# ETS Proficiency Profile <br> 2017-2018 <br> Comparative <br> Summary Report 

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## Executive Summary

The ETS Proficiency Profile (EPP) is a General Education knowledge and skills test that is designed to measure critical thinking and college-level reading, writing, and mathematical skills in the contexts of the humanities, social sciences, and natural sciences. In an effort to evaluate General Education learning outcomes, the University currently requires students to take the EPP at entry (freshmen) and exit (senior) levels. The EPP is administered twice a year, to incoming freshmen in the Fall semester and to graduating seniors in the Spring semester. Within the past five years (Fall 2013 - Spring 2018), $(\mathbf{n}=\mathbf{2}, \mathbf{1 8 3})$ freshmen and $(\mathbf{n}=\mathbf{1}, \mathbf{4 7 6})$ seniors have participated in the EPP test.

In Fall 2017, $(\mathrm{n}=449)$ incoming freshmen attempted to take the EPP. Results were calculated for ( $n=406$ ) of those students who completed $75 \%$ or more of the test items. The total mean score for the incoming freshmen was ( $\mathbf{M}=\mathbf{4 2 7 . 0 1} \mathbf{S D}=\mathbf{1 3 . 0 6}$ ) based on a 400-500 range. In Spring 2018, ( $\mathrm{n}=248$ ) graduating seniors took the EPP. Results were calculated for ( $\mathrm{n}=216$ ) students who completed $75 \%$ or more of the test. Results revealed that the total mean score for the graduating seniors was ( $\mathrm{M}=\mathbf{4 3 1 . 1 1 , ~} \mathrm{SD}=14.42$ ) based on a 400-500 range.

A comparative analysis of Florida Agricultural and Mechanical University (FAMU) scores to those of the ETS provided National Averages, Carnegie classification of doctoral institutions, Historically Black Colleges and Universities (HBCUs) taken as group, and institutions in the State of Florida, was completed. This comparison revealed that the average scaled scores for both incoming freshmen and graduating seniors were below the national average, Carnegie group, and the group of institutions in Florida who participated in the test. See summary table below a comparative synopsis of the results for incoming freshmen and graduating seniors.

Comparative Summary of Student Performance on ETS Proficiency Profile for period (2012-2017)

| Skill Dimension | National |  | Carnegie |  | HBCU |  | Florida |  | FAMU |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | SD | M | SD | M | SD | M | SD | M | SD |
| Incoming <br> Freshmen Total <br> Score | 437.4 | 6.0 | 443.7 | 20.6 | 427.0 | 15.2 | 436.1 | 18.1 | 430.77 | 16.03 |
| Graduating Seniors <br> Total Score | 446.9 | 20.6 | 448.8 | 21.6 | 460.9 | 17.4 | 438.8 | 20.2 | 431.25 | 17.32 |

The results of the ETS Proficiency Profile continues to confirm that our students are entering the university with serious deficiencies in all skill areas as reported by the proportion of incoming
freshmen who were classified as proficient on the test. Equally concerning is the proportion of graduating seniors who were classified as proficient in the skill areas measured by the test. Since 2009, less than $55 \%$ of FAMU graduating seniors were classified as proficient in the skill areas measured by the test. Additionally, less than $8 \%$ of graduating seniors completing the test were scored proficient in Critical Thinking, Writing Level 3 and Mathematics Level 3. It is clear that more emphasis across degree programs should be placed on remediating and developing/enhancing the competencies measured by the test. In general education courses, in addition to upper division courses, these skill sets should be emphasized as a way of speaking to what students should know and/or be able to do at the end of the degree program. Additionally, the Office of University Assessment encourages Colleges and Schools to engage in meaningful ways with their students about the importance of taking the test seriously, as it is a general indicator of what students have learned during their matriculation at FAMU.

There is a great deal of information presented in this report and it is our hope that you will find the report meaningful and empowering in efforts to improve the academic performance of our students.

## Introduction

The 2017-2018 Office of University Assessment (OUA) ETS Proficiency Profile (EPP) Comparative Summary Report was prepared to provide insight into the performance of Florida A\&M University students (i.e. incoming freshmen and graduating seniors) on this general education knowledge and skills test. The EPP is designed to measure critical thinking and college-level reading, writing, and mathematical skills in the contexts of the humanities, social sciences, and natural sciences. This report is divided into several key areas, which will provide you key insight into the performance of FAMU students employing data over the past ten years.

## Overview of ETS Proficiency Profile

The ETS Proficiency Profile is designed by the Educational Testing Service (ETS) as a measure of collegelevel reading, mathematics, writing, and critical thinking in the context of the humanities, social sciences, and natural sciences. Colleges and universities across the United States (US) use the test to assess general education outcomes. The ETS test provides invaluable data for accreditation, strategic planning, curriculum improvement, performance-based funding, benchmarking, and for determining "value added" or learning gains. The Voluntary System of Accountability (VSA) also uses the test for the College Portrait, which allows stakeholders (i.e. potential students, parents, university systems, accrediting bodies etc.) to access and compare the performance of students on the test from across participating institutions in the US.

Questions on the EPP are multiple choice and are arranged in blocks of three to eight. Each section tests the same types of skills. This integrated design prevents a particular skill area from appearing all at once or late in the test when fatigue can affect student performance. The total score on the test is reported on a scale of 400-500. Seven sub-scores are reported on a scale of 100-130 for each skill area (i.e. Critical Thinking, Reading, Writing, Mathematics, Humanities, Social Sciences, and Natural Sciences). In addition to a total score, institutions receive a proficiency classifications (i.e. proficient, marginal or not proficient) for each skill level identified simply as Level 1, Level 2 and Level 3 based on students' performance taken as a group in each skill dimension. Please refer to Appendix A for a comprehensive overview of each proficiency level, which is defined in terms of competencies expected of students. Proficiency classifications capture how well students have mastered each skill area.

Scaled scores are computed by means of a two-stage process.

- The student's "raw score" is computed by counting the number of questions the student answered correctly (there is no penalty for incorrect guessing).
- A raw-to-scale conversion table converts the raw score to a scaled score.

The scaled scores are norm-referenced, i.e., intended for comparing individual students with a group and for comparing a group of students with other groups of students. These comparisons can be entirely within the institution, or they can involve data from other institutions.

## Historical Overview of ETS Proficiency Profile at FAMU

In an effort to evaluate General Education outcomes at FAMU, all incoming freshmen and graduating seniors are asked to participate in the test. Participation is critical in helping the University to evaluate general education outcomes. The test was first administered at FAMU in 2006. The University has since participated in the test on an annual basis. Starting in 2009 every Fall and Spring semester, incoming freshmen and graduating seniors respectively, participate in the test. For freshmen, the test is administered one week before classes begin in the Fall and remains open until the end of September. Freshmen are solicited for participation in the test by means of email, FAMUINFO, Resident Advisors in on-campus housing facilities, and freshmen orientation courses. Similarly, the test is administered to graduating seniors in the Spring. The test is administered the week following spring break and remains open until commencement. Graduating students are solicited for participation in the test my means of: email, FAMUINFO, correspondence from Deans, Department Chairs, and Institutional Level Assessment Committee (ILAC) members.

## Guiding Questions

The preparation of this report was guided by the follow questions:

1. How have incoming freshmen at FAMU performed on the ETS Proficiency Profile?
2. How have graduating seniors at FAMU performed on the ETS Proficiency Profile?
3. How do FAMU students perform on the ETS Proficiency Profile by colleges/schools?
4. How does the performance of incoming freshmen at FAMU compare to the National Average, institutions in our Carnegie Classification, HBCU's, and institutions in the State University System of Florida taken as a group?
5. How does the performance of graduating seniors at FAMU compare to the National Average, institutions in our Carnegie Classification, HBCU's, and institutions in the State University System of Florida taken as a group?

## Methodology

Descriptive and inferential techniques were used in addressing each of the guiding questions, which informed the preparation of this report.

## Findings

This section of the report highlights the findings for each of the guiding questions, which informed the preparation of this report.

## Trends in Incoming Freshmen Performance

## Guiding Question 1: How have incoming freshmen at FAMU performed on the ETS Proficiency Profile?

Descriptive techniques were employed in addressing this question. Specifically, mean and standard deviation of scores were computed for each skill dimension.

In Fall 2017, ( $\mathrm{n}=449$ ) incoming freshmen attempted to take the EPP test. Results were calculated for ( $n=406$ ) of those students who completed $75 \%$ or more of the test items. Table 1 provides a summary of the results for the scaled scores. As can be discerned from Table 1, in 2017 the mean overall score for incoming freshmen was ( $\mathbf{M}=\mathbf{4 2 7 . 0 1}, \mathbf{S D}=\mathbf{1 3 . 0 6}$ ). The overall mean performance of FAMU freshmen was significantly below the national average ( $\mathbf{M}=\mathbf{4 3 7 . 4 0}, \mathbf{S D}=\mathbf{1 9 . 3}$ ). Similarly, the mean performance of FAMU freshmen in each skill dimension fell below the national average. Please refer to Table 1 for a summary of these results.

Table 1
FAMU Incoming Freshmen Average Scaled Scores for Fall 2017

|  | Possible <br> Range of <br> Scores |  <br> Standard Deviation |  | National Average <br> \& Standard Deviation |  | Difference <br> Indicator |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | M | SD | M | SD |  |
| Total Score | 400 to 500 | 427.01 | 13.06 | 437.4 | 19.3 | $\downarrow$ |
| Critical Thinking | 100 to 130 | 107.09 | 4.51 | 109.5 | 7.2 | $\downarrow$ |
| Reading | 100 to 130 | 112.74 | 6.41 | 115.6 | 5.4 | $\downarrow$ |
| Writing | 100 to 130 | 111.24 | 4.89 | 112.9 | 5.6 | $\downarrow$ |
| Mathematics | 100 to 130 | 109.45 | 4.33 | 112.2 | 6.3 | $\downarrow$ |
| Humanities | 100 to 130 | 112.38 | 5.2 | 112.6 | 6.1 | $\downarrow$ |
| Social Sciences | 100 to 130 | 109.65 | 5.52 | 111.3 | 5.9 | $\downarrow$ |
| Natural Sciences | 100 to 130 | 110.79 | 5.59 | 113.5 | 5.9 | $\downarrow$ |

FAMU Mean Performance below National Average
FAMU Mean Performance above National Average

A review of the trends associated with the performance of FAMU incoming freshmen on the EPP revealed much variability in overall mean performance. Table 2 provides a comprehensive overview of the performance of FAMU incoming freshmen on the EPP spanning 2008-2017. Consistent with the findings previously discussed for 2017, since 2008 the mean performance of FAMU freshmen has fallen below the national average (see Figure 1).

Table 2
Trends in Incoming Freshmen Average Performance on ETS Proficiency Profile (2008-2017)

| Skill Dimension | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{N}=142$ |  | $\mathrm{N}=613$ |  | $\mathrm{N}=751$ |  | $N=508$ |  | $N=354$ |  |
|  | Mean | SD | Mean | Mean | Mean | Mean | Mean | Mean | Mean | SD |
| Total Score* | 434.8 | 17.00 | 431.61 | 431.61 | 431.26 | 431.26 | 431.61 | 431.61 | 436.16 | 14.40 |
| Critical Thinking | 108.85 | 5.45 | 108.28 | 108.28 | 107.65 | 107.65 | 108.28 | 108.28 | 109.38 | 5.18 |
| Reading | 115.40 | 6.11 | 113.52 | 113.52 | 113.54 | 113.54 | 113.52 | 113.52 | 116.24 | 5.89 |
| Writing | 113.67 | 4.76 | 112.36 | 112.36 | 112.12 | 112.12 | 112.36 | 112.36 | 112.91 | 4.23 |
| Mathematics | 110.04 | 5.63 | 110.77 | 110.77 | 111.15 | 111.15 | 110.77 | 110.77 | 111.22 | 5.01 |
| Humanities | 112.5 | 5.96 | 112.57 | 112.57 | 112.64 | 112.64 | 112.57 | 112.57 | 113.37 | 5.66 |
| Social Sciences | 111.37 | 5.41 | 110.72 | 110.72 | 110.42 | 110.42 | 110.72 | 110.72 | 111.88 | 5.15 |
| Natural Sciences | 113.01 | 5.06 | 2011 | 2011 | 111.91 | 111.91 | 2011 | 2011 | 113.48 | 5.09 |
| Skill Dimension | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  |
|  | $N=308$ |  | $N=276$ |  | $N=571$ |  | $N=622$ |  | $N=406$ |  |
|  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Total Score* | 431.68 | 17.20 | 431.26 | 17.75 | 431.68 | 17.20 | 431.26 | 17.75 | 427.01 | 13.06 |
| Critical Thinking | 107.97 | 5.36 | 107.65 | 5.35 | 107.97 | 5.36 | 107.65 | 5.35 | 107.09 | 4.51 |
| Reading | 113.57 | 7.10 | 113.54 | 7.16 | 113.57 | 7.10 | 113.54 | 7.16 | 112.74 | 6.41 |
| Writing | 112.43 | 5.32 | 112.12 | 5.15 | 112.43 | 5.32 | 112.12 | 5.15 | 111.24 | 4.89 |
| Mathematics | 110.97 | 5.06 | 111.15 | 5.33 | 110.97 | 5.06 | 111.15 | 5.33 | 109.45 | 4.33 |
| Humanities | 113.17 | 6.13 | 112.64 | 6.17 | 113.17 | 6.13 | 112.64 | 6.17 | 112.38 | 5.2 |
| Social Sciences | 110.29 | 5.99 | 110.42 | 5.54 | 110.29 | 5.99 | 110.42 | 5.54 | 109.65 | 5.52 |
| Natural Sciences | 111.05 | 6.22 | 111.54 | 5.86 | 111.05 | 6.22 | 111.54 | 5.86 | 110.79 | 5.59 |



Figure 1
Historical Overview of FAMU Freshmen Performance on ETS Proficiency Profile Compared to National Average

A review of each skill dimension measured on the ETS Proficiency Profile revealed that since 2009, less than $41 \%$ of incoming freshmen who participated in the test were classified as proficient. The results of all skill dimensions measured by the test suggest serious concerns as it relates to the preparedness of incoming students entering FAMU. Please refer to Table 3 for a comprehensive overview of these results.

Table 3
Trends in Incoming Freshmen Classified as Proficient (2008-2017)

| Proficiency <br> Levels | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{N = 1 4 2}$ | $\mathbf{N}=613$ | $\mathbf{N}=751$ | $\mathbf{N}=508$ | $\mathbf{N}=\mathbf{3 5 4}$ | $\mathbf{N}=308$ | $\mathbf{N}=\mathbf{2 7 6}$ | $\mathbf{N}=\mathbf{5 7 1}$ | $\mathbf{N}=622$ | $\mathbf{N}=\mathbf{4 0 6}$ |
| Reading, Level 1 | $51 \%$ | $34 \%$ | $29 \%$ | $32 \%$ | $32 \%$ | $31 \%$ | $30 \%$ | $33 \%$ | $34 \%$ | $26 \%$ |
| Reading, Level 2 | $20 \%$ | $12 \%$ | $10 \%$ | $12 \%$ | $12 \%$ | $13 \%$ | $12 \%$ | $12 \%$ | $16 \%$ | $8 \%$ |
| Critical Thinking | $3 \%$ | $1 \%$ | $1 \%$ | $1 \%$ | $3 \%$ | $2 \%$ | $0 \%$ | $1 \%$ | $1 \%$ | $0 \%$ |
| Writing, Level 1 | $53 \%$ | $39 \%$ | $35 \%$ | $34 \%$ | $37 \%$ | $40 \%$ | $33 \%$ | $34 \%$ | $39 \%$ | $28 \%$ |
| Writing, Level 2 | $19 \%$ | $8 \%$ | $9 \%$ | $9 \%$ | $10 \%$ | $11 \%$ | $6 \%$ | $9 \%$ | $11 \%$ | $6 \%$ |
| Writing, Level 3 | $7 \%$ | $2 \%$ | $3 \%$ | $4 \%$ | $3 \%$ | $3 \%$ | $1 \%$ | $4 \%$ | $4 \%$ | $2 \%$ |
| Mathematics, <br> Level 1 | $29 \%$ | $28 \%$ | $28 \%$ | $28 \%$ | $29 \%$ | $32 \%$ | $28 \%$ | $29 \%$ | $31 \%$ | $18 \%$ |
| Mathematics, <br> Level 2 | $14 \%$ | $8 \%$ | $9 \%$ | $9 \%$ | $11 \%$ | $12 \%$ | $10 \%$ | $9 \%$ | $11 \%$ | $4 \%$ |
| Mathematics, <br> Level 3 | $4 \%$ | $2 \%$ | $2 \%$ | $2 \%$ | $3 \%$ | $2 \%$ | $1 \%$ | $1 \%$ | $2 \%$ | $1 \%$ |

## Trends in Graduating Seniors Performance

Guiding Question 2: How have graduating seniors at FAMU performed on the ETS Proficiency Profile?

Descriptive techniques were employed in addressing this question. Specifically, mean and standard deviation of scores were computed for each skill dimension.

In Spring 2018, ( $n=248$ ) graduating seniors took the EPP. Results were calculated for ( $n=216$ ) of those students who completed $75 \%$ or more of the test. Table 4 provides a summary of the results for the scaled scores. As can be discerned from Table 4, in 2018 the mean overall score for graduating seniors was
 was significantly below the national average ( $\mathbf{M}=\mathbf{4 4 6 . 9 0}, \mathbf{S D}=\mathbf{2 0 . 6 0}$ ). A review of FAMU graduating seniors' performance in each skill dimension revealed that performance fell below the national average. Please refer to Table 4 for a summary of these results.

Table 4
FAMU Graduating Seniors Average Scaled Scores for 2018

|  | Possible <br> Range of <br> Scores |  <br> Standard Deviation |  |  <br> Standard Deviation |  | Difference Indicator |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | M | SD | M | SD |  |
| Total Score | 400 to 500 | 431.11 | 14.42 | 446.9 | 20.6 | $\downarrow$ |
| Critical Thinking | 100 to 130 | 107.94 | 5.11 | 112.1 | 6.5 | $\downarrow$ |
| Reading | 100 to 130 | 114.16 | 6.56 | 118.6 | 7.1 | $\downarrow$ |
| Writing | 100 to 130 | 112.13 | 4.84 | 114.9 | 5.3 | $\downarrow$ |
| Mathematics | 100 to 130 | 110.36 | 4.18 | 114.2 | 6.2 | $\downarrow$ |
| Humanities | 100 to 130 | 113.01 | 5.81 | 114.9 | 6.8 | $\downarrow$ |
| Social Sciences | 100 to 130 | 110.85 | 5.5 | 113.7 | 6.5 | $\downarrow$ |
| Natural Sciences | 100 to 130 | 111.47 | 5.55 | 115.8 | 5.9 | $\downarrow$ |

FAMU Mean Performance below National Average
FAMU Mean Performance above National Average

A review of the trends associated with the performance of FAMU graduating seniors on the EPP revealed some variability in terms of overall mean performance. Between 2009 and 2018 there has been a drop in terms of the overall performance of graduating seniors on the test [2009 ( $M=438.08$, $\mathrm{SD}=16.01$ ), 2018 ( $M=431.11, S D=17.31$ )]. Please refer to Table 5 for a summary of these results.

Further analysis revealed that since 2009 the mean performance of FAMU graduating seniors has fallen below the national average (see Figure 2).

Table 5
Trends in Graduating Seniors Average Performance on ETS Proficiency Profile for 2009-2018

| Skill Dimension | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $N=613$ |  | $N=751$ |  | $N=242$ |  | $N=409$ |  | $N=287$ |  |
|  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Total Score | 438.08 | 16.01 | 432.97 | 19.16 | 430.84 | 17.22 | 434.64 | 20.47 | 434.28 | 20.24 |
| Critical Thinking | 109.88 | 5.14 | 108.55 | 5.54 | 108.28 | 4.95 | 109.07 | 6.13 | 109.18 | 5.87 |
| Reading | 115.81 | 6.48 | 114.80 | 7.32 | 113.79 | 7.05 | 114.85 | 7.15 | 114.53 | 7.50 |
| Writing | 113.48 | 4.81 | 112.14 | 5.49 | 111.54 | 5.46 | 112.35 | 5.41 | 112.61 | 5.76 |
| Mathematics | 112.40 | 6.06 | 111.04 | 5.86 | 110.75 | 5.61 | 111.53 | 5.91 | 111.20 | 5.72 |
| Humanities | 113.47 | 5.87 | 113.74 | 6.38 | 112.67 | 6.19 | 114.03 | 6.51 | 113.51 | 6.54 |
| Social Sciences | 111.88 | 5.31 | 111.11 | 6.10 | 111.01 | 5.70 | 111.39 | 6.37 | 111.34 | 6.43 |
| Natural Sciences | 113.72 | 5.28 | 112.34 | 6.07 | 112.02 | 5.47 | 112.56 | 6.12 | 112.98 | 6.05 |
| Skill Dimension | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  |
|  | $N=537$ |  | $N=259$ |  | $N=237$ |  | $N=227$ |  | $N=216$ |  |
|  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Total Score | 430.56 | 18.31 | 434.47 | 16.80 | 434.28 | 20.24 | 431.08 | 17.31 | 431.11 | 14.42 |
| Critical Thinking | 108.09 | 5.37 | 108.60 | 5.61 | 109.18 | 5.87 | 107.93 | 5.6 | 107.94 | 5.11 |
| Reading | 113.69 | 7.34 | 115.46 | 6.86 | 114.53 | 7.50 | 114.18 | 6.98 | 114.16 | 6.56 |
| Writing | 111.45 | 5.61 | 112.74 | 4.88 | 112.61 | 5.76 | 111.85 | 5.23 | 112.13 | 4.84 |
| Mathematics | 110.90 | 5.90 | 111.20 | 5.23 | 111.20 | 5.72 | 110.65 | 5.63 | 110.36 | 4.18 |
| Humanities | 112.88 | 6.32 | 113.98 | 6.11 | 113.51 | 6.54 | 113.77 | 6.55 | 113.01 | 5.81 |
| Social Sciences | 110.55 | 5.74 | 111.32 | 5.87 | 111.34 | 6.43 | 110.5 | 5.7 | 110.85 | 5.5 |
| Natural Sciences | 111.76 | 5.84 | 112.35 | 5.87 | 112.98 | 6.05 | 111.13 | 5.7 | 111.47 | 5.55 |



Figure 2
Overview of FAMU Graduating Seniors Performance on ETS Proficiency Profile Compared to National Average (2009-2018)

A review of each skill dimension measured on the EPP for graduating seniors revealed serious concerns with FAMU students' proficiency with all skill areas. Since 2009, less than $8 \%$ of graduating seniors completing the test were classified as proficient in Critical Thinking, Writing Level 3 and Mathematics Level 3. Please refer to Table 6 for a comprehensive overview of these results.

Table 6
Trends in Graduating Seniors Classified as Proficient (2009-2018)

| Proficiency Levels | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $N=613$ | $N=751$ | $N=242$ | N=409 | N=287 | $N=537$ | N=259 | $N=237$ | $N=227$ | $N=216$ |
| Reading, Level 1 | 51\% | 39\% | 32\% | 37\% | 37\% | 35\% | 42\% | 27\% | 33\% | 31\% |
| Reading, Level 2 | 24\% | 18\% | 13\% | 17\% | 16\% | 13\% | 18\% | 11\% | 12\% | 13\% |
| Critical Thinking | 2\% | 1\% | 0\% | 3\% | 4\% | 1\% | 1\% | 2\% | 1\% | 1\% |
| Writing, Level 1 | 54\% | 36\% | 32\% | 39\% | 41\% | 32\% | 39\% | 26\% | 33\% | 36\% |
| Writing, Level 2 | 15\% | 11\% | 10\% | 11\% | 13\% | 10\% | 12\% | 7\% | 8\% | 10\% |
| Writing, Level 3 | 5\% | 4\% | 3\% | 4\% | 4\% | 2\% | 5\% | 3\% | 3\% | 1\% |
| Mathematics, Level 1 | 47\% | 31\% | 31\% | 33\% | 31\% | 31\% | 36\% | 34\% | 28\% | 24\% |
| Mathematics, Level 2 | 25\% | 15\% | 12\% | 15\% | 16\% | 15\% | 12\% | 14\% | 11\% | 5\% |
| Mathematics, Level 3 | 7\% | 4\% | 2\% | 4\% | 3\% | 4\% | 2\% | 3\% | 3\% | 1\% |

## Freshmen/Senior Comparative Analysis

Figures 4 and 5 provides a comparison of freshmen results to those of seniors assuming four and six years to time of graduation. Assuming a four year graduation for the cohort of incoming freshmen who took the test in 2014, overall mean performance between incoming freshmen ( $\mathrm{M}=429.13$ ) and graduating seniors ( $M=431.11$ ) showed a marginal increase (i.e. 1.98 scaled score points). Assuming a six year graduation for the cohort of incoming freshmen who took the test in 2012, overall mean performance between incoming freshmen ( $\mathrm{M}=431.26$ ) and graduating seniors $(\mathrm{M}=431.11$ ) also showed a marginal decrease (i.e. 0.15 scaled score points). Please refer to figures 4 and 5 for a longitudinal overview of these results.


Figure 4
Comparison assuming 4-year Graduation


Figure 5
Comparison assuming 6-year Graduation

## Performance by College/School

Guiding Question 3: How do FAMU students perform on the ETS Proficiency Profile by colleges/schools?

Descriptive techniques were employed in addressing this question. Specifically, mean and standard deviation of scores were computed for each skill dimension.

This section of the report summarizes the performance of students on the ETS Proficiency Profile by colleges and schools based on a five year rolling average from 2013-2017 for incoming freshmen and 20142018 for graduating seniors. Because participation rates by colleges and schools were low, in an effort to present data that is meaningful, approaching the analysis using the rolling average was necessary. Please refer to Tables 7 and 8 for a comprehensive summary of performance by Colleges/Schools. The summary results include performance on each skill dimension, which outlines the proportion of the test sample who were classified as P (Proficient), M (Marginally Proficient), and $\boldsymbol{N}$ (Not Proficient). Figures 6 and 7 provides a graphical representation of these results. This data is intended to provide colleges and schools with meaningful information that will help to shape the dialogue on efforts to improve participation rates and overall performance on the test. As can be discerned from the tables below, the number of students who participated in the test by colleges/schools ranged from ( $n=15$ ) to ( $n=459$ ).

Table 7
Incoming Freshmen Performance by Colleges/Schools

| Skill Dimension | CAFS |  |  | COE |  |  | COEng |  |  | COPPS |  |  | CoSaT |  |  | CSSAH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $N=73$ |  |  | $\mathrm{N}=28$ |  |  | $\mathrm{N}=94$ |  |  | $\mathrm{N}=74$ |  |  | N=311 |  |  | $\mathrm{N}=441$ |  |  |
|  | M |  | SD | M |  | SD | M |  | SD | M |  | SD | M |  | SD | M |  | SD |
| Total Score | 436.77 |  | 19.04 | 428.54 |  | 13.74 | 432.14 |  | 15.33 | 434.43 |  | 18.85 | 436.75 |  | 19.42 | 427.22 |  | 13.78 |
| Critical Thinking | 109.89 |  | - | 107.79 |  | 4.38 | 107.97 |  | 4.56 | 108.00 |  | 5.28 | 109.15 |  | 6.02 | 106.99 |  | 4.59 |
| Reading | 115.58 |  | - | 114.07 |  | 7.08 | 113.59 |  | 6.42 | 114.91 |  | 7.68 | 115.75 |  | 7.53 | 112.41 |  | 6.48 |
| Writing | 112.89 |  | 5.21 | 110.68 |  | 5.28 | 112.44 |  | 5.41 | 113.07 |  | 5.55 | 113.11 |  | 5.37 | 111.76 |  | 4.92 |
| Mathematics | 111.75 |  | 5.33 | 109.61 |  | 4.01 | 111.67 |  | 5.03 | 111.74 |  | 5.63 | 112.03 |  | 5.56 | 109.39 |  | 4.18 |
| Humanities | 114.27 |  | 6.12 | 113.75 |  | 5.35 | 113.15 |  | 5.26 | 113.42 |  | 5.91 | 114.25 |  | 6.56 | 112.14 |  | 5.35 |
| Social Sciences | 112.25 |  | 6.58 | 110.54 |  | 6.52 | 110.24 |  | 5.31 | 110.97 |  | 6.43 | 111.68 |  | 6.18 | 109.40 |  | 5.25 |
| Natural Sciences | 113.32 |  | 6.11 | 110.79 |  | 6.57 | 111.50 |  | 5.34 | 112.27 |  | 6.37 | 113.11 |  | 6.28 | 110.71 |  | 5.48 |
| Skill Dimension | SON |  |  | SBI |  |  | SOE |  |  | SJGC |  |  | SAET |  |  | SOAHS |  |  |
|  | N=336 |  |  | $\mathrm{N}=469$ |  |  | $\mathrm{N}=16$ |  |  | N=90 |  |  | $\mathrm{N}=41$ |  |  | N=218 |  |  |
|  | M | SD |  | M | SD |  | M | SD |  | M | SD |  | M | SD |  | M |  | SD |
| Total Score | 428.13 | 13.07 |  | 431.83 | 16.55 |  | 427.69 | 9.85 |  | 430.37 | 16.90 |  | 430.22 | 15.12 |  | 427.77 | 12.81 |  |
| Critical Thinking | 107.22 | 4.55 |  | 107.74 | 5.55 |  | 107.56 |  |  | 108.38 |  |  | 108.05 | 4.57 |  | 107.10 | 4.62 |  |
| Reading | 112.87 | 6.44 |  | 113.89 | 6.73 |  | 110.00 | 4.31 |  | 113.89 | 7.04 |  | 113.71 | 7.26 |  | 113.17 | 6.05 |  |
| Writing | 111.60 | 4.81 |  | 112.01 | 5.02 |  | 111.81 | 5.72 |  | 112.08 | 5.51 |  | 111.27 | 4.97 |  | 111.27 | 4.74 |  |
| Mathematics | 109.90 | 4.27 |  | 111.65 | 5.24 |  | 111.44 | 3.98 |  | 109.61 | 4.95 |  | 110.32 | 4.54 |  | 110.02 | 4.55 |  |
| Humanities | 112.60 | 5.63 |  | 112.86 | 5.81 |  | 110.44 | 5.77 |  | 112.96 | 6.01 |  | 111.90 | 5.17 |  | 111.56 | 5.16 |  |
| Social Sciences | 109.53 | 5.27 |  | 110.07 | 5.87 |  | 109.38 | 4.51 |  | 110.78 | 5.54 |  | 111.12 | 5.98 |  | 110.22 | 5.07 |  |
| Natural Sciences | 110.85 | 5.63 |  | 111.85 |  |  | 110.31 |  |  | 112.26 6. |  |  | 112.66 |  |  | 111.29 | 5.63 |  |
| Proficiency Level | CAFS |  |  | COE |  |  | COEng |  |  | COPPS |  |  | CoSaT |  |  | CSSAH |  |  |
|  | P | M | - N | P | M | N | M |  | N | M |  | N | M |  | N | M |  | N |
| Reading, Level 1 | 44\% | 15\% | - 41\% | 32\% | 29\% | - 39\% | 31\% | 22\% | - $47 \%$ | 42\% | 15\% | 43\% | 44\% ${ }^{\text {P }}$ 18\% |  | - $37 \%$ | 25\% $20 \%$ |  | 54\% |
| Reading, Level 2 | 19\% | 14\% | 67\% | 14\% | 14\% | 71\% | 9\% | 17\% | 74\% | 20\% | 12\% | 68\% | 24\% ${ }^{\text {2 }}$ 14\% |  | \% $62 \%$ | 8\% $11 \%$ |  | 81\% |
| Critical Thinking | 0\% | 8\% | 92\% | 0\% | 7\% | 93\% | 0\% | 2\% | 98\% | 1\% | 4\% | 95\% | 3\% $8 \%$ |  | 89\% | $0 \%$ | 2\% | 98\% |
| Writing, Level 1 | 45\% | 29\% | - $26 \%$ | 14\% | 46\% | 39\% | 40\% | 24\% | 35\% | 39\% | $35 \%$ | 26\% | 46\% $28 \%$ |  | 26\% | 32\% 33\% |  | 36\% |
| Writing, Level 2 | 14\% | 26\% | 60\% | 7\% | 11\% | 82\% | 13\% | 23\% | -64\% | 16\% | 22\% | 62\% | 13\% 29\% |  | 58\% | 9\% | 20\% | 71\% |
| Writing, Level 3 | 3\% | 16\% | - 81\% | 0\% | 11\% | - 89\% | 4\% | 13\% | - 83\% | 3\% | 24\% | 73\% | 6\% | 17\% | 77\% | 4\% | 10\% | 87\% |
| Mathematics, Level 1 | 32\% | 33\% | - 36\% | 21\% | 18\% | 61\% | 38\% | 26\% | - 36\% | 36\% | 20\% | 43\% | 37\% | 25\% | 38\% | 18\% | 25\% | 57\% |
| Mathematics, Level 2 | 11\% | 29\% | 60\% | 4\% | 14\% | 82\% | 12\% | 28\% | 61\% | 14\% | 20\% | 66\% | 15\% | 22\% | 62\% | 5\% | 16\% | 79\% |
| Mathematics, Level 3 | 4\% | 5\% | 90\% | 0\% | 4\% | 96\% | 1\% | 13\% | 86\% | 5\% | 8\% | 86\% | 4\% | 10\% | 86\% | 0\% | 5\% | 94\% |
|  |  | SON |  |  | SBI |  |  | SOE |  |  | SJGC |  |  | SAET |  |  | SOAHS |  |
| Proficiency Level | P | M | N | P | M | N | P | M | N | P | M | N | P | M | N | P | M | N |
| Reading, Level 1 | 26\% | 23\% | 51\% | 31\% | 24\% | - $45 \%$ | 6\% | 19\% | 75\% | 37\% | 16\% | 48\% | 34\% | 22\% | 44\% | 28\% | 26\% | 47\% |
| Reading, Level 2 | 9\% | 10\% | 82\% | 13\% | 10\% | 78\% | 0\% | 6\% | 94\% | 17\% | 8\% | 76\% | 15\% | 15\% | 71\% | 6\% | 13\% | 81\% |
| Critical Thinking | 1\% | 3\% | 97\% | 1\% | 4\% | 95\% | 0\% | 0\% | $\begin{gathered} 100 \\ \% \\ \hline \end{gathered}$ | 0\% | 6\% | 94\% | 0\% | 2\% | 98\% | 0\% | 0\% | $\begin{gathered} 100 \\ \% \\ \hline \end{gathered}$ |
| Writing, Level 1 | 29\% | 38\% | - 33\% | 37\% | 31\% | 32\% | 25\% | 50\% | 25\% | 37\% | 29\% | 34\% | 24\% | 44\% | 32\% | 28\% | 33\% | 39\% |
| Writing, Level 2 | 7\% | 17\% | 76\% | 7\% | 25\% | 68\% | 19\% | 6\% | 75\% | 9\% | 22\% | 69\% | 10\% | 15\% | 76\% | 5\% | 20\% | 75\% |
| Writing, Level 3 | 3\% | 8\% | 89\% | 2\% | 12\% | 87\% | 0\% | 25\% | 75\% | 6\% | 11\% | 83\% | 2\% | 7\% | 90\% | 1\% | 11\% | 88\% |
| Mathematics, Level 1 | 23\% | 22\% | - 55\% | 36\% | 23\% | 41\% | 31\% | 25\% | 44\% | 17\% | 28\% | 56\% | 22\% | 32\% | 46\% | 25\% | 22\% | 53\% |
| Mathematics, Level 2 | 4\% | 21\% | -75\% | 13\% | 23\% | 64\% | 0\% | 38\% | 63\% | 7\% | 13\% | 80\% | 12\% | 10\% | 78\% | 6\% | 20\% | 74\% |
| Mathematics, Level 3 | 0\% | 6\% | 94\% | 2\% | 10\% | 88\% | 0\% | 0\% | $\begin{gathered} 100 \\ \% \\ \hline \end{gathered}$ | 1\% | 7\% | 92\% | 0\% | 7\% | 93\% | 0\% | 6\% | 94\% |

Table 8
Graduating Seniors Performance by Colleges/Schools

| Skill Dimension | CAFS |  |  | COE |  |  | COEng |  |  | COPPS |  |  | CoSaT |  |  | CSSAH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N=36 |  |  | $\mathrm{N}=56$ |  |  | N=36 |  |  | N=109 |  |  | N=97 |  |  | $\mathrm{N}=490$ |  |  |
|  | M |  | SD | M |  | SD | M |  | SD | M |  | SD | M |  | SD | M |  | SD |
| Total Score | 435.03 |  | 20.91 | 428.71 |  | 17.66 | 442.58 |  | 16.82 | 435.89 |  | 21.92 | 436.12 |  | 18.49 | 428.61 |  | 16.06 |
| Critical Thinking | 109.97 |  | 5.42 | 107.46 |  | 5.55 | 109.44 |  | 5.64 | 109.23 |  | 6.43 | 108.73 |  | 5.57 | 107.71 |  | 5.02 |
| Reading | 116.00 |  | 7.07 | 113.20 |  | 7.04 | 117.92 |  | 6.61 | 114.10 |  | 7.71 | 115.15 |  | 7.31 | 113.49 |  | 6.69 |
| Writing | 111.08 |  | 5.01 | 110.88 |  | 5.53 | 113.11 |  | 4.96 | 112.61 |  | 6.27 | 112.66 |  | 5.43 | 111.43 |  | 5.00 |
| Mathematics | 111.64 |  | 5.90 | 110.43 |  | 4.38 | 116.56 |  | 6.46 | 113.50 |  | 6.44 | 113.08 |  | 5.83 | 109.47 |  | 4.57 |
| Humanities | 114.53 |  | 7.77 | 112.14 |  | 6.33 | 114.67 |  | 6.37 | 113.59 |  | 6.40 | 114.04 |  | 6.42 | 112.81 |  | 6.05 |
| Social Sciences | 112.36 |  | 6.69 | 110.75 |  | 5.76 | 112.36 |  | 4.99 | 111.17 |  | 6.59 | 110.64 |  | 6.08 | 110.32 |  | 5.48 |
| Natural Sciences | 113.58 |  | 5.98 | 110.77 |  | 5.75 | 114.72 |  | 5.83 | 112.32 |  | 6.70 | 113.14 |  | 5.66 | 111.25 |  | 5.51 |
| Skill Dimension | SON |  |  | SBI |  |  | SOE |  |  | SJGC |  |  | SAET |  |  | SOAHS |  |  |
|  | $\mathrm{N}=65$ |  |  | $\mathrm{N}=224$ |  |  | $\mathrm{N}=3$ |  |  | N=82 |  |  | $\mathrm{N}=60$ |  |  | $\mathrm{N}=219$ |  |  |
|  | M |  | SD | M |  | SD | M |  | SD | M |  | SD | M |  | SD | M | SD |  |
| Total Score | 423.03 |  | 14.52 | 435.04 |  | 18.11 | 424.00 |  | 9.17 | 429.57 |  | 15.31 | 434.78 |  | 19.10 | 429.13 | 15.76 |  |
| Critical Thinking | 106.55 |  | 4.66 | $108.49$ |  | 5.45 | $110.67$ |  | 6.11 | $107.85$ |  | 5.97 | 109.68 |  | 6.39 | 107.01 |  | 4.74 |
| Reading | 111.43 |  | 5.92 | 115.25 |  | 7.12 | 112.00 |  | 2.65 | 113.63 |  | 6.61 | 113.97 |  | 8.39 | 113.96 |  | 7.01 |
| Writing | 109.18 |  | 4.76 | 112.56 |  | 5.59 | 105.00 |  | 1.00 | 112.04 |  | 5.59 | 112.03 |  | 5.29 | 111.68 |  | 4.87 |
| Mathematics | 109.37 |  | 5.16 | 112.37 |  | 5.65 | 110.67 |  | 4.04 | 109.49 |  | 4.35 | 112.57 |  | 6.14 | 110.00 |  | 4.87 |
| Humanities | 111.51 |  | $6.09$ | 114.33 |  | 6.51 | 115.33 |  | 9.45 | 113.15 |  | 6.24 | 113.40 |  | 5.78 | 112.54 |  | 5.87 |
| Social Sciences | 108.80 |  | 4.93 | 111.31 |  | $\begin{aligned} & 5.65 \\ & \hline 5.91 \\ & \hline \end{aligned}$ | 110.67 |  | 1.15 | 110.90 | 5.76 |  | 111.88 |  | 6.34 | 110.01 | 5.57 |  |
| Natural Sciences | 109.92 |  | 4.80 | 111.91 |  |  | 110.67 |  | $4.51$ | 110.12 | 5.68 |  | 112.32 |  | 6.53 | 111.18 | 5.51 |  |
| Proficiency Level | CAFS |  |  | COE |  |  | COEng |  |  | COPPS |  |  | CoSaT |  |  | CSSAH |  |  |
|  | P | M | N | P | M | N | P | M | N | P | M | N | P | M | N | P | M | N |
| Reading, Level 1 | 53\% | 14\% | 33\% | 29\% | 16\% | 55\% | 61\% | 22\% | 17\% | 38\% | 18\% | 44\% | 41\% | 26\% | 33\% | 29\% | 24\% | 47\% |
| Reading, Level 2 | 19\% | 22\% | 58\% | 11\% | 13\% | 77\% | 28\% | 22\% | 50\% | 14\% | 12\% | 74\% | 16\% | 14\% | 69\% | 11\% | 12\% | 78\% |
| Critical Thinking | 3\% | 6\% | 92\% | 2\% | 5\% | 93\% | 0\% | 8\% | 92\% | 3\% | 6\% | 92\% | 2\% | 3\% | 95\% | 1\% | 2\% | 97\% |
| Writing, Level 1 | 22\% | 36\% | 42\% | 29\% | 27\% | 45\% | 36\% | 42\% | 22\% | 40\% | 26\% | 34\% | 43\% | 25\% | 32\% | 29\% | 34\% | 37\% |
| Writing, Level 2 | 8\% | 14\% | 78\% | 11\% | 14\% | 75\% | 11\% | 25\% | 64\% | 17\% | 22\% | 61\% | 13\% | 26\% | 61\% | 8\% | 18\% | 74\% |
| Writing, Level 3 | 3\% | 8\% | 89\% | 4\% | 9\% | 88\% | 3\% | 22\% | 75\% | 6\% | 18\% | 75\% | 3\% | 20\% | 77\% | 2\% | 11\% | 87\% |
| Mathematics, Level 1 | 31\% | 25\% | 44\% | 27\% | 25\% | 48\% | 69\% | 17\% | 14\% | 49\% | 22\% | 29\% | 52\% | 16\% | 32\% | 21\% | 24\% | 56\% |
| Mathematics, Level 2 | 17\% | 22\% | 61\% | 9\% | 20\% | 71\% | 44\% | 22\% | 33\% | 29\% | 20\% | 50\% | 23\% | 27\% | 51\% | 4\% | 19\% | 77\% |
| Mathematics, Level 3 | 3\% | 11\% | 86\% | 0\% | 7\% | 93\% | 8\% | 36\% | 56\% | 7\% | 17\% | 75\% | 5\% | 14\% | 80\% | 1\% | 3\% | 96\% |
| Proficiency Level |  | SON |  |  | SBI |  |  | SOE |  |  | SJGC |  |  | SAET |  |  | SOAHS |  |
|  | P | M | N | P | M | N | P | M | N | P | M | N | P | M | N | P | M | N |
| Reading, Level 1 | 17\% | 23\% | 60\% | 38\% | 31\% | 32\% | 0\% | 33\% | 67\% | 29\% | 22\% | 49\% | 40\% 15 | 15\% | 45\% | 37\% | 19\% | 45\% |
| Reading, Level 2 | 8\% | 2\% | 91\% | 19\% | 13\% | 67\% | 0\% | 0\% | 100\% | 10\% | 16\% | 74\% | 17\% | 17\% | 67\% | 12\% | 18\% | 70\% |
| Critical Thinking | 0\% | 2\% | 98\% | 1\% | 5\% | 94\% | 0\% | 0\% | 100\% | 1\% | 6\% | 93\% | 5\% | 3\% | 92\% | 0\% | 2\% | 98\% |
| Writing, Level 1 | 18\% | 26\% | 55\% | 42\% | 32\% | 27\% | 0\% | 0\% | 100\% | 34\% | 28\% | 38\% | 35\% | 27\% | 38\% | 30\% | 40\% | 30\% |
| Writing, Level 2 | 2\% | 14\% | 85\% | 12\% | 26\% | 62\% | 0\% | 0\% | 100\% | 12\% | 22\% | 66\% | 8\% | 22\% | 70\% | 7\% | 21\% | 73\% |
| Writing, Level 3 | 0\% | 5\% | 95\% | 3\% | 17\% | 80\% | 0\% | 0\% | 100\% | 6\% | 15\% | 79\% | 2\% | 15\% | 83\% | 2\% | 12\% | 86\% |
| Mathematics, Level 1 | 26\% | 17\% | 57\% | 41\% | 23\% | 36\% | 33\% | 33\% | 33\% | 20\% | 23\% | 57\% | 38\% | 23\% | 38\% | 23\% | 24\% | 53\% |
| Mathematics, Level 2 | 9\% | 17\% | 74\% | 18\% | 26\% | 56\% | 0\% | 33\% | 67\% | 5\% | 16\% | 79\% | 22\% | 20\% | 58\% | 7\% | 21\% | 72\% |
| Mathematics, Level 3 | 0\% | 11\% | 89\% | 3\% | 13\% | 84\% | 0\% | 33\% | 67\% | 1\% | 2\% | 96\% | 8\% | 17\% | 75\% | 2\% | 2\% | 95\% |



Figure 6
Incoming Freshmen Total Mean Score by College/School


Figure 7
Graduating Seniors Total Mean Score by College/School

## Freshmen Comparative Group Analysis

Guiding Question 4: How does the performance of incoming freshmen at FAMU compare to the National Average, institutions in our Carnegie Classification, HBCU's, and institutions in the State University System of Florida taken as a group?

First, comparison groups had to be identified then descriptive techniques were employed in addressing this guiding question. Specifically, mean and standard deviation of scores were computed for each skill dimension.

The Carnegie classification of institutions was developed based on institutions basic classification (Doctoral/Research University I \& II). The HBCU list of institutions was developed based on institutions land grant status. Once institutions were identified, further work was required in an effort to ascertain whether they participated in the EPP. This process helped to narrow the relevant group of institutions for comparison. Relative to institutions in the State of Florida, all participating institutions were included in the comparison group. This was necessary, as a minimum of ten institutions were required for comparative analyses. Please refer to Appendix B for a list of all institutions in the comparison groups.

Following, is a comparative summary of the performance of FAMU freshmen and that of the ETS provided National Averages, Carnegie classification institutions, HBCUs taken as a group, and participating institutions in the State of Florida. The data provided in Tables 9 were taken from the custom comparative data report generated by ETS. The report provided descriptive statistics based on the number of students who completed the ETS Proficiency Profile between July 2013 and September 2018. A five-year rolling average is utilized to normalize the scores.

As can be discerned from the data provided in Table 7, the mean score of FAMU freshmen, taken as a group for the period July 2013 to September 2017 ( $\mathbf{M}=\mathbf{4 3 0 . 7 7}$, $\mathrm{SD}=16.03$ ), fell below the national average ( $\mathbf{M}=\mathbf{4 3 7 . 4 0}, \mathbf{S D = 1 9 . 3 0}$ ), the Carnegie comparison group ( $\mathbf{M}=\mathbf{4 4 3 . 7 0}, \mathbf{S D} \mathbf{2 0 . 6 0}$ ), and the Florida comparison group ( $M=\mathbf{4 3 6 . 1 0}, \mathbf{M}=\mathbf{1 8 . 1 0}$ ). FAMU freshmen taken as a group outperformed the HBCU comparison group ( $\mathbf{M}=\mathbf{4 2 7 . 0 0}, \mathbf{S D = 1 5 . 2 0}$ ). Please refer to Table 9 for a comprehensive overview of these results to include the results for each skill dimension, which outlines the proportion of the test sample who were classified as P (Proficient), M (Marginally Proficient), and $N$ (Not Proficient).

Table 9
Comparative Summary of the Performance of FAMU Freshmen to Comparison Groups

| Skill Dimension | National Average |  |  | Carnegie <br> Comparison Group |  |  | HBCU Comparison Group |  |  | Florida Peer Group |  |  | FAMU Cumulative Results |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $N=82,731$ |  |  | N=16,034 |  |  | N=13,918 |  |  | $\mathrm{N}=7,172$ |  |  | N=2,183 |  |  |
|  | M |  | SD | M | SD |  | M | SD |  | M |  | SD | M | SD |  |
| Total Score | 437.4 |  | 19.3 | 443.7 | 20.6 |  | 427.0 | 15.2 |  | 436.1 |  | 18.1 | 430.77 | 16.03 |  |
| Critical Thinking | 109.5 |  | 7.2 | 110.9 | 6.4 |  | 107.1 | 4.8 |  | 109.3 |  | 5.7 | 107.78 | 5.18 |  |
| Reading | 115.6 |  | 5.4 | 117.3 | 7.4 |  | 112.8 | 6.6 |  | 115.3 |  | 7.1 | 113.68 | 6.82 |  |
| Writing | 112.9 |  | 5.6 | 114.4 | 5.3 |  | 110.7 | 4.9 |  | 112.7 |  | 5.3 | 112.05 | 5.09 |  |
| Mathematics | 112.2 |  | 6.3 | 113.9 | 6.0 |  | 109.4 | 4.5 |  | 111.8 |  | 5.5 | 110.69 | 4.95 |  |
| Humanities | 112.6 |  | 6.1 | 114.1 | 6.6 |  | 110.8 | 5.3 |  | 112.9 |  | 6.1 | 112.80 | 5.78 |  |
| Social Sciences | 111.3 |  | 5.9 | 112.6 | 6.4 |  | 109.4 | 5.4 |  | 111.3 |  | 6.0 | 110.26 | 5.69 |  |
| Natural Sciences | 113.5 |  | 5.9 | 114.7 | 6.0 |  | 111.1 | 5.3 |  | 113.2 |  | 6.0 | 111.66 | 5.94 |  |
|  | National Average |  |  | Carnegie Peer Group |  |  | HBCU Peer Group |  |  | Florida Peer Group |  |  | FAMU Cumulative Results |  |  |
| Proficiency Levels | P | M | N | P | M | N | P | M | N | P | M | N | P | M | N |
| Reading, Level 1 | 51\% | 22\% | 27\% | 59\% | 19\% | 22\% | 34\% | 25\% | 41\% | 47\% | 21\% | 32\% | 32\% | 22\% | 47\% |
| Reading, Level 2 | 23\% | 20\% | 58\% | 31\% | 20\% | 49\% | 10\% | 15\% | 75\% | 20\% | 17\% | 63\% | 12\% | 11\% | 76\% |
| Critical Thinking | 2\% | 12\% | 86\% | 3\% | 17\% | 80\% | 1\% | 4\% | 95\% | 2\% | 10\% | 88\% | 1\% | 4\% | 96\% |
| Writing, Level 1 | 50\% | 33\% | 18\% | 59\% | 28\% | 13\% | 32\% | 38\% | 30\% | 46\% | 31\% | 23\% | 35\% | 33\% | 32\% |
| Writing, Level 2 | 13\% | 31\% | 56\% | 19\% | 35\% | 46\% | 5\% | 21\% | 74\% | 12\% | 28\% | 60\% | 9\% | 22\% | 69\% |
| Writing, Level 3 | 6\% | 17\% | 77\% | 10\% | 21\% | 69\% | 2\% | 9\% | 89\% | 4\% | 17\% | 79\% | 3\% | 12\% | 85\% |
| Mathematics, Level 1 | 46\% | 27\% | 27\% | 56\% | 23\% | 21\% | 23\% | 30\% | 47\% | 41\% | 26\% | 33\% | 28\% | 24\% | 48\% |
| Mathematics, Level 2 | 21\% | 25\% | 54\% | 30\% | 26\% | 44\% | 7\% | 17\% | 77\% | 17\% | 24\% | 59\% | 9\% | 21\% | 70\% |
| Mathematics, Level 3 | 4\% | 12\% | 85\% | 7\% | 17\% | 76\% | 1\% | 4\% | 47\% | 3\% | 11\% | 86\% | 2\% | 8\% | 91\% |

Note: $\quad P=\%$ of students who were Proficient
$M=\%$ of students who were Marginally Proficient
$N=\%$ of students who were Not-Proficient

Figures 8-10 provide a graphical representation of these results.


Figure 8
Incoming Freshmen Total Mean Score Comparison


Figure 9
Incoming Freshmen Skill Dimensions Comparison


Figure 10
Incoming Freshmen Proficiency Classification Comparison (i.e. Percent of Students classified as proficient)

## Graduating Seniors Comparative Group Analysis

Guiding Question 5: How does the performance of graduating seniors at FAMU compare to the national average, institutions in our Carnegie Classification, HBCU's, and institutions in the State University System of Florida taken as a group?

The same approach outlined to address the third guiding question was employed in the identification and development of the comparison group of institutions. See Appendix B for a list of institutions that comprised the comparison groups. Descriptive techniques were employed in addressing this question. Specifically, mean and standard deviation of scores were computed for each skill dimension.

Following, is a comparative summary of the performance of FAMU graduating seniors and that of the ETS provided National Averages, Carnegie classification institutions, HBCUs taken as a group, and participating institutions in the State of Florida. The data provided in Tables 10 were taken from the custom comparative data report generated by ETS. The report provided descriptive statistics based on the number of students who completed the ETS Proficiency Profile between February 2014 and May 2018. A five-year rolling average is utilized to normalize the scores.

As can be discerned from the data provided in Table 10, the mean overall performance of FAMU graduating seniors, taken as a group for the period February 2014 to May 2018 ( $\mathbf{M}=\mathbf{4 3 1 . 2 5 , ~ S D = 1 7 . 3 2 ) , ~}$ fell below the national average ( $\mathbf{M}=\mathbf{4 4 6 . 9 0}$, SD 20.60), the Carnegie comparison group ( $\mathbf{M}=\mathbf{4 4 8 . 8 0}$, $\mathbf{S D}=\mathbf{2 1 . 6 0}$ ), and the Florida comparison group ( $\mathbf{M}=\mathbf{4 3 8 . 8 0}, \mathbf{S D = 2 0 . 2 0}$ ). The FAMU group was slightly higher than the HBCU comparison group ( $\mathbf{M}=\mathbf{4 3 0 . 9 0}, \mathbf{S D = 1 7 . 4 0}$ ). Please refer to Table 10 for a comprehensive overview of these results to include the results for each skill dimension, which outlines the proportion of the test sample who were classified as P (Proficient), M (Marginally Proficient), and $N$ (Not Proficient).

Table 10
Comparative Summary of the Performance of FAMU Seniors to Comparison Groups

|  | National Average |  |  | Carnegie Peer Group |  |  | HBCU Peer Group |  |  | Florida Group |  |  | FAMU Cumulative Results |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $N=70,628$ |  |  | $N=25,963$ |  |  | $N=5,279$ |  |  | $N=4,710$ |  |  | N=1,476 |  |  |
| Skill Dimension | M |  | SD | M |  | SD | M |  | SD | M |  | SD | M |  | SD |
| Total Score | 446.9 |  | 20.6 | 448.8 | 21.6 |  | 430.9 |  | 17.4 | 438.8 |  | 20.2 | 431.25 |  | 17.32 |
| Critical Thinking | 112.1 |  | 6.5 | 112.5 | 6.7 |  | 108.0 |  | 5.4 | 110.3 |  | 6.2 | 108.04 |  | 5.42 |
| Reading | 118.6 |  | 7.1 | 119.0 | 7.3 |  | 114.2 |  | 7.0 | 116.5 |  | 7.5 | 114.08 |  | 7.07 |
| Writing | 114.9 |  | 5.3 | 115.2 | 5.3 |  | 111.4 |  | 5.2 | 113.2 |  | 5.4 | 111.77 |  | 5.31 |
| Mathematics | 114.2 |  | 6.2 | 114.9 | 6.5 |  | 110.3 |  | 5.3 | 112.2 |  | 6.1 | 110.91 |  | 5.46 |
| Humanities | 114.9 |  | 6.8 | 115.6 | 7.0 |  | 111.8 |  | 5.8 | 114.4 |  | 6.5 | 113.19 |  | 6.25 |
| Social Sciences | 113.7 |  | 6.5 | 114.2 | 6.6 |  | 110.2 |  | 5.8 | 112.6 |  | 6.3 | 110.66 |  | 5.73 |
| Natural Sciences | 115.8 |  | 5.9 | 116.1 | 6.0 |  | 112.0 |  | 5.6 | 114.1 |  | 6.3 | 111.59 |  | 5.79 |
|  | National Average |  |  | Carnegie Peer Group |  |  | HBCU Peer Group |  |  | Florida Group |  |  | FAMU Cumulative Results |  |  |
| Proficiency Levels | P | M | N | P | M | N | P | M | N | P | M | N | P | M | $N$ |
| Reading, Level 1 | 68\% | 16\% | 15\% | 68\% | 15\% | 17\% | 42\% | 23\% | 35\% | 51\% | 20\% | 29\% | 34\% | 23\% | 43\% |
| Reading, Level 2 | 39\% | 21\% | 40\% | 40\% | 20\% | 40\% | 17\% | 16\% | 67\% | 27\% | 16\% | 57\% | 13\% | 14\% | 73\% |
| Critical Thinking | 5\% | 22\% | 73\% | 7\% | 21\% | 73\% | 1\% | 7\% | 92\% | 4\% | 12\% | 85\% | 1\% | 4\% | 95\% |
| Writing, Level 1 | 65\% | 25\% | 10\% | 65\% | 24\% | 11\% | 37\% | 34\% | 30\% | 49\% | 27\% | 23\% | 33\% | 32\% | 35\% |
| Writing, Level 2 | 22\% | 37\% | 41\% | 24\% | 36\% | 40\% | 9\% | 23\% | 68\% | 15\% | 30\% | 56\% | 10\% | 20\% | 70\% |
| Writing, Level 3 | 11\% | 25\% | 64\% | 12\% | 25\% | 62\% | 3\% | 12\% | 85\% | 5\% | 19\% | 76\% | 3\% | 13\% | 84\% |
| Mathematics, Level 1 | 59\% | 23\% | 18\% | 61\% | 20\% | 19\% | 29\% | 29\% | 43\% | 42\% | 23\% | 35\% | 31\% | 23\% | 47\% |
| Mathematics, Level 2 | 33\% | 26\% | 41\% | 36\% | 25\% | 39\% | 11\% | 17\% | 71\% | 20\% | 23\% | 57\% | 12\% | 21\% | 67\% |
| Mathematics, Level 3 | 9\% | 18\% | 74\% | 11\% | 19\% | 70\% | 2\% | 7\% | 91\% | 5\% | 12\% | 83\% | 3\% | 8\% | 89\% |

[^0]Figures 11-13 provides a graphical representation of these results.


Figure 11
Graduating Seniors Total Mean Score Comparison


Figure 12
Graduating Seniors Skill Dimension Comparison


Figure 13
Graduating Seniors Proficiency Classification Comparison, (i.e. Percent of Students classified as proficient)

## Recommendations for Improvement

The results of the EPP confirm that our students are entering the university with serious deficits in all skill areas as reported by the proportion of incoming freshmen who were classified as proficient on the test. Equally concerning, is the proportion of graduating seniors who were classified as proficient in the skill areas measured by the test. Since 2009, less than $55 \%$ of FAMU graduating seniors were classified as proficient in the skill areas measured by the test. Additionally, less than $10 \%$ of graduating seniors completing the test were classified as proficient in Critical Thinking, Writing Level 3 and Mathematics Level 3. Following are recommendations for improvement:

- More emphasis across colleges/schools should be placed on addressing the competencies measured by the test.
- Colleges and schools should reinforce to students the importance to taking the test seriously, as it is an indicator of what they have learned over their matriculation at FAMU.
- Colleges and schools should encourage and incentivize student participation on the test.
- In general education courses, in addition to upper division courses, these skill sets should be emphasized and assessed as a way of speaking to what students should know and/or be able to do at the end of the degree program.
- The test should be administered to all incoming freshmen during orientation week as a way of gauging the knowledge and skills that students possess when they enter the university.
- Colleges and schools should mandate all undergraduate graduating senior participate in the test prior to graduation.


## Limitations of Report

The following considerations should be kept in mind when interpreting the comparative results:

- This data should be considered comparative rather than normative because the institutions included in the data do not represent proportionally the various types of higher education institutions. The data are drawn entirely from institutions that choose to participate in the ETS Proficiency Profile. Such a self-selected sample may not be representative of all institutions.
- The number of students tested and sampling procedures vary from one institution to another. Therefore, it is impossible to verify that the students tested at each institution are representative of all that institution's students.
- It is helpful when these comparisons involve students at approximately the same point in their educational careers. Students who have not identified their credit status are excluded from these calculations.
- The tables report data for institutions that have tested 30 or more students at the selected class level or number of credit hours attained. Institutions with fewer than 30 test takers at that class level are excluded from these calculations.


## APPENDIX

## Appendix A

## Proficiency Measures

In addition to a total score, proficiency classifications (proficient, marginal or not proficient) measure how well your students have mastered each level of proficiency within three skill areas:

- Reading/Critical Thinking
- Writing
- Mathematics


## Reading/Critical Thinking

Level 1: Students who are proficient can:

- recognize factual material explicitly presented in a reading passage
- understand the meaning of particular words or phrases in the context of a reading passage

Level 2: Students who are proficient can:

- synthesize material from different sections of a passage
- recognize valid inferences derived from material in the passage
- identify accurate summaries of a passage or of significant sections of the passage
- understand and interpret figurative language
- discern the main idea, purpose or focus of a passage or a significant portion of the passage

Level 3/Critical Thinking: Students who are proficient can:

- evaluate competing causal explanations
- evaluate hypotheses for consistency with known facts
- determine the relevance of information for evaluating an argument or conclusion
- determine whether an artistic interpretation is supported by evidence contained in a work
- recognize the salient features or themes in a work of art
- evaluate the appropriateness of procedures for investigating a question of causation
- evaluate data for consistency with known facts, hypotheses or methods
- recognize flaws and inconsistencies in an argument


## Writing Skills

Level 1: Students who are proficient can:

- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions)
- recognize appropriate transition words
- recognize incorrect word choice
- order sentences in a paragraph
- order elements in an outline

Level 2: Students who are proficient can:

- incorporate new material into a passage
- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions) when these elements are complicated by intervening words or phrases
- combine simple clauses into single, more complex combinations
- recast existing sentences into new syntactic combinations

Level 3: Students who are proficient can:

- discriminate between appropriate and inappropriate use of parallelism
- discriminate between appropriate and inappropriate use of idiomatic language
- recognize redundancy
- discriminate between correct and incorrect constructions
- recognize the most effective revision of a sentence


## Mathematics

Level 1: Students who are proficient can:

- Solve word problems that would most likely be solved by arithmetic and do not involve conversion of units or proportionality. These problems can be multistep if the steps are repeated rather than embedded
- Solve problems involving the informal properties of numbers and operations, often involving the Number Line, including positive and negative numbers, whole numbers and fractions (including conversions of common fractions to percent, such as converting " $1 / 4$ " to $25 \%$ )
- solve problems requiring a general understanding of square roots and the squares of numbers
- solve a simple equation or substitute numbers into an algebraic expression
- Find information from a graph. This task may involve finding a specific piece of information in a graph that also contains other information

Level 2: Students who are proficient can:

- Solve arithmetic problems with some complications, such as complex wording, maximizing or minimizing, and embedded ratios. These problems include algebra problems that can be solved by arithmetic (the answer choices are numeric)
- Simplify algebraic expressions, perform basic translations, and draw conclusions from algebraic equations and inequalities. These tasks are more complicated than solving a simple equation, though they may be approached arithmetically by substituting numbers
- interpret a trend represented in a graph, or choose a graph that reflects a trend
- solve problems involving sets; problems have numeric answer choices

Level 3: Students who are proficient can:

- solve word problems that would be unlikely to be solved by arithmetic; the answer choices are either algebraic expressions or numbers that do not lend themselves to back-solving
- solve problems involving difficult arithmetic concepts, such as exponents and roots other than squares and square roots, and percent of increase or decrease
- generalize about numbers (e.g., identify the values of $(x)$ for which an expression increases as ( $x$ ) increases)
- Solve problems requiring an understanding of the properties of integers, rational numbers, etc.
- interpret a graph in which the trends are to be expressed algebraically or one of the following is involved: exponents and roots other than squares and square roots, percent of increase or decrease
- solve problems requiring insight or logical reasoning


## Appendix B

Following are the comparison groups used in the analyses.
Table A
Carnegie Comparison Group

| Carnegie Peer Group |  |
| :--- | :--- |
| Freshmen | Seniors |
| Bowie State University | Arizona State University - Tempe |
| Clark Atlanta University | Bowie State University |
| Clemson University | Capella University |
| Colorado State University- Global Campus | Clemson University |
| Florida Agricultural and Mechanical University | Colorado State University- Global Campus |
| Florida International University | Florida Agricultural and Mechanical University |
| Indiana University - System Office | Florida International University |
| Mississippi State University | Mississippi State University |
| North Carolina State University | Missouri University of Science and Technology |
| Northern Arizona University - Flagstaff | North Carolina State University |
| Saint Philips College | Northern Arizona University - Flagstaff |
| Seattle University | Saint Philips College |
| Spalding University | Temple University |
| Temple University | Tennessee State University |
| Texas A\&M University - Kingsville | Texas A\&M University - Kingsville |
| Texas A\&M University - San Antonio | Texas A\&M University - San Antonio |
| Texas A\&M University-Commerce | Texas Tech University Health Sciences Center |
| The New School | The New School |
| University of Akron, The | University of Akron, The |
| University of Alabama at Birmingham | University of Alabama at Birmingham |
| University of Alaska Fairbanks | University of Alabama in Huntsville |
| University of Colorado - Denver | University of Alaska Fairbanks |
| University of Delaware | University of Colorado - Denver |
| University of Mississippi | University of Delaware |
| University of Nevada | University of Georgia |
| University of North Texas - Dallas | University of Memphis |
| University of South Florida - Sarasota-Manatee | University of Mississippi |
| University of Tulsa | University of Missouri - Columbia |
| Walden University | University of Missouri - Kansas City |
|  | University of Nevada |
|  | University of North Carolina - Charlotte |
|  | University of North Texas - Dallas |
|  | University of South Florida - Tampa |
|  | University of Tulsa |
|  |  |
|  |  |


| Carnegie Peer Group |  |
| :--- | :--- |
| Freshmen | Seniors |
|  | Walden University |
|  | Wayne State University |
|  | Wilmington University |

## Table B

HBCU Comparison Group

| HBCU Peer Group |  |
| :--- | :--- |
| Freshmen | Seniors |
| Alabama A \& M University | Alabama State University |
| Alabama State University | Bennett College for Women |
| Benedict College | Bowie State University |
| Bennett College for Women | Elizabeth City State University |
| Bowie State University | Fisk University |
| Clark Atlanta University | Florida Agricultural and Mechanical University |
| Elizabeth City State University | Grambling State University |
| Fisk University | Jarvis Christian College |
| Florida Agricultural and Mechanical University | Norfolk State University |
| Morehouse College | Philander Smith College |
| Norfolk State University | Prairie View A \& M University |
| Prairie View A \& M University | Saint Philips College |
| South Carolina State University | Talladega College |
| Spelman College | Tennessee State University |
|  | University of Maryland Eastern Shore |
|  | Wiley College |

Table C
Florida Comparison Group

| SUS/Florida |  |
| :--- | :--- |
| Freshmen | Seniors |
| Baptist College of Florida, The | Everglades University |
| Eckerd College | Florida Agricultural and Mechanical University |
| Florida Agricultural and Mechanical University | Florida International University |
| Florida International University | Florida State College at Jacksonville |
| Florida Polytechnic University | Keiser University |
| Florida State College at Jacksonville | Miami International University of Art and Design |
| Palm Beach Atlantic University | Palm Beach Atlantic University |
| Saint Leo University | Southeastern University |
| Southeastern University | St. Johns River State College |
| University of North Florida | University of North Florida |
| University of South Florida - Sarasota-Manatee | University of South Florida - St. Petersburg |


| SUS/Florida |  |
| :--- | :--- |
| Freshmen | Seniors |
| University of South Florida - St. Petersburg | University of South Florida - Tampa |
| University of Tampa | University of Tampa |
| Webber International University |  |


[^0]:    Note: $\quad P=\%$ of students who were Proficient
    $M=\%$ of students who were Marginally Proficient
    $N=\%$ of students who were Not-Proficient

