

A comparative summary report of the ETS Proficiency Profile results for incoming freshman and graduating seniors during the 2018-2019 academic year.

ETS Proficiency Profile 2018-2019 Comparative Summary Report

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#### **Overview**

The Office of University Assessment (OUA) administers the ETS Proficiency Profile (EPP) Test to Florida A&M University's incoming freshmen and graduating seniors to assess their general education knowledge and skills. The EPP evaluates critical thinking and college-level reading, writing, and mathematical skills in the contexts of the humanities, social sciences, and natural sciences. Colleges and universities nationwide use the EPP to assess general education outcomes and provide valuable data for accreditation, strategic planning, curriculum improvement, performance-based funding, benchmarking, and for investigating learning gains.

The EPP is comprised of multiple-choice questions arranged in blocks of three to eight items. Each section contains items that assess the same types of skills. The test is structured to mitigate the effect of test fatigue on student performance. Students receive a total score on the test that is reported on a scale of 400-500. Additionally, students receive a subscale score on a range from 100-130 on each skill area (i.e., Critical Thinking, Reading, Writing, Mathematics, Humanities, Social Sciences, and Natural Sciences). Institutions also receive proficiency classifications that range from Level 1 (*not proficient*) to Level 3 (*proficient*) based on students' performance taken as a group in each skill dimension. A comprehensive overview of the proficiency levels for each skill area is provided on the OUA website.

This report is intended to summarize key findings related to students' performance on the EPP. The results are provided using data for three years (Fall 2016 to Spring 2019). 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 three years (Fall 2016 – Spring 2019), (n = 1,557) freshmen and (n = 545) seniors have participated in the EPP test.

Four central questions guided the preparation of this report:

- 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 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?
- 4. 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?

Additionally, information on EPP performance by College/School is provided on the OUA website.

### **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?

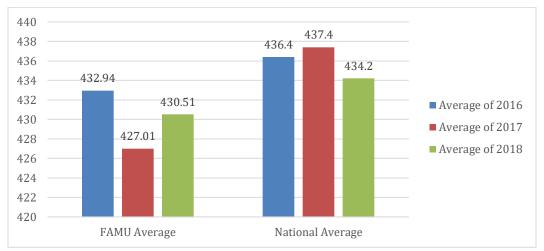
Descriptive techniques were employed in addressing this question. Specifically, mean and standard deviation of scores were computed for each skill dimension.

In Fall 2018, (n = 440) incoming freshmen attempted to take the EPP test. Results were calculated for the students (n = 412) who completed 75% or more of the test items. Table 1 provides a summary of the results for the scaled scores. The mean total score for the Fall 2018 cohort of incoming freshmen was 430.51 (SD = 13.59). The overall mean performance of FAMU freshmen was below the national average during the same period (M = 434.20, SD = 18.80). The FAMU entering freshmen performance was compared to the performance of entering freshmen enrolled in all institution types administering the unproctored version of the EPP test across the United States. A review of the trends associated with the performance of FAMU incoming freshmen on the EPP revealed variability in overall mean performance. Table 1 provides a comprehensive overview of the performance of FAMU incoming freshmen on the EPP spanning 2016-2018.

Table 1
Trends in Incoming Freshmen Average Performance on ETS Proficiency Profile (2016-2018)

Skill Dimension	2016		20	17	2018		
	N	=622	N=4	406	N=412		
	М	SD	М	SD	М	SD	
<b>Total Score</b>	432.94	17.69	427.01	13.06	430.51	13.59	
Critical Thinking	108.46	5.63	107.09	4.51	107.75	4.72	
Reading	114.13	6.93	112.74	6.41	113.83	6.24	
Writing	112.38	5.22	111.24	4.89	111.9	4.68	
Mathematics	111.29	5.19	109.45	4.33	110.56	4.41	
Humanities	112.95	5.96	112.38	5.2	112.92	5.54	
Social Sciences	110.92	5.96	109.65	5.52	110.48	5.43	
Natural Sciences	111.78	6.00	110.79	5.59	111.57	5.42	

Figure 1 presents the FAMU entering freshmen mean total scores plotted against the national averages for the cohorts from Fall 2016 to Fall 2018.



*Figure 1.* FAMU Freshmen Performance on ETS Proficiency Profile Compared to National Average for 2017 to 2019.

Similarly, the mean performance of FAMU freshmen in each skill dimension fell below the national average. Table 2 presents a summary of these results. While the overall performance of FAMU entering freshmen lagged national averages, it should be noted that the largest difference was evidenced in the critical thinking skill dimension and the smallest difference was evidenced in the humanities skill dimension.

Table 2
FAMU Incoming Freshmen Average Scaled Scores for Fall 2018

	Range of Scores	FAM	IU	National		Difference Indicator
		М	SD	М	SD	
Total Score	400 to 500	430.51	13.59	434.20	18.80	1
Critical Thinking	100 to 130	107.75	4.72	109.00	5.90	1
Reading	100 to 130	113.83	6.24	114.30	7.40	1
Writing	100 to 130	111.90	4.68	112.4	5.40	1
Mathematics	100 to 130	110.56	4.41	111.50	5.70	1
Humanities	100 to 130	112.92	5.54	113.00	6.30	1
Social Sciences	100 to 130	110.48	5.43	111.10	6.10	1
Natural Sciences	100 to 130	111.57	5.42	112.70	6.20	1

Note. Denotes FAMU Mean Performance below National Average. Poenotes FAMU Mean Performance above National Average.

Table 3 presents the percentage of entering freshmen exhibiting proficiency in each skill dimension at FAMU and in the national sample from 2016 to 2018. A review of each skill dimension measured on the ETS Proficiency Profile revealed that the largest percentage of incoming freshmen demonstrated proficiency on level 1 writing at FAMU in 2016; this trend persisted as the highest percentages of students demonstrating proficiency each year at FAMU occurred on the writing skill dimension at level 1. At a national level, incoming freshmen demonstrated proficiency at higher percentages on level 1 writing and level 1 reading.

Table 3
Trends in Incoming Freshmen Classified as Proficient (2016-2018)

g		FAMU			National	
Proficiency Levels	2016	2017	2018	2016	2017	2018
	N=622	N=406	N=412	2010	2017	2010
Reading, Level 1	34%	26%	29%	47%	38%	38%
Reading, Level 2	16%	8%	11%	21%	16%	16%
Critical Thinking	1%	0%	0%	2%	2%	2%
Writing, Level 1	39%	28%	38%	47%	40%	40%
Writing, Level 2	11%	6%	7%	12%	11%	12%
Writing, Level 3	4%	2%	2%	5%	3%	4%
Mathematics, Level 1	31%	18%	26%	42%	34%	35%
Mathematics, Level 2	11%	4%	7%	19%	15%	16%
Mathematics, Level 3	2%	1%	0%	4%	3%	3%

### Trends in Graduating Seniors Performance

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

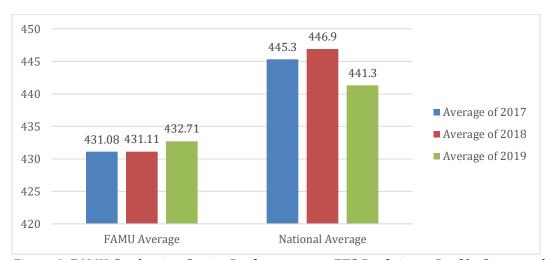
Descriptive techniques were employed in addressing this question. Specifically, mean and standard deviation of scores were computed for each skill dimension.

In Spring 2019, (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 for graduating seniors from 2017 to 2019. There were minor increases in mean total score, critical thinking, social sciences, and natural sciences. In the remaining categories there were mild fluctuations from 2017 to 2019, however, the were largely either flat or decreased.

Table 4
Trends in Graduating Seniors Average Performance on ETS Proficiency Profile (2017-2019)

	201	17	201	8	201	9
Skill Dimension	N=2	27	N=2	16	N = 143	
	М	SD	М	SD	М	SD
Total Score	431.08	17.31	431.11	14.42	432.71	19.36
Critical Thinking	107.93	5.6	107.94	5.11	108.82	6.12
Reading	114.18	6.98	114.16	6.56	114.43	7.49
Writing	111.85	5.23	112.13	4.84	111.8	5.63
Mathematics	110.65	5.63	110.36	4.18	111.25	5.76
Humanities	113.77	6.55	113.01	5.81	113.01	6.2
Social Sciences	110.5	5.7	110.85	5.5	111.03	6.38
Natural Sciences	111.13	5.7	111.47	5.55	112.81	6.14

Similar to the results for incoming freshmen, FAMU graduating seniors' total score was significantly below the national average between 2017 and 2018. Figure 2 presents the FAMU graduating senior mean total scores plotted against the national averages for the cohorts from Spring 2017 to Spring 2019.



*Figure 2.* FAMU Graduating Senior Performance on ETS Proficiency Profile Compared to National Average for 2017 to 2019.

Please refer to Table 5 for a summary of FAMU graduating seniors' performance in each skill dimension in comparison to the national averages. Overall, the performance of FAMU graduating seniors lagged behind national averages for total scores and skill dimension scores.

Table 5
FAMU Graduating Seniors Average Scaled Scores for Spring 2019

S	Range of	FAM	IU	Natio	nal	Difference Indicator
	Scores	М	SD	М	SD	Difference mulcator
Total Score	400 to 500	432.71	19.36	441.3	20.8	1
Critical Thinking	100 to 130	108.82	6.12	111.1	6.5	•
Reading	100 to 130	114.43	7.49	117.1	7.6	1
Writing	100 to 130	111.8	5.63	113.7	5.4	•
Mathematics	100 to 130	111.25	5.76	112.7	6.1	1
Humanities	100 to 130	113.01	6.2	115.3	6.7	1
Social Sciences	100 to 130	111.03	6.38	113.3	6.5	•
Natural Sciences	100 to 130	112.81	6.14	114.6	6.5	<b>I</b>

Note. Denotes FAMU Mean Performance below National Average. Poenotes FAMU Mean Performance above National Average.

A review of each skill dimension measured on the EPP for graduating seniors revealed that overall FAMU graduating seniors' proficiency in all skill areas were higher in 2019 than 2017. For all three cohorts, higher percentages of students exhibited proficiency in reading level 1, writing level 1, and math level 1 than the other skill dimensions. Additionally, critical thinking, writing level 3 and mathematics level 3 proved most challenging for FAMU graduating seniors as the lowest percentages of students achieved proficiency in these areas. Please refer to Table 6 for a comprehensive overview of these results.

Table 6
Trends in FAMU Graduating Seniors Classified as Proficient (2017-2019)

Proficiency Levels	2017	2018	2019
	N=227	N=216	N=143
Reading, Level 1	33%	31%	40%
Reading, Level 2	12%	13%	13%
Critical Thinking	1%	1%	1%
Writing, Level 1	33%	36%	36%
Writing, Level 2	8%	10%	8%
Writing, Level 3	3%	1%	4%
Mathematics, Level 1	28%	24%	33%
Mathematics, Level 2	11%	5%	13%
Mathematics, Level 3	3%	1%	5%

### Freshmen/Senior Comparative Analysis

Figures 3 and 4 provide a comparison of freshmen results to those of seniors assuming four and six years to time of graduation. Assuming a four-year graduation, there was an increase in the mean total score for cohorts of incoming freshmen who took the test in 2014 and 2015 and 2018 and 2019 graduating seniors. However, there was a decrease in mean total score for the 2013 incoming freshmen and 2017 graduating senior cohorts. Assuming a six-year graduation, there were declines for 2011 and 2012 cohorts of incoming freshmen, and an increase across the 2013 cohort of incoming freshmen to the cohort of 2019 graduating seniors.

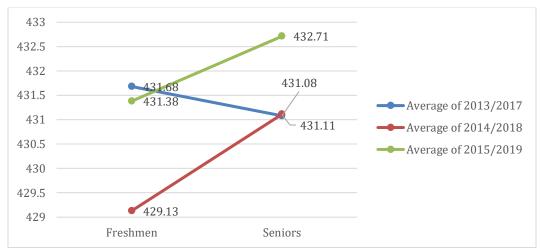


Figure 3. Comparison assuming 4-year Graduation.

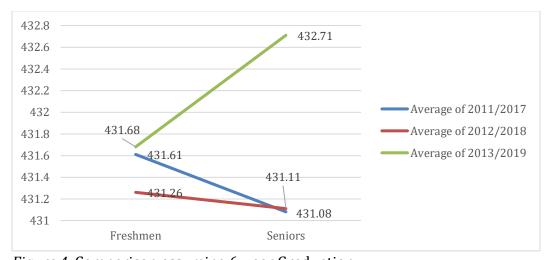


Figure 4. Comparison assuming 6-year Graduation.

### Freshmen Comparative Group Analysis

Guiding Question 3: 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 were identified then descriptive techniques were employed in addressing this guiding question. Specifically, mean and standard deviation of scores were computed for each skill dimension. Additionally, the percentage of incoming freshmen classified as proficient in each skill dimension was reported.

The Carnegie classification of institutions was developed based on the institution's 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. Please refer to Appendix A for a list of all institutions in the comparison groups.

Following is a comparative summary of the performance of FAMU freshmen from Fall 2013 to Fall 2018 and that of the ETS provided National Averages (July 2013-June 2018), Carnegie classification institutions (July 2013-June 2018), HBCUs taken as a group (July 2015-June 2019), and participating institutions in the State of Florida (July 2015-June 2019). The data provided in Tables 7 and 8 were taken from the custom comparative data report and annual comparative report generated by ETS. These reports provided descriptive statistics based on the number of students who completed the ETS Proficiency Profile between July 2013 and June 2019. A rolling average is utilized to normalize the scores.

As can be discerned from the data provided in Table 7, FAMU incoming freshmen's mean total score and skill dimension scores trailed the national average, the Carnegie, and the Florida comparison groups. These gaps were marginal for most skill dimensions. However, FAMU freshmen taken as a group outperformed the HBCU comparison group on mean total score and all mean skill dimension scores. Please refer to Table 8 for a comprehensive overview of percentage of students exhibiting proficiency in each skill dimension.

Table 7
Comparative Summary of the Performance of FAMU Freshmen to Comparison Groups

Skill Dimension	National Average		Comp	negie parison oup		omparison oup	Florida Pe	er Group		mulative ults
	N=31	1,593	N=	2,552	N=1	0,557	N=5,	5 <i>32</i>	N=2	,595
	М	SD	М	SD	М	SD	М	SD	М	SD
Total Score	434.2	18.8	434.5	18.7	427.50	15.8	433.9	17.4	430.73	15.67
Critical Thinking	109.0	5.9	109.1	5.9	107.3	5.0	108.9	5.6	107.77	5.11
Reading	114.3	7.4	114.7	7.3	113.1	6.7	114.6	7.0	113.70	6.73
Writing	112.4	5.4	112.5	5.3	110.7	5.0	112.4	5.2	112.03	5.02
Mathematics	111.5	5.7	111.7	5.7	109.5	4.7	111.3	5.4	110.67	4.87
Humanities	113.0	6.3	113.5	6.3	111.2	5.6	112.9	6.0	112.82	5.74
Social Sciences	111.1	6.1	111.4	6.1	109.7	5.5	111.0	5.9	110.30	5.65
Natural Sciences	112.7	6.2	112.7	6.3	111.2	5.4	112.7	6.0	111.64	5.86

Table 8
Comparative Summary of the Performance of FAMU Freshmen to Comparison Groups

	National Average	Carnegie Peer Group	HBCU Peer Group	Florida Peer Group	FAMU Cumulative Results
Reading, Level 1	38%	39%	34%	41%	31%
Reading, Level 2	16%	18%	11%	16%	12%
Critical Thinking	2%	3%	1%	1%	1%
Writing, Level 1	40%	40%	31%	41%	35%
Writing, Level 2	12%	13%	6%	11%	9%
Writing, Level 3	4%	4%	2%	4%	3%
Mathematics, Level 1	35%	35%	24%	35%	28%
Mathematics, Level 2	16%	16%	7%	14%	9%
Mathematics, Level 3	3%	4%	1%	2%	1%

### Graduating Seniors Comparative Group Analysis

Guiding Question 4: 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 A 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 while percentages were reported for the skill dimensions.

Following is a comparative summary of the performance of FAMU graduating seniors from Spring 2013 to Spring 2019 and that of the ETS provided National Averages (July 2014-June 2019), Carnegie classification institutions (July 2014-June 2019), HBCUs taken as a group (July 2015-June 2020), and participating institutions in the State of Florida (July 2015-June 2020). The data provided in Tables 9 and 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 July 2013 and June 2020. A rolling average is utilized to normalize the scores.

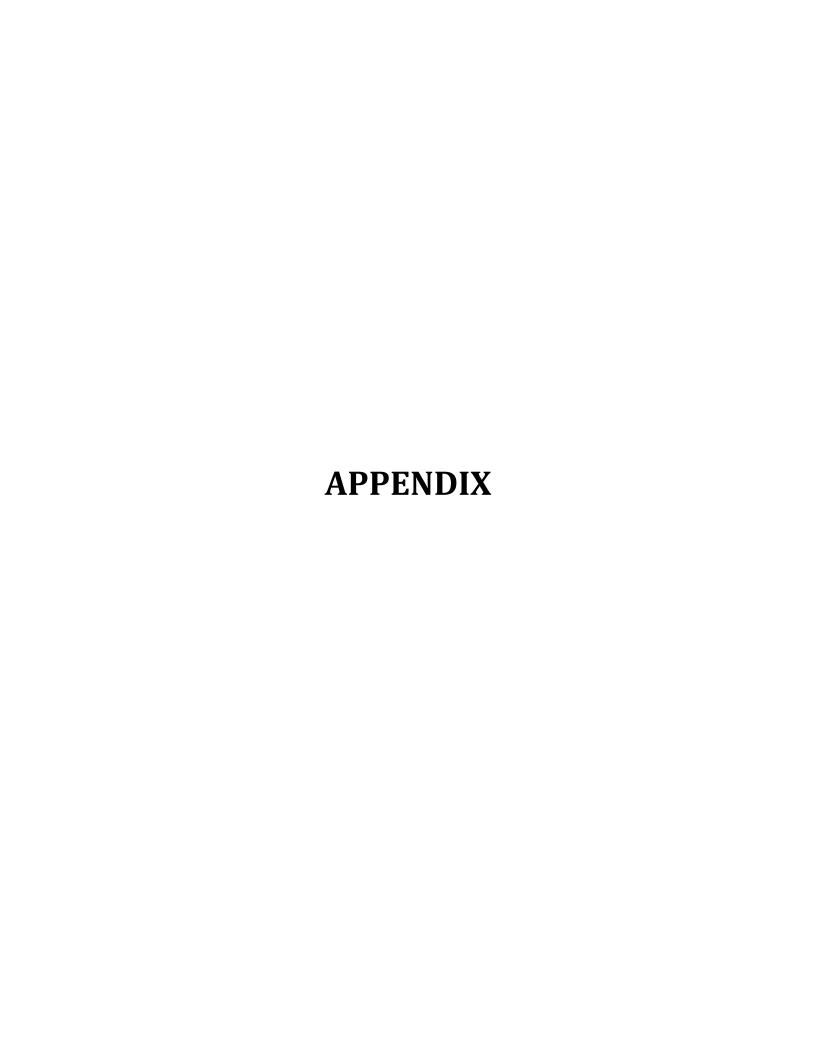
As can be discerned from the data provided in Table 9, the mean overall performance of FAMU graduating seniors as a group fell below the national, the Carnegie, and the Florida comparison groups on the total score and each skill dimension. The FAMU group was slightly higher than the HBCU comparison group on mean total score and each skill dimension with the exception of natural sciences. Please refer to Table 10 for a comprehensive overview of the results for each skill dimension, specifically the percentage of seniors in each group classified as proficient. The percentage of FAMU seniors demonstrating proficiency lagged behind the national, Carnegie, and Florida comparison groups for all subscales. FAMU seniors outperformed or maintained pace with their HBCU counterparts in demonstrating proficiency on all dimensions except reading level 1 and 2 and writing level 1.

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

	National A	Average	Carnegie Pe	eer Group	HBCU	Peer	Florid	a Peer	FAMU Cur	nulative
Skill Dimension					Gro	up	Gre	oup	Resu	ılts
	N=41,	652	N=8,3	128	N=6	,182	N=4	,521	N=1,2	751
	М	SD	М	SD	М	SD	М	SD	М	SD
Total Score	441.3	20.8	444.1	20.9	430.6	17.6	437.7	20.0	431.80	18.31
Critical Thinking	111.1	6.5	111.7	6.6	108.1	5.5	110.1	6.2	108.28	5.62
Reading	117.1	7.6	117.9	5.3	114.1	7.0	116.1	7.5	114.15	7.23
Writing	113.7	5.4	114.3	5.3	111.3	5.3	112.9	5.5	111.88	5.47
Mathematics	112.7	6.1	113.5	6.2	110.1	5.2	112.1	5.9	111.01	5.62
Humanities	115.3	6.7	116.1	6.7	111.9	5.9	114.2	6.5	113.25	6.34
Social Sciences	113.3	6.5	113.9	6.5	110.2	5.8	112.3	6.3	110.81	5.92
Natural Sciences	114.6	6.5	115.1	6.4	111.9	5.7	113.8	6.3	111.88	5.92

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

	National Average	Carnegie Peer Group	HBCU Peer Group	Florida Group	FAMU Cumulative Results
Reading, Level 1	53%	57%	42%	49%	35%
Reading, Level 2	28%	31%	16%	25%	14%
Critical Thinking	5%	5%	1%	3%	2%
Writing, Level 1	50%	54%	35%	46%	34%
Writing, Level 2	17%	19%	8%	14%	10%
Writing, Level 3	5%	6%	3%	5%	3%
Mathematics, Level 1	43%	48%	28%	40%	31%
Mathematics, Level 2	22%	25%	11%	19%	13%
Mathematics, Level 3	6%	7%	2%	5%	3%



## **Appendix A. Comparison Group Listings**

Following are the comparison groups used in the analyses.

Table A Carnegie Comparison Group

Carnegie Peer Group					
Freshmen	Seniors				
Arizona State University - Tempe	Arizona State University - Tempe				
Bowie State University	Bowie State University				
Colorado State University- Global Campus	Colorado State University- Global Campus				
Florida Agricultural and Mechanical University	Florida Agricultural and Mechanical University				
Northern Arizona University - Flagstaff	Northern Arizona University - Flagstaff				
Saint Philips College	Saint Philips College				
Seattle University	Texas A&M University - San Antonio				
Texas A&M University - San Antonio	Texas Tech University				
Texas Tech University Health Sciences Center	Texas Tech University Health Sciences Center				
The New School, NY	The New School, NYU				
University of Alaska Fairbanks	University of Georgia				
University of Nevada	University of Memphis				
University of South Florida - Sarasota-Manatee	University of Nevada				
Walden University	University of South Florida – Sarasota/Manatee				
	Walden University				
	Wayne State University				
	Wilmington University				

Table B HBCU Comparison Group

HBCU Peer Group	
Freshmen	Seniors
Alabama A & M University	Bennett College for Women
Alabama State University	Fayetteville State University, NC
Benedict College	Fisk University
Bennett College for Women	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
Norfolk State University	Philander Smith College
Spelman College	Prairie View A & M University
	Tennessee State University
	Wiley College

Table C Florida Comparison Group

SUS/Florida	
Freshmen	Seniors
The Baptist College of Florida	The Baptist College of Florida
Florida Agricultural and Mechanical University	Everglades University
Florida International University	Florida Agricultural and Mechanical University
Florida Polytechnic University	Florida International University
Palm Beach Atlantic University	Florida State College at Jacksonville
Southeastern University	Keiser University
University of North Florida University of South Florida - Sarasota-	Miami International University of Art and Design
Manatee	Miami Regional University
University of South Florida - St. Petersburg	Palm Beach Atlantic University
University of Tampa	Southeastern University
Webber International University	St. Johns River State College
	University of North Florida
	University of South Florida – Sarasota/Manatee
	University of South Florida - St. Petersburg
	University of Tampa