Patterns in Faculty Teaching Practices on the Campuses of Historically Black Colleges and Universities and Predominantly White Institutions

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Abstract

Various scholars have entered the conversation on the educational effectiveness of HBCUs in comparison to PWIs. There is, however, an absence of research that examines the potential relationship between the positive educational outcomes of attending HBCUs and faculty teaching practices. This study uses data from the 2009 and 2010 administrations of the Faculty Survey of Student Engagement (FSSE) to examine the differences between faculty perceptions of student engagement and faculty teaching practices on HBCU and PWI campuses. The results complicate existing findings about HBCU environments, suggesting that students’ quality of relationship may be higher on PWI campuses and that measures, such as faculty-student interaction, do not differ between the two institutional types. Adding to the literature, our results show that institutional support and certain faculty practices are higher on HBCU campuses, and suggest that faculty characteristics influence these differences.
The institutional focus and pedagogical techniques of Historically Black Colleges and Universities (HBCUs) have been contentious subjects since the beginning of Black college teachings in the 1830s (Jackson, 2002). Created out of a desire to equalize educational opportunities, the top priorities of HBCU campuses were to educate, prepare, and equip members of the Black community to effectively contribute to the advancement of this community (Gasman, Lundy-Wagner, Ransom, & Bowman, 2010). It is this history that creates a unique campus environment and educational experience for HBCU students, as well as a dynamic relationship between the mission and culture found on HBCU campuses and that of U.S. higher education in general.

HBCU campuses are unique learning environments. In comparison to Predominantly White Institutions (PWIs), HBCUs tend to have smaller total enrollments and offer classes with lower student-faculty ratios (Kim, 2002). Considering the reported benefits of increased student-faculty interaction (see Chickering & Gamson, 1987), these characteristics of the HBCU environment are advantages to the students enrolled on these campuses. Much of the research comparing student learning on HBCU and PWI campuses primarily assesses student experiences by race. The findings generally present a more positive experience for African American students at HBCUs. How faculty members contribute to this experience is less analyzed.

**Faculty Practices**

The impact of faculty practices on student experiences and learning has become more present in higher education research recently, as the focus on accountability in the higher education classroom has increased. While faculty practices have garnered increased attention, there are few studies that assess faculty practices by institution type, particularly by student demographic.
Bellas and Toutkoushian (1999) found many differences in faculty practices. Their study used data from 1993 to analyze faculty practices in the categories of teaching, research and service. While they did not control for institution type, this study of 14,000 faculty members at two-year and four-year institutions proved important to the study of faculty practice and the description of how faculty members spend their time. One finding, most germane to faculty practice by institution type, are the differences by race and ethnicity. Bellas and Toutkoushian (1999) discovered that Black faculty members spend less time teaching and more time in service than their White colleagues. How does this translate into discussions of how time is spent in the classroom? Is there an impact on pedagogical techniques or curricular content? This study will provide insight into these issues.

**Student Experiences and Educational Outcomes**

Previous research comparing Black students at HBCUs and PWIs has shown that HBCU students often report greater educational and developmental gains from their undergraduate experience than those matriculating at PWIs (Allen, 1992). Among the differences reported in student experiences from HBCU to PWI campuses are higher levels of student-faculty interaction and active and collaborative learning experiences (Nelson Laird, Bridges, Morelon-Quainoo, Williams, & Salinas Holmes, 2007). In a study of students noted to be aspiring scientists, Hurtado et al. (2011) report that the frequency of Black students’ interactions with faculty is higher on HBCU campuses than PWI campuses. Of the five institutions in Hurtado et al.’s study (2011), students perceived the faculty on the one HBCU campus to be most approachable. Although these findings are specific to students in STEM disciplines, and are thus tempered by the disciplinary culture of the hard sciences, they provide insight into the overall HBCU student experience.
Research findings regarding the educational outcomes for HBCU students are more varied. Allen (1992) found that students matriculating on HBCU campuses report higher levels than their PWI counterparts of both academic achievement and social involvement, as well as more positive relationships with faculty. Kim’s (2002) results refute this finding, however, and instead assert that the academic outcomes of Black students at HBCUs and PWIs do not differ. These results concerning the experiences and outcomes of students enrolled at different types of institutions calls the role of institutional type into question.

The Influence of Institutional Type

The influence of institutional type on student outcomes is called into question by Kim’s (2002) HLM results which indicate that the differences present in student academic outcomes between HBCU and PWI campuses are better explained by individual student characteristics than by institutional characteristics. Allen (1992), however, suggests that while students’ personal traits may be important, there are other “factors—characteristics that are more situational and interpersonal” (p. 40)—that impact student outcomes. These other factors include the uniquely nourishing elements of the HBCU environment which stem from the institutional history and culture of these institutions and serve to enhance students’ experiences and outcomes.

Taken in tandem, the findings presented above suggest that (a) Black faculty and faculty on HBCU campuses are more likely to engage students in certain educationally purposeful activities, both in and out of the classroom; and (b) HBCU campuses are structured in ways that inherently improve the student experience. However, in the structuring of this study, no publications were able to be located that document the differences in faculty practices between HBCU and PWI faculty or how the faculty role contributes to the elemental differences distinct
to HBCUs. As Gasman et al. write, “the achievements of HBCUs in terms of African American student success throughout history make the lack of information on their faculty peculiar” (p. 47). Given the traditional HBCU approach to undergraduate education and the impact that HBCU students report receiving, the faculty role warrants further exploration. This study is designed to explore the faculty role in enhancing student learning at the undergraduate level, and how that role differs across these two institutional types.

**Purpose**

The purpose of this study is to explore differences in teaching and learning practices on HBCU and PWI campuses, placing emphasis on the faculty perspective and role. We focus specifically on how faculty perceive and engage in educational practices empirically linked to learning and development, and how these things vary between faculty at HBCUs and those at PWIs. The following questions have guided this research:

1. How do faculty perceptions of student engagement in, and institutional emphases on, certain educational practices vary between HBCU and PWI campuses?
2. How do teaching practices vary between faculty on HBCU and PWI campuses?

**Methods**

**Data Source**

The data for this study come from the 2009 and 2010 administrations of the Faculty Survey of Student Engagement (FSSE). FSSE annually collects information from faculty members at baccalaureate degree-granting colleges and universities where students have completed the National Survey of Student Engagement (NSSE). FSSE assesses faculty attitudes and behaviors related to educational practices known to produce positive outcomes for students. In addition, survey results provide insight into how faculty members perceive their institution,
divide up their work time, and spend class time. We used only faculty responses from FSSE’s
course-based survey option, which asks faculty to respond to certain questions based on a course
they taught during the current academic year. The course-based survey option was chosen
because our measures (discussed below) include those focused on specific classroom practices
that are only measured on the course-based instrument.

In this study, responses from 953 faculty members on 22 HBCU campuses are presented
alongside responses from 1,589 faculty members from 22 PWIs. Faculty members responded in
either 2009 or 2010. If an institution participated in FSSE both years, faculty responses from
2010 were used.

Of the unique institutions that administered FSSE in 2009 and 2010, 31 were HBCUs. Of
those 31 institutions, 22 administered FSSE’s course-based survey option. For comparison
purposes, a mirror PWI was matched to each of those 22 HBCUs. Institutions were randomly
matched based on Carnegie Classification type and sector. For example, there were two private
HBCUs classified as “Research Universities (very high activity).” Each of those institutions was
randomly matched to a private PWI of the same Carnegie type. Using this method, 22 PWIs were
selected from the FSSE 2009 and 2010 participant institutions.

Measures

Faculty members were asked questions about their campus in general and a series of
questions about a particular course taught during either the 2008-09 or 2009-10 academic year.
We relied on measures that tap faculty perceptions of student engagement in, and institutional
emphases on, effective educational practices, and faculty self-reports of teaching practices. To
capture a range of effective educational practices, we examined scales on quality campus
relationships and campus support, active classroom practices, faculty-student interactions,
faculty emphasis on personal and social responsibility, the importance of reflective learning, and
interactions across difference in the classroom. See Table 1 for scale names, component items,
and reliabilities.

Table 1
Dependent Variables

<table>
<thead>
<tr>
<th>Scale and Component Items</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality campus relationships (3-items; α = 0.72)</td>
<td>Assess the quality of student relationships with other students; with faculty members; and with administrative personnel and offices</td>
</tr>
<tr>
<td>Campus support (6-items; α = 0.83)</td>
<td>To what extent does your institution emphasize: encouraging contact among students from different economic, social, and racial or ethnic backgrounds; providing students the support they need to succeed academically; helping students cope with their non-academic responsibilities (work, family, etc.); providing students the support they need to thrive socially; encouraging to attend campus events and activities (special speakers, cultural performances, etc.); encouraging students to participate in co-curricular activities (organizations, campus publications, student government, etc.)</td>
</tr>
<tr>
<td>Active classroom practices (5-items; α = 0.70)</td>
<td>In your selected course section, on average, what percent of class time is spent on the following: teacher-student shared responsibility; lecture (reversed); student presentations; small group activities; in-class writing</td>
</tr>
<tr>
<td>Faculty-student interactions (4-items; α = 0.76)</td>
<td>What percentage of students in your selected course section: frequently ask questions in class or contribute to class discussions; work harder than they usually do to meet your standards; at least once, talk about career plans with you; at least once, discuss ideas from readings or classes with you outside of class</td>
</tr>
<tr>
<td>Emphasis on personal and social responsibility (4-items; α = 0.82)</td>
<td>To what extent do you structure your selected course section so that students learn and develop in: understanding themselves; understanding people of other racial and ethnic backgrounds; developing a personal code of values and ethics; developing a deepened sense of spirituality</td>
</tr>
<tr>
<td>Importance of reflective learning (3-items; α = 0.82)</td>
<td>In your selected course section, how important to you is it that your students: examine the strengths and weaknesses of their views on a topic or issue; try to better understand someone else’s views by imagining how an issue looks from that person’s perspective; learn something that changes the way they understand an issue or concept</td>
</tr>
<tr>
<td>Interaction across difference in classroom (2-items; α = 0.84)</td>
<td>How often do students in your selected course section have serious conversations in your course: with students of a different race or ethnicity than their own; with students who are very different from them in terms of their religious beliefs, political opinions, or personal values</td>
</tr>
</tbody>
</table>

Note. The range for quality campus relationships is 1 to 7. The range for active classroom practice is 1 to 8. The range for student-faculty interaction is 1 to 5. All others range from 1 to 4.
Sample

Of the sample of HBCU faculty members, 53% were male and 46% were African American, with 33% White, 9% Asian, 2% Hispanic, and 4% Other; the remaining 6% indicated a preference not to identify race/ethnicity. Among the academic ranks represented at HBCUs, 19% were professors, 24% associate professors, 36% assistant professors, 14% full-time instructors, and 7% part-time instructors. About 91% of the respondents identified themselves as United States citizens and 71% of HBCU faculty members had earned a doctorate. As for course characteristics at HBCUs, 47% of faculty members identified their particular course to have upper division (mostly juniors and seniors) students and 46% of faculty members had lower division (mostly freshman and sophomores) students; the remaining 7% do not fit either of those categories exclusively. Among the course sizes, most HBCU faculty members (60%) selected a medium size course of 20 to 49 students, compared to 27% small courses (0 to 19 students) and 13% large courses (50 or more students). As well, 57% of these courses met a general education requirement. Lastly, among academic disciplines, 33% of HBCU faculty members indicated the general area of their selected course was in the hard sciences.

Among the PWI faculty members in the sample, 55% were male and 80% were White, with 2% African American, 4% Asian, 2% Hispanic, 4% Other, and 9% indicated a preference not to identify race/ethnicity. Various academic ranks were represented at PWIs: 29% professors, 26% associate professors, 23% assistant professors, 13% full-time instructors, and 9% part-time instructors. For both race/ethnicity and academic rank, there are notable differences in the distribution of PWI faculty members compared to HBCU faculty members in these demographic categories. However, there are similarities between HBCU and PWI faculty demographics in regards to United States citizenship, percentage of faculty members with doctorates, and the size
of the selected courses. At PWIs, 94% of faculty members identify as United States citizens and 71% of faculty members at these institutions have earned a doctorate. In the selected courses, 50% have upper division (mostly juniors and seniors) students while 45% have lower division (mostly freshman and sophomore) students. In these courses, 59% were medium sized (20 to 49 students), 28% small (0 to 19 students) and 13% large (50 or more students). Among these courses at PWIs, 26% were within the hard sciences. See Table 2 for highlighted comparisons of HBCU and PWI faculty demographics.

Table 2
Faculty Characteristics at Predominately White Institutions (PWIs) and Historically Black Colleges and Universities (HBCUs)

<table>
<thead>
<tr>
<th>Faculty Characteristics</th>
<th>PWIs (%)</th>
<th>HBCUs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race or ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>2</td>
<td>46</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>80</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Preferred Not to Respond</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Academic Rank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>29</td>
<td>19</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>23</td>
<td>36</td>
</tr>
<tr>
<td>Full-time Instructor</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Part-time Instructor</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Academic Discipline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard Sciences</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Soft Sciences</td>
<td>75</td>
<td>68</td>
</tr>
</tbody>
</table>

Note. Chi-square tests indicate significance at the p < 0.001 level on these characteristics.

Analyses

Mean scores were calculated to compare HBCU and PWI faculty perceptions of the quality of campus relationships and the level of campus support. Mean scores were also calculated to compare teaching practices.

Effect sizes (standardized mean differences) were calculated both with and without controls to determine the magnitude of the HBCU/PWI differences. Effect sizes without controls
were standardized mean differences with pooled standard deviations. These effect sizes represent the raw difference between the two contexts. For example, with active classroom practice, the effect size without controls gives an estimate of the difference in active classroom practice experienced by students on the two different types of campuses. The effect size with controls represents how much of the raw difference is left unexplained after adjusting for differences in faculty and course characteristics. Since African American faculty members, generally report greater emphasis on active classroom practice, for example, we would expect the mean score to be higher at HBCUs since a greater proportion of their faculty are African American. The effect size with controls determines whether differences remain even after adjusting for differences in the racial make-up of the faculty and other characteristics. Control variables included gender, race, U.S. citizenship status, level of education, rank and employment status, course load, course level, course size, course status as general education requirement, and disciplinary area.

**Results**

Table 3 shows HBCU/PWI mean comparisons for faculty members’ perceptions of quality campus relationships and campus support. The results indicate that the average faculty member at a PWI, compared to their HBCU counterparts, had a higher perception of the quality of the relationships students have with other students, faculty, and administrative personnel. For example, 88% of PWI faculty considered students’ relationships with other students to be “friendly” and “supportive” (a rating of 5 or above) compared to 82% for their HBCU colleagues. Because the scale for quality campus relationships ranges from 1 to 7, the means above 5 in Table 3 suggest that the average faculty member on both types of campuses found student relationships were more positive than not. However, the average faculty member at the HBCUs rated these relationships about a quarter of a standard deviation lower than the average
faculty member at a PWI (effect size = -0.27, p ≤ 0.001). Interestingly, the difference was larger—over a third of a standard deviation—when controls were present (effect size with controls = -0.37, p ≤ 0.001) indicating that the differences between the two campus types would likely be larger if the characteristics of their faculties were more similar.

In contrast to the quality of relationship measure, the results in Table 3 indicate that HBCU faculty found their institutions to be more supportive of students than PWI faculty. For instance, at HBCUs, 57% of faculty felt their institution placed “very much” or “quite a bit” of emphasis on contact across difference compared to 47% of PWI faculty. For the campus support scale, the means close to 3 suggest that the average faculty members on both types of campuses felt students were receiving support across a range of areas. The HBCU/PWI difference was relatively small in magnitude (effect size = 0.17, p ≤ 0.001) and indistinguishable from zero in the presence of controls (effect size with controls = 0.02, p > 0.05) suggesting that faculty members’ sense of campus support for students would be very similar if the characteristics of the two faculties were more similar.

Table 3

<table>
<thead>
<tr>
<th>Scale</th>
<th>PWI Mean</th>
<th>PWI SD</th>
<th>HBCU Mean</th>
<th>HBCU SD</th>
<th>Diff.</th>
<th>Effect Size\textsuperscript{a}</th>
<th>Effect Size with Controls\textsuperscript{b}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality campus relationships</td>
<td>5.28</td>
<td>0.90</td>
<td>5.01</td>
<td>1.05</td>
<td>-0.27</td>
<td>-0.27***</td>
<td>-0.37***</td>
</tr>
<tr>
<td>Campus support</td>
<td>2.72</td>
<td>0.60</td>
<td>2.83</td>
<td>0.68</td>
<td>0.11</td>
<td>0.17***</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

\textsuperscript{a}The effect size is the mean difference divided by the pooled standard deviation.

\textsuperscript{b}The effect size with controls is the unstandardized regression coefficient for the institutional type variable (HBCU versus PWI) from analyses where all non-dichotomous variables were standardized. Controls included faculty characteristics (gender, race, citizenship, level of education, employment status, and academic rank) and course characteristics (number of courses taught, course level, course size, general education requirement, and disciplinary area).
Table 4 shows mean comparisons for faculty teaching practices at HBCUs and PWIs. The results indicate that HBCU faculty members incorporated several teaching practices significantly more than PWI faculty. HBCU faculty used active classroom practices, emphasized personal and social responsibility, and placed more importance of reflective learning than their PWI colleagues (effect sizes ranged from 0.27 to 0.41, $p \leq 0.001$). Introducing controls reduced the size of these effects by a range of 0.13 to 0.17 (effect sizes with controls ranged from 0.14 to 0.26, $p \leq 0.001$), roughly a third to a half of the original effect size. This suggests that a small effect would be present on these three measures even if the characteristics of the faculty were more similar at the two types of campuses.

The results in Table 4 show little difference between HBCU and PWI faculty in regards to the amount of faculty-student interaction and the amount of student interactions across difference in the classroom. For faculty-student interaction, the effect size was very close to zero (-0.01, $p > 0.05$). The difference was slightly larger with controls (-0.09, $p > 0.05$), but still statistically indistinguishable from zero. For interaction across difference in classroom, the mean for HBCU faculty members was about one tenth of a standard deviation higher than the mean for PWI faculty (effect size = 0.09, $p < 0.05$), a small difference. With controls, the difference was slightly smaller, but not significantly different than zero (effect size with controls = 0.07, $p > 0.05$). These results suggest that faculty-student interaction and interactions across difference in the classroom would be nearly identical at the two groups of institutions whether or not faculty characteristics were as they are or more similar.
Table 4
HBCU/PWI Mean Comparisons for Faculty Members’ Teaching Practices

<table>
<thead>
<tr>
<th>Scale</th>
<th>PWI Mean</th>
<th>PWI SD</th>
<th>HBCU Mean</th>
<th>HBCU SD</th>
<th>Mean Diff</th>
<th>Effect Size&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Effect Size with Controls&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active classroom practices</td>
<td>2.75</td>
<td>1.15</td>
<td>3.13</td>
<td>1.23</td>
<td>0.38</td>
<td>0.32***</td>
<td>0.15***</td>
</tr>
<tr>
<td>Faculty-student interactions</td>
<td>2.85</td>
<td>0.78</td>
<td>2.84</td>
<td>0.83</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.09</td>
</tr>
<tr>
<td>Emphasis on personal and social responsibility</td>
<td>2.24</td>
<td>0.82</td>
<td>2.58</td>
<td>0.86</td>
<td>0.34</td>
<td>0.41***</td>
<td>0.26***</td>
</tr>
<tr>
<td>Importance of reflective learning</td>
<td>3.11</td>
<td>0.84</td>
<td>3.33</td>
<td>0.75</td>
<td>0.22</td>
<td>0.27***</td>
<td>0.14**</td>
</tr>
<tr>
<td>Interaction across difference in classroom</td>
<td>2.21</td>
<td>0.90</td>
<td>2.30</td>
<td>0.93</td>
<td>0.09</td>
<td>0.09*</td>
<td>0.07</td>
</tr>
</tbody>
</table>

<sup>a</sup> The effect size is the mean difference divided by the pooled standard deviation.

<sup>b</sup> The effect size with controls is the unstandardized regression coefficient for the institutional type variable (HBCU versus PWI) from analyses where all non-dichotomous variables were standardized. Controls included faculty characteristics (gender, race, citizenship, level of education, employment status, and academic rank) and course characteristics (number of courses taught, course level, course size, general education requirement, and disciplinary area).

**Discussion and Implications**

Our findings complicate existing findings about HBCU environments. Studies based on students have shown HBCUs to be more supportive for Black students than PWIs. Our study, which did not limit to a particular group of students, suggests that students may have higher quality relationships at PWIs, more institutional support at HBCUs, and that faculty members overall might not sense high support levels as much as students. The small difference between HBCUs and PWIs in our study suggests that the differences in campus support may not be as significant as implied in previous research. An alternative explanation is that students feel greater support based on certain teaching and learning practices (e.g., active teaching, more importance placed on reflective learning, and greater emphasis on personal and social responsibility) which our study found to be higher at HBCUs.

In addition to campus support, our findings contrast with previous research on faculty-student interaction. Regardless of faculty characteristics, there was little to no difference between institutional
types in both faculty-student interaction and students’ in-class interactions across difference. While those findings do not align with the literature, our results lean towards an explanation of the HBCU effect found in the literature. Allen (1992) suggests that there are “characteristics that are more situational and interpersonal” which influence the student experience at HBCUs. According to our findings, the effects of HBCU attendance cited in previous studies are likely due to the characteristics of the faculty (e.g., a greater proportion of African American faculty and assistant professors). In other words, PWIs could get closer to HBCU practices and outcomes if they either employed faculty members with characteristics more like those of the faculty at HBCUs or reduced the effects of race and rank, for example.

Finally, the results in our study points out that large HBCU/PWI effects likely depend on how one constructs the PWI comparison group. By limiting to PWIs with similar institutional characteristics, we may have decreased the effects. As some studies have not controlled for these differences, this presents an area for further research.
References


