ENGAGING AFRICAN AMERICAN STUDENTS: COMPARING STUDENT ENGAGEMENT AND STUDENT SATISFACTION AT HISTORICAL BLACK COLLEGES AND UNIVERSITIES AND THEIR SELF-IDENTIFIED PREDOMINANTLY WHITE PEER INSTITUTIONS

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Abstract

This study compares African American students’ educational engagement and satisfaction at Historical Black Colleges and Universities (HBCU) and their self-identified peer Predominantly White Institutions (PWI). Data of this study came from the National Survey of Student Engagement (NSSE) that includes a sample of 1,631 seniors from 17 HBCU’s and 2,939 seniors from 246 PWI’s. The results of this study show that African American seniors at HBCU’s are generally equally or more engaged in educationally purposeful activities than their peers at PWI’s. However, the higher engagement of African American students at HBCU’s does not translate into higher student satisfaction. A further investigation indicated that student’s relationships with administrative personnel and offices may be the prominent factor affecting student satisfaction at HBCU’s.

Keywords: student engagement; student satisfaction; HBCU; PWI
INTRODUCTION

Over the past twenty years, numerous studies have been conducted on the subject of Historically Black Colleges and Universities (HBCU). Within these studies, most have attested to the beneficial academic and professional effects of African American students attending HBCUs (Allen, 1992; Astin, Tsui, & Avalos, 1996; Bonous-Hammarth & Boatsman, 1996; Davis, 1991; Fleming, 1984; Roebuck & Murty, 1993). Although research has demonstrated that student involvement is strongly related to student success, the literature does not contain many studies examining the relationship between student involvement and satisfaction for African American students at HBCUs. In addition, most of the studies on African American students at HBCUs utilized either a small sample of students from both HBCUs and Predominantly White Institutions (PWIs), or the researchers only compared HBCUs with PWIs that are not analogous in terms of institutional and student characteristics. It is very difficult to draw a large sample of African American students from both HBCUs and their comparable peer PWIs. It is even more difficult to identify which PWI should be used in the comparison group.

An opportunity to overcome the above research obstacles emerged in 2005 when the National Survey of Student Engagement (NSSE) was administered by more than 520 American four-year colleges and universities. During the survey administration, the NSSE asked each institution to select a group of at least six institutions that they considered to be their peer institutions. This provided a unique opportunity for HBCUs to compare themselves with similar PWIs, and it unraveled two limitations that troubled many HBCU studies: (1) NSSE respondents were randomly selected from 600,000 students at more than 520 American four-year colleges and universities. The size and quality of the NSSE sample has exceeded the requirements of most parametric statistics. (2) NSSE asked each institution to select their peer institutions. This
eliminated the problematic procedures of having the researchers select comparable PWIs in most HBCU studies. Since the comparable PWIs in this study were selected by schools instead of by the researchers, this study should yield results that are more parallel to the reality.

The purpose of this study is to examine the relationship between student engagement and satisfaction for African American students at HBCUs. The following research questions guided this study:

1. Do African American senior students have the same level of educational engagement at HBCUs and PWIs?
2. Do African American senior students have the same level of satisfaction with their collegiate experience at HBCUs and PWIs?
3. What institutional factors may drive the differences, if any, in student satisfaction between HBCUs and PWIs?

Student Engagement and Satisfaction

For the past several decades, the voluminous research in student development showed that the time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development in college (Astin, 1993; Pascarella & Terenzini, 1991; Pace, 1980). The implication for estimating collegiate quality is that institutions that more fully engage their students in educational activities can claim to be of higher quality in comparison with similar types of colleges and universities (Kuh, 2004).

Certain institutional practices are known to lead to high levels of student engagement. In 1987, Chickering and Gamson published the seven principles of good practice in undergraduate education. These seven principles of good practice in undergraduate education have been dispensed widely in many aspects of American higher education. These seven principles are: (a)
encouraging contact between students and faculty, (b) developing reciprocity and cooperation among students, (c) encouraging active learning, (d) giving prompt feedback, (e) emphasizing time on task, (f) communicating high expectations, and (g) respecting diverse talents and ways of learning. Also important to college student development are institutional environments that are perceived by students as inclusive and affirming as well as where expectations for performance are clearly communicated and set at reasonably high level (Kuh, 2004).

African American Student Engagement

Over the past couple of decades many scholars have researched the differences in collegiate experiences of African American students who attend HBCUs and their counterparts at PWIs (Fleming, 1984; Allen, 1992; Flowers, 2002; Kim, 2002). Most of the studies found that today’s HBCUs still play a significant role in success of African Americans students. In an often cited study that was administered to 1,529 undergraduates from 7 HBCUs and 1,062 undergraduates from 8 PWIs, Fleming reported that HBCUs promoted intellectual and interpersonal growth for African American men better than PWIs. Astin (1975) found that African American student’s experiences of isolation and alienation at PWIs might contribute to a higher degree of student success at HBCUs. Fleming (1984) asserted that HBCUs provide greater developmental opportunities for African American students that PWIs can only aspire. In addition, Allen (1992) reported that HBCUs provided a more positive social and psychological environment for African Americans. As a result of their conductive environment, African American students are able to have higher grades, higher occupational aspirations, support, connection, feelings of acceptance and become more engaged at HBCUs than their peers at PWIs.
Harper, Carini, Bridges, and Hayek (2004) studied 1,167 African American undergraduates attending 12 HBCUs and found that men and women share similar gains in engagement patterns, benefit equally from a supportive HBCU environment, and have similar satisfaction with their school. Fleming (1984) pointed out that historically African American female college students were less engaged socially than their male counterparts. With African American females being the majority gender at today’s HBCU, their level of social engagement has now equaled that of African American males who attend HBCUs (Harper, et al; 2004). Although social engagement simply captures a one-side perspective of the collegiate experience while higher education is a two-tier experience that also include an academic component, the social gains they receive outside the classrooms are as equally important as academic advancements.

Research on student-faculty relationship is essential to understanding African American engagement at institutions of higher education. Empirical research continues to show that male college students interact more frequently with faculty than their female counterparts at HBCUs (Fleming, 1984; Davis, 1994; Harper et. al, 2004). Harper and colleagues (2004) offered the rationale that men may dominate face time with faculty simply because they spend less time actually preparing for class and completing assignments, therefore, requiring additional in-class and out-of-class attention. Toward this end, African American women have appropriated more time to their academic pursuits as they dominate in numbers over men in college classrooms. Davis (1994) also asserted the student-faculty relationship is very important for the success of African American men at HBCUs. Additionally, Davis claimed that the type of interaction among student and faculty is what affects the student’s academic performance. Allen (1992) found that students who have good relations with faculty and had good grades in high school
usually accomplish a higher level of academic achievement in college. Thus, student faculty relationships have been proven to be a factor regardless of the racial composition of the institution.

METHODS

Data Source

The data source for this study comes from student responses to the 2005 National Survey of Student Engagement (NSSE). Since its inception in 2000, more than one million students at nearly 1,000 American four-year colleges and universities have reported their college activities and experiences to NSSE (Center for Postsecondary Research, 2006). In 2005, 528 four-year colleges and universities with more than 237,000 first-year and senior students participated in the NSSE. The population of this study is African American students at all four-year American colleges and universities. Considering that the NSSE was conducted in the spring semester which for most first year students is their second semester on the campus, the researcher decided to include only randomly selected senior students in this study.

Samples and Sites

Of the 528 four-year colleges and universities participated in the NSSE 2005 administration, 17 of them were HBCUs, which included 1,631 African American senior students. During the survey administration, the NSSE also asked each institution to identify at least six peer institutions that they would like to be compared to for student engagement results. Institutions can select peers from all NSSE participating institutions and no limitation was set by NSSE except that they must select at least six schools. As a result of peer selection, 246 PWIs were identified by the 17 HBCUs as their peer institutions. These 246 PWIs provided 2,939 African American senior students as the comparison group for this study. Due to the confidential
Engaging African American agreement between NSSE and the participating schools, the researchers cannot release the name of the institutions in this study. However, the characteristics of these institutions are presented in Table 1. The total of 4,570 randomly selected senior African American students at the 17 HBCUs and the 246 PWIs formed the sample of this study.

**INSERT TABLE 1 HERE**

**Variables**

HBCU status is defined by the U.S. National Center for Education Statistics (NCES) in the Integrated Postsecondary Education Data System (IPEDS) and is served as the independent variable for this study. PWI status is defined by the researcher as an institution with more than 50% Caucasian on total student enrollment. Dependent variables are the five NSSE Benchmarks of Effective Educational Practices, three Deep Learning Scales, three student self-report Gain Scales, and one general satisfaction scale. The covariance for this study are public/private status, number of student enrolled, and average faculty salary. The corresponding items for each dependent variable and the internal consistency index (coefficient alpha) can be found in Appendix A. More information on validity and psychometric properties of the NSSE can be found on the NSSE psychometric portfolio at [http://nsse.iub.edu/html/researchers.cfm](http://nsse.iub.edu/html/researchers.cfm)

**Instrument**

The NSSE is specifically designed to assess the extent to which students are engaged in empirically derived good educational practices and what they gain from their college experiences (Kuh, 2001). Items on the NSSE have been used in other long-running, well-regarded college student research programs, such as UCLA’s Cooperative Institutional Research Program and Indiana University’s College Student Experiences Questionnaire Research Program (Kuh, 2004). Indeed, the NSSE shared many similar characteristics as the College Student Experiences
Questionnaire (CSEQ) because they were developed in the same conceptual framework. As with the CSEQ, the items on the NSSE focus on students’ experiences in three areas: (a) the amount of time and energy they devote to various activities, (b) perceptions of important dimensions of their institution’s environment, and (c) estimates of how much progress they have made toward a variety of desirable outcomes of college (Kuh & Hu, 2001).

The conceptual framework of NSSE is based on Pace’s (1984) concept of quality in student effort, Chickering and Gamson’s (1987) “Seven Principles of Good Practices in Undergraduate Education,” and Astin’s (1984) theory of student involvement (Kuh et al., 2001). The validity and credibility of student self-report data have been examined extensively (Baird, 1976; Berdie, 1971; Pace, 1985; Pike, 1995; Pohlmann & Beggs, 1974). Kuh (2004) summarized previous findings and reported that self-reports are likely to be valid under five general conditions: (1) when the information requested is known to the respondents, (2) the questions are phrased clearly and unambiguously, (3) the questions refer to recent activities, (4) the respondents think the questions merit a serious and thoughtful response, and (5) answering the questions does not threaten, embarrass, or violate the privacy of the respondent. Empirical evidence shows that the NSSE survey satisfies these conditions (Kuh, 2004). Moreover, research has found that test-retest reliability is quite high (0.83), and mode of administration effect for paper as well as Web surveys are quite small (Kuh et al., 2001).

Analysis

Data analysis for this research was conducted in two stages. After reporting the descriptive statistics, the researchers employed an Analysis of Covariance (ANCOVA) to answer the first two research questions. The ANCOVA is a statistical analysis based on linear regression with one explanatory variable and one or more covariates (Hair, Anderson, Tatham, & Black,
The independent variable for the ANCOVA is the HBCU/PWI status, and the dependent variables are the NSSE Benchmarks of Effective Educational Practice, the Deep Learning Scales, the Gain Scales, and the general satisfaction scale. Control variables were utilized in this study to control for institutional factors that may affect student engagement. Public/private status, number of student enrolled, and average faculty salary were served as covariates for the ANVCOVA.

The second stage of data analysis utilized Spearman’s correlation coefficient and the ANCOVA to answer the third research question. A correlational analysis was conducted between the general satisfaction scale and all NSSE items. This analysis identified possible factors that may affect African American students’ satisfaction at HBCUs. The researchers selected items that have a Spearman’s correlation coefficient greater than 0.3 and conducted another ANCOVA using the selected items as dependent variables, HBCU/PWI status as independent variable, and public/private status, number of student enrolled, and average faculty salary as covariates.

Limitation

Increasingly, students are reported attending more than one college or university before completing their baccalaureate degree (Center for Postsecondary Research, 2005). If a student has attended more than one college, their responses to the survey may mix up their experience at different institutions. This is a potential problem for all survey research that studies college student experiences. The NSSE addresses this issue by specifically asking students their experience at their institution during the current school year. Nevertheless, it is hard to distinguish how many student responses are based on their current institution as oppose to their prior collegiate experiences.
RESULTS

The first research question addresses the level of educational engagement of African American seniors at HBCUs and PWIs. An ANCOVA was conducted using the institution’s HBCU status as the independent variable, NSSE Benchmarks of Effective Educational Practices, Deep Learning Scales, and student self-reported gain scales as dependent variables, and public/private status, student enrollment size, and average faculty salary as covariates. The results in Table 2 showed that African American seniors at HBCUs preformed better in almost all the learning and engagement indicators. For example, African American seniors at HBCUs have significantly higher scores than their counterparts at PWIs on Active and Collaborative Learning (ACL) (p<.001), Student-Faculty Interaction (SFI) (p<.001), Enriching Educational Experiences (EEE) (p=.001), Integrative Learning Scale (p<.001), Reflective Learning Scale (p=.006), self-reported gains in Personal and Social Development (p <.001), and gains in Practical Competence (p<.001). The differences between African American seniors at HBCUs and PWIs on Higher Order Learning Scale (p = .021) is also highly significant. Conversely, there are no significant differences between African American seniors at HBCUs and PWIs in areas like Level of Academic Challenge (LAC) (p=.352), Supportive Campus Environment (SCE) (p=.510), and self-reported gains in General Education (p=.947).

INSERT TABLE 2 HERE

Despite the overall superiority of HBCUs in almost all the learning, engagement, and student self-reported gain measurements, African American seniors at HBCUs reported less satisfaction with their educational experiences than their peers at PWIs (p=.001). The discrepancy between student engagement and satisfaction at HBCU merits further investigation. The researchers conducted a correlational analysis between overall satisfaction and all NSSE
engagement items, and the results showed that only six NSSE items have had Spearman correlation coefficients of higher than .3. These six items are (a) relationship with other students ($\rho=.35$), (b) relationship with faculty members ($\rho=.45$), (c) relationship with administrative personnel and offices ($\rho=.4$), (d) institution’s emphasis in providing the support you need to help you succeed academically ($\rho=.45$), (e) institution’s emphasis in encouraging contact among students from different economic, social, and racial or ethnic backgrounds ($\rho=.34$), and (f) institution’s emphasis in providing the support you need to thrive socially ($\rho=.35$). This result, as seen in Table 3, seems to indicate that African American student’s satisfaction is tied with their relationships with other campus parties including other students, faculty, and administrators, institution’s emphasis on diversity, and the academic and social support the institution provides.

**INSERT TABLE 3 HERE**

Of the six satisfaction related NSSE items, HBCUs have higher mean scores than their peer PWIs in two items. These two items are (a) relationship with other students and (b) institution’s emphasis in providing the support students need to thrive socially. The differences between HBCUs and PWIs for these two items are both statistically significant ($p<.001$) as confirmed by an ANCOVA analysis. PWIs performed better in three of the six items that include (a) relationship with faculty, (b) relationship with administrative personnel and offices, and (c) institution’s emphasis in providing the support students need to help them succeed academically. Of these three items, however, only the relationship with administrative personnel and offices is statistically significant ($p<.001$). HBCUs and PWIs performed equally well in terms of their emphasis in encouraging contact among students from different economic, social, and racial or ethnic backgrounds.
Giving the results of the correlational analysis and ANCOVA, it is evident that student’s relationship with administrative personnel and offices has huge impacts on African American student’s satisfaction at HBCUs. This result may have significant practical importance for HBCUs in student recruitment, retention, and student’s overall educational experiences at the institution.

DISCUSSION

Are African American students more engaged at HBCUs than their peers in PWIs? According to the results of this study, the answer is yes. Compared to the peer institutions selected by HBCUs that have participated in NSSE 2005, African American senior students at HBCUs are significantly more likely to be engaged in active and collaborative learning, student faculty interaction, and enriching educational experiences. However, student engagement at HBCUs does not guarantee student satisfaction. Even through African American senior students are more engaged at HBCUs than their counterparts at PWIs, the same group of students reported less satisfaction with their educational experiences at HBCUs than their peers at PWIs. Further analysis indicated that student’s relationship with administrative personnel and offices may play a crucial role in African American students’ educational experiences at HBCUs. Through the research and the review of literature, the researchers would like to provide four recommendations to foster positive interaction among administrators and students attending HBCUs:

1. Encouraging collaborative working relationships between students and administrators: Many times students interact with university units for disciplinary purposes or individual challenges. Student learning is enhanced by planning, executing, and participating in purposeful campus activities, both educational and social (Kuh, 1995). Therefore, having pleasure interaction with institutional agents
can create positive community relationships which will not only increase student satisfaction but also promote students to be more engaged in educationally purposeful activities.

2. Prompting student feedback on institutional policies and campus services: Student affairs staff is influential in students questioning institutional policies (Kuh, Schuh, & Whitt, 1991). Providing a medium for students to offer their responses to current events, policies, and institutional services can ease the tension between students and administrators. Furthermore, student feedback should be recorded, maintained, and responded by university officials so that students understand that their voices are being valued.

3. Changing the administrative and faculty reward system and institutional expectations: The criteria established for tenure and promotion should encourage faculty members and administrators to become more involved in service activities within the campus community. For example, administrators should be asked to be more involved in student affairs programs and community development efforts. Examples of these involvements include but not limited to serving as a judge in homecoming pageant, conducting professional development workshops, being a guest speaker for student groups, etc.

4. Creating formal mentoring relationships between staff and students: Sutton (2006) points out that mentoring relationship with campus administrators provide support for protégés who may pursue a career path similar to the mentor. Consequently, the union of both parties can create an experience that will increase the student’s understanding of how college works and also their educational satisfaction.
CONCLUSION

Results of this study and many recent studies have suggested that African Americans students at HBCUs were more engaged and reported more gains in development than their peers at PWIs (Nelson Laird et. al, 2007). Specifically, African American students attending HBCUs have greater involvement in active and collaborative learning, student-faculty interaction, and enriching educational experiences. One explanation for their involvement is the institutional culture, such that students who perceive the campus as inclusive are more likely to partake in educationally appropriate behaviors (Nelson Laird, 2007). Although, the students at HBCUs are educationally engaged, their level of satisfaction is lower than their PWI counterparts. Many people assume that the gap between HBCUs and PWIs in terms of student satisfaction is caused by the amount of available resources. Overall speaking, the resources provided to students attending some HBCUs is not comparable to the resources offered to African American students attending most PWIs. Our study showed, however, that after controlling for the number of student enrolled at the institution and average faculty salary, African American students at HBCUs are still less satisfied compared to their PWI counterparts.

Further investigation confirmed that student satisfaction is most related with the student’s relationships with other campus parties including other students, faculty, and administrators, a diverse and supportive campus environment that provides academic and social supports and the opportunities to interact with people of different economic, social, and racial or ethnic backgrounds. These are the areas both HBCUs and PWIs should strive to improve in order to benefit their students.

This study affirms that HBCUs are doing a decent job in providing an educational engaging environment for their students. However, there is still opportunity for improvement
especially in the areas of providing an academic challenged and supportive campus environment. Reexamining how administrators interact with students will begin to positively alter the satisfaction of African American students attending HBCUs. Moreover, having structures in place so both HBCUs and PWIs can better support their students is equally important when the aim is to offer the best educational experience for the next generation of college students.
REFERENCES


### Table 1
**Institutional Characteristics of HBCUs and PWIs**

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<tr>
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<th>HBCU</th>
<th>PWI</th>
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<tr>
<td>Number of Institutions</td>
<td>17</td>
<td>246</td>
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<tr>
<td>African American Student Percentage</td>
<td>89%</td>
<td>8%</td>
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<tr>
<td>Average Full-time Enrollment (FTE)</td>
<td>3,872</td>
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<td>Average Percentage of Faculty with Terminal Degree</td>
<td>67%</td>
<td>80%</td>
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<td>54,064</td>
<td>56,458</td>
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## Table 2
### African American Student Engagement and Satisfaction at HBCUs and PWIs

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<td>Active &amp; Collaborative Learning</td>
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<td>43.77</td>
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<td>41.64</td>
<td>10.78</td>
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<td>Supportive Campus Environment</td>
<td>58.41</td>
<td>58.73</td>
<td>.43</td>
<td>.510</td>
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### Deep Learning

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### Gains

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<td>&lt;.001</td>
<td>.003</td>
</tr>
</tbody>
</table>

### Student Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>HBCU</th>
<th>PWI</th>
<th>F</th>
<th>p-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td>66.20</td>
<td>69.92</td>
<td>10.25</td>
<td>.001</td>
<td>.002</td>
</tr>
</tbody>
</table>

How would you evaluate the quality of academic advising you have received at your institution?
- Excellent: 23%, 28.3%
- Good: 40%, 40.7%
- Fair: 25.6%, 22.7%
- Poor: 11.3%, 8.3%

How would you evaluate your entire educational experience at this institution?
- Excellent: 25.2%, 32.4%
- Good: 54.3%, 51.3%
- Fair: 17.7%, 14.6%
- Poor: 2.8%, 1.7%

If you could start over again, would you go to the same institution you are now attending?
- Definitely yes: 33.6%, 36.5%
- Probably yes: 37.9%, 39.3%
- Probably no: 18.9%, 17.1%
- Definitely no: 9.6%, 7.1%
Table 3
NSSE Item Correlations with Overall Satisfaction

<table>
<thead>
<tr>
<th>NSSE Items</th>
<th>Spearman’s r</th>
<th>Mean HBCU</th>
<th>Mean PWI</th>
<th>ANCOVA F</th>
<th>p-value</th>
<th>$\eta^2_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>8a. Relationship with other students</td>
<td>.354</td>
<td>5.78</td>
<td>5.51</td>
<td>25.61</td>
<td>&lt;.001</td>
<td>.006</td>
</tr>
<tr>
<td>8b. Relationship with faculty members</td>
<td>.449</td>
<td>5.35</td>
<td>5.42</td>
<td>2.61</td>
<td>.106</td>
<td>.001</td>
</tr>
<tr>
<td>8c. Relationship with administrative personnel and offices</td>
<td>.400</td>
<td>4.21</td>
<td>4.89</td>
<td>168.27</td>
<td>&lt;.001</td>
<td>.038</td>
</tr>
<tr>
<td>10b. Institution emphasizes in providing the support you need to help you succeed academically</td>
<td>.446</td>
<td>2.90</td>
<td>2.96</td>
<td>1.16</td>
<td>.283</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>10c. Institution emphasizes in encouraging contact among students from different economic, social, and racial or ethnic backgrounds</td>
<td>.344</td>
<td>2.45</td>
<td>2.45</td>
<td>.57</td>
<td>.450</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>10e. Institution emphasizes in providing the support you need to thrive socially</td>
<td>.346</td>
<td>2.36</td>
<td>2.22</td>
<td>18.16</td>
<td>&lt;.001</td>
<td>.004</td>
</tr>
</tbody>
</table>
APPENDIX A

NSSE Measurement Scales and Internal Consistency Index

The following internal consistency indices (coefficient alpha) were calculated from 4,570 randomly selected seniors African American students at 263 U.S. 4-year colleges and universities.

Level of Academic Challenge (11 items; $\alpha = .73$)

- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of 20 pages or more
- Number of written papers or reports between 5 and 19 pages
- Number of written papers or reports of fewer than 5 pages
- Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components
- Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships
- Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
- Applying theories or concepts to practical problems or in new situations
- Worked harder than you thought you could to meet an instructor's standards or expectations
- Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
- Spending significant amounts of time studying and on academic work

Active and Collaborative Learning (7 items; $\alpha = .7$)

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students (paid or voluntary)
- Participated in a community-based project (e.g., service learning) as part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

Student-Faculty Interaction (6 items; $\alpha = .73$)

- Discussed grades or assignments with an instructor
- Discussed ideas from your readings or classes with faculty members outside of class
- Talked about career plans with a faculty member or advisor
- Received prompt feedback from faculty on your academic performance (written or oral)
- Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)
- Work on a research project with a faculty member outside of course or program
requirements

Enriching Educational Experiences (12 items; \( \alpha = .64 \))
- Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values
- Had serious conversations with students of a different race or ethnicity than your own
- Encouraging contact among students from different economic, social, and racial or ethnic backgrounds
- Participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, intercollegiate or intramural sports, etc.)
- Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment
- Practicum, internship, field experience, co-op experience, or clinical assignment
- Participate in a learning community or some other formal program where groups of students take two or more classes together
- Community service or volunteer work
- Foreign language coursework
- Study abroad
- Independent study or self-designed major
- Culminating senior experience (capstone course, thesis, project, comprehensive exam, etc.)

Supportive Campus Environment (6 items; \( \alpha = .76 \))
- Providing the support you need to thrive socially
- Providing the support you need to help you succeed academically
- Helping you cope with your non-academic responsibilities (work, family, etc.)
- Relationships with: Other Students
- Relationships with: Faculty Members
- Relationships with: Administrative Personnel and Offices

Higher-Order Learning (4 items; \( \alpha = .86 \))
- Analyzed the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components
- Synthesized and organized ideas, information, or experiences into new, more complex interpretations and relationships
- Made judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
- Applied theories or concepts to practical problems or in new situations

Integrative Learning (5 items; \( \alpha = .72 \))
- Worked on a paper or project that required integrating ideas or information from various sources
- Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments
- Put together ideas or concepts from different courses when completing assignments or
during class discussions
- Discussed ideas from your readings or classes with faculty members outside of class
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

Reflective Learning (3 items; $\alpha = .79$)
- Examined the strengths and weaknesses of your own views on a topic or issue
- Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
- Learned something that changed the way you understand an issue or concept

Gain in Practical Competence (5 items; $\alpha = .82$)
- Acquiring job or work-related knowledge and skills
- Working effectively with others
- Using computing and information technology
- Analyzing quantitative problems
- Solving complex real-world problems

Gain in Personal and Social Development (7 items; $\alpha = .89$)
- Developing a personal code of values and ethics
- Understanding people of other racial and ethnic backgrounds
- Understanding yourself
- Learning effectively on your own
- Developing a deepened sense of spirituality
- Contributing to the welfare of your community
- Voting in local, state (provincial), or national (federal) elections

Gain in General Education (4 items; $\alpha = .86$)
- Writing clearly and effectively
- Speaking clearly and effectively
- Acquiring a broad general education
- Analyzing quantitative problems

Overall Satisfaction (2 items; $\alpha = .76$)
- How would you evaluate your entire educational experience at this institution?
- If you could start over again, would you go to the same institution you are now attending?