

# African-American Students' Experiences of Good Practices: A Comparison of Institutional Type

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*Using the principles of good practice in undergraduate education defined by Chickering and Gamson (1987, 1991), this study examined the role of institutional type in African-American students' experiences. Controlling for confounding influences, students attending historically Black colleges reported significantly greater levels of good practices in and out of the classroom with faculty and peers than did their counterparts at both research and regional institutions. Only one difference was found in experiences of good practices between historically Black and liberal arts colleges.*

As the U.S. becomes more ethnically diverse, so are the students at today's colleges and universities. From 1976 to 2001, minority student enrollment increased by 63% whereas White student enrollment increased moderately by 15.8% (Digest of Education Statistics, 2003). Despite the increased democratization of higher education, many of the developmental and college impact models were developed using a relatively homogenous college population (e.g., Kohlberg, 1969; Perry, 1968; Tinto, 1975). Researchers have given evidence for the need to test the saliency of current student development models on an increasingly heterogeneous student population (King, Taylor, & Ottinger, 1989; Pascarella & Terenzini, 1991, 1998).

In addition to changing student demo-

graphics, the current focus on accountability on the part of legislatures and accrediting boards has called attention to undergraduate student learning (Whitt, 1999). Chickering and Gamson (1987, 1991), in a project sponsored by the American Association for Higher Education, the Education Commission of the States, and the Johnson Foundation, synthesized the literature on college impact and identified dimensions which consistently enhanced student learning. Focusing on students' cognitive and personal development, Chickering and Gamson framed the dimensions into seven broad principles of "good practice" in undergraduate education. These good practices include student-faculty contact, cooperation among students, active learning, academic effort/time on task, prompt feedback to students, high expectations, and diversity experiences.

The purpose of this study was to compare the educational experiences of African-American students in and out of the classroom with faculty and peers along the dimensions of good practices in undergraduate education by institutional type. The key question guiding this study was: To what extent, if any, does institutional type affect African-American students' experiences of good practices in undergraduate education? By focusing solely on the experiences of African-American students, the current study responds to calls

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for expanding the testing of student development theories beyond a historically homogenous population of college students. Additionally, through the inclusion of historically Black colleges, this study answers the need for greater accountability by testing to what extent Chickering and Gamson's (1987, 1991) empirically vetted good practices are experienced by African-American students differently by institutional type.

## LITERATURE REVIEW

### Research on the Principles of Good Practice in Undergraduate Education

Using data from the National Study of Student Learning (NSSL) from students at 16 institutions (four research universities, seven regional institutions, and five liberal arts colleges), Pascarella, Wolniak, Cruce, and Blaich (2004) investigated the extent to which the principles of good practice in undergraduate education prevailed at different institutional types. The dependent measures for the study were informed by Chickering and Gamson's (1987, 1991) principles as well as additional research on effective teaching and influential peer interactions (Astin, 1993; Davis & Murrell, 1993; Feldman, 1997; Pascarella & Terenzini, 1991; Whitt, Edison, Pascarella, Nora, & Terenzini, 1999). The 19 dependent measures of "good practice" were grouped in the following seven categories: (a) student–faculty contact, (b) cooperation among students, (c) active learning/time on task, (d) prompt feedback to students, (e) high expectations of faculty for student learning, (f) quality of teaching, and (g) influential interactions with other students. Controlling for a host of student precollege and institutional characteristics, Pascarella et al. (2004) found the prevalence of good practices to be significantly greater at liberal arts colleges than

at regional institutions or regional universities, net of their full-time, residential character and institutional selectivity. Although they found significant effects in all three years under investigation, effects in the first year of college were the most pronounced.

Others have looked at the impact of institutional type on isolated principles of good practice. For example, Umbach and Kuh (in press) examined the prevalence of diversity experiences across Carnegie types. Net of student background characteristics and institutional traits, they found students at Baccalaureate Colleges–Liberal Arts reported more diversity experiences than their peers at other institutional types despite the fact that on average, liberal arts colleges enroll proportionately fewer students of color. Similar findings were reported earlier by Hu and Kuh (2003). This body of evidence suggests institutional context plays a role in the prevalence of students' experiences of good practices in undergraduate education.

In addition to understanding the impact of institutional context on the prevalence of good practices in undergraduate education, a large body of literature supports the predictive validity of Chickering and Gamson's (1987, 1991) principles of good practice (Pascarella et al., 2004). Most recently, Cruce, Wolniak, Seifert, and Pascarella (2004) used data from the NSSL from students at 18 four-year colleges and 5 two-year institutions to estimate the effects good practices in undergraduate education had on cognitive development, learning orientations, and graduate degree plans during the first year of college. Four meta-scales of good practice were developed from earlier research (e.g., Pascarella et al., 2004): (a) effective teaching and interaction with faculty, (b) interactions with peers, (c) challenge/high expectations of faculty, and (d) a global composite of the three. Net of a

battery of student background and institutional characteristics, measures of good practice in undergraduate education were positively related to a number of first-year learning outcomes. The magnitude of these effects differed by pre-college student characteristics and the type of institution attended. For example, effective teaching and interaction with faculty had a greater effect for students of color than White students and challenge/high expectations had a more pronounced effect for students at historically Black colleges and community colleges in predicting a positive attitude toward literacy. This research finds the prevalence of students' experiences of good practices varies by institutional context and can impact student learning outcomes.

### **Impact of Institutional Type on African-American Student Engagement and Learning**

Research on the effects of institutional type on African-American student learning is not conclusive. One segment of the research holds African-American students are significantly more engaged in college experiences (DeSousa & Kuh, 1996; Fleming, 1984; Flowers, 2003; Flowers & Pascarella, 1999a; Nettles, Thoeny, & Gosman, 1986) and gain significantly more in cognitive and personal development from attending a historically Black college (HBC) rather than a predominantly White institution (PWI) (DeSousa & Kuh; Flowers, 2002; Flowers & Pascarella, 1999b; Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996). The reasons most frequently cited for different levels of engagement and learning gains are the "chilly climate" faced by African-American students at PWIs (Allen, 1987; DeSousa & Kuh; Lewis, Chesler, & Forman, 2000; Sedlacek, 1999; Wasson, 1990), and that institutional services and programs do not reflect the interests of African-American

students (Davis, 1991; Gossett, Cuyjet, & Cockriel; 1996).

The other segment of research holds institutional type does not significantly affect African-American students' levels of engagement or cognitive and personal development (Bohr, Pascarella, Nora, & Terenzini, 1995; Flowers & Pascarella, 1999c; Kim, 2002; Terenzini, Yaeger, Bohr, Pascarella, & Nora, 1997). Although some studies posit that African-American students at PWIs are socially alienated and thus put forth less effort and gain less by attending PWIs, these studies found otherwise. For example, in the only study to date using hierarchical linear modeling (HLM) to investigate institutional effects on African-American student learning, Kim found no difference between students at HBCs and PWIs in overall academic, writing, and math ability when controlling for institutional factors such as mean pretest of students at the institution, selectivity, average family income, and single-sex college status.

Although the research seems to be divided on the effect of institutional type on levels of engagement in educationally purposeful activities and cognitive and personal development for African-American students, perhaps institutional type serves as a convenient analytical proxy for a more complex construct manifested within the institution. Specifically, a host of studies have attributed increased levels of student learning to the supportive environment nurtured by HBCs (Flowers, 2002; Newby, 1982; Watson, 1998). Pascarella and Terenzini (1991) stated that it is rarely institutional type that affects student learning but rather the supportive social-psychological context manifested by the institution. A supportive social-psychological context includes the existence of the following: a strong faculty emphasis in teaching and student development, a common valuing of the life

of the mind, high academic expectations, and frequent interactions in and outside the classroom between students and faculty (Pascarella & Terenzini, 1998). The qualities that contribute to a supportive social-psychological context overlap extensively with the good practices advanced by Chickering and Gamson (1987, 1991) and have been found to affect student learning (Carini & Kuh, 2003; Davis & Murrell, 1993; Graham, 1998; Kuh, Pace, & Vesper, 1997).

## RESEARCH METHODS

### Data Collection and Instrumentation

The sample in this study comprised students who participated in the NSSL, a federally-funded, longitudinal study of college student experiences and outcomes. The NSSL followed samples of students from 23 two- and four-year colleges for a period of three years, beginning in Fall 1992 and concluding in Spring 1995. The major purpose of the NSSL was to assess the factors that influence student learning and cognitive development during college.

The instruments used in the NSSL data collection included the reading comprehension, mathematics, and critical thinking modules of the Collegiate Assessment of Academic Proficiency (CAAP), developed by the American College Testing Program (ACT; 1990); the College Student Experiences Questionnaire (CSEQ) (Pace, 1990); and a questionnaire developed for the NSSL to gauge high school involvement, postsecondary education aspirations, and learning orientations. The CSEQ and the NSSL follow-up instruments were used to measure a wide range of students' curricular and out-of-class experiences in the first year of college as well as reassessing students' postsecondary education aspirations and learning orientations.

Through the extensive information on students' background characteristics, including high school involvement, as well as academic and non-academic experiences during college, the NSSL database allows us to estimate the net effects of attending a HBC (compared to a research university, regional institution, or liberal arts college) on African-American students' experiences of good practices in undergraduate education.

### Institutional Sample

The institutional sample consisted of 18 four-year colleges and universities located in 15 states throughout the country. In an effort to represent differences in colleges and universities nationwide on a variety of characteristics including institutional type, control (public or private), size, location, commuter versus residential character, and ethnic distribution of the undergraduate student body, institutions were chosen from the National Center on Education Statistics Integrated Post-secondary Education Data System (IPEDS) data. At the time of the data collection, three institutions were designated by the Carnegie classification as Research I institutions, and one had a Research II designation. For the purposes of this study, these institutions were collapsed into one category, research universities, and had a median enrollment of 22,990. Other institutions in the sample were classified by the Carnegie typology as Comprehensive colleges and Doctoral-Granting institutions. These seven institutions, with a median enrollment of 12,478, had limited graduate programs and primarily a regional focus. These institutions comprised the regional institutions category of this study. Five of the institutions in the sample were private liberal arts colleges, varying in selectivity, with a median enrollment of 1,707. These institutions constituted the liberal arts colleges category in the study.

HBCs were the final institutional type represented in this study. The two HBCs in this sample differed on many levels: control, Carnegie classification, religious affiliation, and geographic location. One HBC was a mid-Atlantic public institution with limited graduate programs, roughly the size of the regional institutions in the sample. The other was a private, religiously affiliated institution in the South, roughly the size of the liberal arts colleges in the sample.

### Student Sample

African-American students attending four-year institutions constituted the sub-sample for this study. The initial sample of 594 was selected randomly from the incoming first-year class at each participating institution. Our sub-sample yielded responses from 547 undergraduate African-American students of which 539 had complete responses (a 90.7% response rate). Fifty-three students attended a research university, 104 attended a regional institution, 70 attended a liberal arts college, and 312 attended a HBC. Because of attrition from the sample and the differential response rate by gender and institution, we developed a sample weighting algorithm for each follow-up data collection to adjust for potential sample bias by gender and institution. Within each of the institutions, we weighted participants in the follow-up data collection to that institution's population for the appropriate year by gender (male or female).

Although applying sample weights corrects for bias in the sample, it cannot correct for nonresponse bias. Past analyses have found that those students who dropped out of the NSSL study divided into two groups: (a) students who withdrew from the institution during the study, and (b) students who persisted at the institution but dropped out of the study. The former tended to have lower

levels of precollege cognitive test scores (as measured by the CAAP), academic motivation, and were of lower socioeconomic status than their peers who persisted in the study. However, students who persisted at the institution but dropped out of the study did not significantly differ from their peers who remained in the study (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1998).

### Dependent Variables

The 19 dependent variables in the study mirror those used by Pascarella et al. (2004) and are distributed among the following categories: (a) student-faculty contact, (b) cooperation among students, (c) active learning/time on task, (d) prompt feedback to students, (e) high expectations of faculty for student learning, (f) quality of teaching, and (g) influential interactions with other students. Chickering and Gamson's (1987, 1991) principles of good practice in undergraduate education informed our development of these dependent measures. We augmented the Chickering and Gamson framework by adding the empirically-supported dimension, "quality of teaching" (Feldman, 1997; Hines, Cruickshank, & Kennedy, 1985; Pascarella, Edison, Nora, Hagedorn, & Braxton, 1996; Wood & Murray, 1999), and by using "influential interactions with other students" (Astin, 1993; Douzenis, 1996; Davis & Murrell, 1993; Volkwein & Carbone, 1994; Whitt, Edison, Pascarella, Nora, & Terenzini, 1999) in the place of an explicit measure of diversity experiences. Operational definitions for all variables used in the analysis are available in the appendix of the paper.

A substantive body of evidence supports the predictive validity of Chickering and Gamson's (1987, 1991) principles of good practice. In the presence of controls for important confounding influences, these

principles of good practice have been significantly and positively linked to a host of desired cognitive and non-cognitive growth during college and with career and personal benefits after college (Astin, 1993; Chickering & Reisser, 1993; Kuh, Schuh, Whitt, & Associates, 1991; Pascarella & Terenzini, 1991, 2005). Recent research supporting the predictive validity of specific principles of good practice include the following: student–faculty contact (Anaya, 1999; Frost, 1991; Kuh & Hu, 2001; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1994); cooperation among students (Cabrera, Crissman, Bernal, Nora, Terenzini, & Pascarella, 2002; Johnson, Johnson, & Smith, 1998a, 1998b; Qin, Johnson, & Johnson, 1995); active learning (Grayson, 1999; Hake, 1998; Kuh et al., 1997; Lang, 1996; Murray & Lang, 1997); academic effort/time on task (Astin; Ethington, 1998; Hagedorn, Siadat, Nora, & Pascarella, 1997; Johnstone, Ashbaugh, & Warfield, 2002; Watson & Kuh, 1996); prompt feedback to students (d’Apollonia & Abrami, 1997; Feldman, 1997); high expectations (Arnold, Kuh, Vesper, & Schuh, 1993; Astin; Bray, Pascarella, & Pierson, 2004; Whitmire & Lawrence, 1996); and diversity experiences (Kitchener, Wood, & Jensen, 2000; Pascarella, Palmer, Moye, & Pierson, 2001; Terenzini et al., 1994; Umbach & Kuh, in press).

### Independent Variables and Statistical Controls

The independent variable of interest in this study was institutional type, formulated as dummy variables with HBCs as the reference group. Because students who are open to educational experiences in high school are also those most receptive to educational experiences in college and the dependent variables in the study were self-reports, it was necessary to control for students’ background charac-

teristics (Astin, 2003; Pascarella, 2001). Consistent with the conceptual framework of the college impact literature (Astin; Chickering & Reisser, 1993; Pascarella, 1985; Weidman, 1984), we entered a host of student background and institutional characteristics into the model to serve as statistical controls. All analyses controlled for demographic and precollege characteristics of the student: gender, age, parents’ education, family income, precollege educational aspirations, precollege academic ability (composite of CAAP reading comprehension, mathematics, and critical thinking test scores), college as student’s first choice, self-reported high school G.P.A., high school involvement, precollege academic motivation, and number of credit hours earned. Analyses also controlled for the average tested precollege academic ability of students entering the institution (a measure of institutional selectivity; Pascarella et al., 2004). The appendix of the paper contains the exact variable definitions. Table 1 contains the mean and standard deviations of all variables.

### Data Analysis

We used ordinary least squares regression to analyze the data. In each analysis, the good practice measure was regressed on the independent and control variables. All analyses reported are based on weighted sample estimates, adjusted to the actual sample size to obtain correct standard errors. We estimated effect sizes for all analyses yielding significant effects. This was accomplished by dividing the metric regression weights for the dummy variables representing different institutional types (HBCs versus research universities) by the pooled standard deviation of the dependent variable (Hays, 1994). The result is that part of a standard deviation that, on average, an African-American student attending a HBC is advantaged or disadvantaged on any good

TABLE 1.

Weighted Sample Means and Standard Deviations for all Variables in Model, *N* = 539

	Mean	SD
<i>Background Characteristics</i>		
Female	0.598	0.490
Age	20.300	5.254
Parents' Education	9.906	3.592
Family Income	7.440	3.370
Pre-Education Aspirations	0.915	0.279
Pre-College CAAP	-1.095	1.983
First Choice	0.582	0.493
Self-Reported High School G.P.A.	2.800	0.983
High School Involvement	19.000	3.715
Educational Motivation	3.386	0.570
<i>Institutional Characteristics</i>		
College Hours Completed	5.19	1.338
Institutional Selectivity	-0.421	1.112
<i>Independent Variables</i>		
Research Universities	0.204	0.403
Regional Institutions	0.254	0.435
Liberal Arts Colleges	0.033	0.178
Historically Black Colleges	0.510	0.500
<i>Dependent Variables</i>		
Student-Faculty Contact		
Non-Classroom Faculty Interaction	16.541	3.338
Faculty Interest in Teaching and Student Development	16.833	2.776
Cooperation Among Students		
Instructional Emphasis on Cooperative Learning	9.714	2.139
Course-Related Interaction with Peers	25.742	3.780
Active learning/Time on Task		
Academic Effort and Involvement	82.602	12.073
Essay Exams in Courses	2.640	1.023
Instructor Use of Higher-Order Questioning Techniques	10.048	1.883
Emphasis on Higher-Order Exam Questions	12.340	2.373
Computer Use	8.075	1.921
Prompt Feedback		
Instructor Feedback to Students	4.635	1.188
High Expectations		
Course Challenge and Effort	15.722	2.379
Scholarly and Intellectual Emphasis	15.841	2.433
Number of Textbooks or Assigned Readings	2.990	0.730
Number of Term Papers or Written Reports	2.830	0.740
Quality of Teaching		
Instructional Skill and Clarity	14.198	2.555
Instructional Organization and Preparation	15.755	2.255
Influential Interactions with Other Students		
Quality of Interactions with Students	26.203	4.117
Non-Course-Related Interactions with Peers	23.978	4.807
Cultural and Interpersonal Involvement	84.309	13.430

TABLE 2.

Statistically Significant Estimated Effects of African-American Students Attending a Historically Black College (vs. a Research University, Regional Institution, or Liberal Arts College) on Good Practices in Undergraduate Education<sup>ab</sup>

Good Practice Variable	Historically Black Colleges vs. :		Research Universities		Regional Institutions		Liberal Arts Colleges	
	MRC <sup>c</sup>	Effect Size <sup>d</sup>	MRC <sup>c</sup>	Effect Size <sup>d</sup>	MRC <sup>c</sup>	Effect Size <sup>d</sup>	MRC <sup>c</sup>	Effect Size <sup>d</sup>
Student-Faculty Contact								
Quality of Non-Classroom Interactions with Faculty	2.317**	0.694						
Faculty Interest in Teaching and Student Development	1.720**	0.620						
Cooperation Among Students								
Course-Related Interaction with Peers			1.056*	0.279				
Active Learning/Time on Task								
Academic Effort/Involvement			4.385**	0.363				
Number of Essay Exams in Courses	0.342*	0.334						
Computer Use			0.571*	0.297				
Prompt Feedback								
Instructor Feedback to Students	0.445*	0.374						
High Expectations								
Scholarly and Intellectual Emphasis	1.304**	0.536	0.772**	0.317				
Number of Term Papers or Written Reports			0.166*	0.224			-0.505**	-0.682
Influential Interactions with Other Students								
Quality of Interactions with Students	2.051**	0.498						
Non-Course-Related Interactions with Peers			1.471**	0.306				

<sup>a</sup> Sample sizes: HBCs,  $n = 312$ ; research universities,  $n = 53$ ; regional institutions,  $n = 104$ ; liberal arts colleges = 70.

*table notes continue*

<sup>b</sup> Equations also include controls for: gender, age, parents' education and income, precollege educational plans, tested precollege academic ability (composite of CAAP reading comprehension, mathematics, and critical thinking test scores), college attended was one's first choice, secondary school grades, high school involvement (composite measure of time spent during secondary school in eight separate activities: studying, socializing with friends, talking with teachers outside of class, working for pay, exercising or sports, studying with friends, volunteer work, and extracurricular activities), a measure of precollege academic motivation, cumulative number of credit hours completed, and the average tested precollege academic ability (composite of CAAP reading comprehension, mathematics, and critical thinking test scores) of students entering each institution or "selectivity" of the institution.

<sup>c</sup> The Metric Regression Coefficient represents the average difference between African-American students attending HBCs and their peers at comparison institution types on each good practice variable, statistically adjusted for the controls listed in footnote b above.

<sup>d</sup> The effect size is computed by dividing the metric regression coefficient by the pooled standard deviation of the good practice variable. It indicates the fraction of a standard deviation African-American students attending HBCs are advantaged or disadvantaged (depending on the sign) relative to their peers at comparison institution types.

\* $p < .05$ . \*\* $p < .01$ .

practice measure relative to students at the other institutional type, net of other influences specified in the regression equation. Given that Pascarella et al. (2004) found the most pronounced effects of institutional type on good practices occurred during the first year of college, our analyses focused on the effects of good practices during the first year of college for African-American students.

## RESULTS

Table 2 summarizes the statistically significant estimated effects of HBCs (versus other institutional types) on measures of principles of good practice in undergraduate education. We have corrected the signs of the regression coefficients to denote the net advantage/disadvantage for African-American students attending HBCs. A positive signed coefficient represents an advantage for students attending an HBC relative to their peers at other institution types whereas a negative signed coefficient represents a disadvantage. Net of student background characteristics, full- or part-time enrollment, and institutional selectivity, HBCs had the following impacts on African-American students' exposure to and engagement in good practices in undergraduate education.

As Table 2 indicates, African-American students attending HBCs experienced good practices in undergraduate education at a significantly greater level than did their peers at research universities on 6 of the 19 measures. These good practice advantages for African-American students at HBCs included quality of non-classroom interactions with faculty, faculty interest in teaching and student development, number of essay exams in courses, instructor feedback to students, scholarly and intellectual emphasis, and quality of interactions with other students. It

is interesting to note that two of the study's strongest effect sizes compared HBC students' experiences with peers at research universities. In terms of quality of non-classroom interactions with faculty and faculty interest in teaching and student development, students at HBCs had a considerable advantage compared to their peers at research universities (.694 and .620 effect sizes, respectively).

African-American students attending HBCs also experienced good practices in undergraduate education at a significantly greater level than did their peers at regional institutions on 6 of the 19 measures. These good practice advantages for African-American students at HBCs included course-related interaction with peers, academic effort/involvement, computer use, scholarly and intellectual emphasis, number of term papers or written reports, and non-course-related interactions with peers. It is worth noting that we found no advantage in student-faculty contact for African-American students at HBCs compared with their counterparts at regional institutions, an area pronounced in the HBC/research university comparison. Our results, however, suggest the advantage for students at HBCs compared to their peers in regional institutions lies in greater effort and emphasis in educational pursuits and greater levels of interaction with peers in and outside the classroom.

We found only one good practice measure in which African-American students at HBCs were advantaged over their peers at both research universities and regional institutions. Specifically, in terms of institutional scholarly and intellectual emphasis, students at HBCs were advantaged relative to their peers at research universities and regional institutions. The fact that we found only one good practice measure in which students at HBCs were advantaged compared to their peers at research

universities and regional institutions underscores that the experiences of students at medium and large public institutions are distinct.

Compared to their peers at liberal arts colleges, our results suggest African-American students at HBCs experience good practices in approximately similar levels. African-American students at liberal arts colleges reported writing significantly more term papers or written reports than did their peers at HBCs. However, on all other indicators of good practice, we found no significant differences at the .05 level between students at HBCs and liberal arts colleges.

All significant effects persisted in the presence of controls for an extensive array of student precollege characteristics and institutional influences. Thus, the effects cannot be explained away by differences between HBC students and peers attending comparison institutions in precollege characteristics such as tested academic ability, academic motivation, secondary school achievement, family background, or secondary school level of social and other involvement. Similarly, the differences uncovered are not a function of the full- or part-time attendance of the student or the academic selectivity (average student precollege test scores) of the institution attended.

## DISCUSSION

In any given in-class learning environment, two components are present: (a) the academic learning environment as fostered by the faculty, and (b) the influence of peers on the learning environment (Caboni, Mundy, & Duesterhaus, 2002; Hirschy & Wilson, 2002). Our results suggest that institutional type has an effect on African-American students' experiences of good practices with regard to these different components. Specifically, the

advantages experienced by students at HBCs compared to students at research universities were overwhelmingly part of the learning environment fostered by the faculty. Students at HBCs experienced greater student–faculty contact, received more feedback on their class performance, and reported a learning environment with a more scholarly and intellectual emphasis than their peers at research universities.

On the other hand, our results suggest students at HBCs, contrasted with their peers at regional institutions, were more engaged and challenged in their academic pursuits (as measured by academic effort/involvement, institutional scholarly and intellectual emphasis, computer use, and number of term papers written) and interacted with peers both in and out of the classroom more often. Our findings indicate African-American students at HBCs find their academic environment to be more rigorous than their peers at public regional institutions. This finding is interesting in that it holds net of institutional selectivity. Moreover, insofar as peer interaction contributes to student learning, African-American students at HBCs gain an advantage over their counterparts at regional institutions.

We found no differences in the learning environment fostered by the faculty or the influence of peer interactions on the learning environment between students at HBCs and those at liberal arts colleges. With one exception, HBCs appeared to function much like liberal arts colleges in terms of fostering good practices for African-American students. The one existing difference was within the good practice of high expectations relative to the advantage liberal arts college students reported in completing a greater number of term papers or written reports. Although this is certainly an interesting finding that warrants further study, the overall results suggest that

in terms of experiences of good practices in undergraduate education for African-American students, HBCs and liberal arts colleges seem very similar.

Because differences in students' experiences of good practices between HBCs and research universities and regional institutions could not be explained by student background characteristics (including high school involvement), the full/part-time enrollment of the student, or institutional selectivity, the results suggest a plausible institutional effect. But to what can we attribute such an effect? Some may posit institutional size is the dominant factor.

Chickering and Reisser (1993) suggest that institutions of smaller size present students with a more manageable social–psychological environment that invites greater levels of student engagement than their larger counterparts. However, attributing the differences in students' experiences of good practice to institutional size falls short as an explanation. This is particularly true considering that one of the two HBCs was approximately the median size of the regional institutions in our sample. Moreover, the average size of the HBCs in our sample was two and a half times larger than the average size of the liberal arts colleges in the sample. Finally, size correlated highly with Carnegie classification ( $r = .728$ ) and was thus approximately accounted for in our model. For these reasons, we believe attributing the differences in experiences of good practices in undergraduate education to institutional size masks a much more plausible explanation of our findings. We assert the differences uncovered in this study between HBCs and research and regional institutions are the result of an uncompromising attendance to a clear and defined institutional mission focused on student learning which manifests a supportive social–psychological envi-

ronment for student growth and development.

Missions are the touchstone of an institution, providing the yardstick from which to determine if policies and practices are educationally purposeful (Kuh et al., 1991). The missions of research universities and regional institutions are multi-faceted, including research, service to the state/community, as well as the education of undergraduate and graduate students. These multi-faceted missions likely add another layer of challenge for faculty also charged with creating powerful learning environments for both graduate and undergraduate students. Our result finding African-American students at research universities reported lower levels of student–faculty contact than their peers at HBCs suggests this challenge may indeed exist at research universities. Although the intersection between the demands of a multi-faceted mission and lower levels of academic challenge and peer interaction at regional institutions was less apparent (i.e., had less substantial effect sizes), it is plausible that HBCs are more intentional in communicating institutional academic expectations and the role of students in developing the learning environment than regional institutions.

Compared to the missions of research universities and regional institutions, the missions of HBCs and liberal arts colleges are more clearly defined and limited in scope. Newby's (1982) findings support the assertion that HBCs have a clearly defined mission. "The fact that most social science faculty members view the development of the ability to pursue research as the least important goal of their institutions provides further evidence that predominantly black four-year colleges and universities are essentially teaching institutions" (p. 55). HBCs focus on teaching is shared by their liberal arts college counterparts, which too, are more likely than other

four-year institutions to attract and hire faculty who place a personal and professional premium on good teaching (Leslie, 2002). This unambiguous institutional focus clearly communicates the primary institutional value, student learning.

Following the conclusion of previous research (Astin, 1993; Pascarella & Terenzini, 1991; Pascarella et al., 2004), we theorize that the defined mission of liberal arts colleges and HBCs creates a culture in which student–faculty interaction, engagement with peers, and high expectations for learning in and outside the classroom is valued and articulated not only to faculty and staff but also to students. Thus, the creation of an environment grounded in good practices benefits from the investment of multiple stakeholders.

We are not asserting HBCs and liberal arts colleges share the same mission. HBCs have a very distinct mission that sets them apart from other, typically, small liberal arts colleges. HBCs were established "to provide, encourage, and accelerate higher education for African Americans; and to incubate and preserve black [sic] creativity and scholarship" (Whiting, 1991, p. 37). The contribution of this study is that it provides yet further evidence to support the assertion that although missions may differ, they matter. Specifically, academic and social policies and practices that support student success reflect the degree to which an institution articulates and enacts a clear and coherent mission (Kuh, Kinzie, Shuh, Whitt, & Associates, 2005).

Although a number of HBCs lack resources (Allen, 1987; Blake, 2003; Bohr et al., 1995; Whiting, 1991), particularly compared to PWIs, the HBCs in our sample exhibited an uncompromising attendance to the mission of student learning and development as evidenced by their students' experiences of good practices in undergraduate education.

We argue that institutions with a focused mission that manifests a supportive context for student learning and development can provide undergraduate African-American students with learning environments grounded in good practice. We posit this can be achieved provided the mission of the institution regarding undergraduate education is clearly defined and consistently articulated to all members of the institutional community and the institution rewards those whose pedagogy and practice are mission-driven.

## IMPLICATIONS FOR PRACTICE

It may be tempting for student affairs practitioners to dismiss this study because of its focus on in-class dimensions of good practices in undergraduate education. We challenge readers to consider how Chickering and Gamson's (1987, 1991) principles of good practice are applicable within student affairs divisions, particularly given our profession's imperative to be learning-centered (American College Personnel Association [ACPA], 1996; ACPA & National Association of Student Personnel Administrators [NASPA], 2004). We can easily consider quality of interactions, interest in student development, providing prompt feedback, and articulating and maintaining high expectations in terms of many student affairs professionals' daily functions and practices, be it advising campus organizations, career counseling, or residence hall conflict mediation. Through our communication and interaction with students, we define student affairs' role and the student role in forwarding the mission. In word and action, we shape how the mission of the institution and its subsequent manifestation in a supportive social-psychological environment is realized on our campuses.

Because this study found differences in

African-American students' experiences of good practice by institutional type, it seems timely to revisit an earlier recommendation for cross-institutional learning. The suggestion of developing exchange programs to heighten awareness of practices and relationships that encourage African-American student success is not new (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996; Watson & Kuh, 1996), but our results suggest much could be gained from such an exchange. Faculty and student affairs professionals at research universities and regional institutions could learn from their peers at HBCs and liberal arts colleges about policies and practices that are educationally purposeful and focused on student learning. With our student bodies becoming more reflective of America's diversity and the increasing focus on accountability of student learning, it behooves all of us to learn from those institutions that exemplify good practices in undergraduate education.

## LIMITATIONS

This study is not without its limitations. Due to our relatively small number of institutions represented in the sample, we were unable to fully test or control for a range of organizational effects. HLM would have been useful if a larger number of institutions were available. Although the institutions in this study differed in terms of size, control, Carnegie classification, geographic region, and selectivity, one must use caution in generalizing these findings to all colleges and universities. This caution is particularly necessary given that: (a) only one HBC is currently classified as a research university and it is not part of our sample, and (b) we had only two HBCs represented in our sample. It is possible that the good practices experienced by students in our sample did not capture the

vast variability among student experiences at other HBCs. Second, our sample of African-American students ( $N = 539$ ) was also relatively small. Although the individual and institutional sample sizes were small, we know of no other data set that comes close to measuring the extent or depth of good practices that we have in this data set.

Additionally, the scales created for this study place a great emphasis on the role of the faculty in fostering learning environments grounded in good practice. Past research, however, has demonstrated the important contributions of the out-of-class environment on student learning (Baxter Magolda, 1992; Kuh, 1993; Pascarella et al., 1999). In a holistic study of good practices in undergraduate education, more measures of good practice related to the out-of-class environment need to be included. Moreover, the findings are limited by the way the principles of good practice were operationally defined by the measures created. Although existing evidence on empirically-supported indicators of good practice dimensions guided the dependent measures, surely other measures exist which would capture different facets of the principles of good practice and might yield somewhat different results.

Two of the dependent measures have alpha reliabilities in the .62 to .65 range. Although such reliabilities are too low for guiding individual-level decisions, they are not necessarily too low to detect group differences (Iowa Testing Program, personal communication). Indeed, even after introducing extensive statistical controls, HBCs had a significant positive effect in both cases. This is almost *prima facie* evidence that the scale reliability is not so low that it fails to detect differences.

Finally, the data were collected in the early 1990s. Balancing against this limitation is the

longitudinal nature of the NSSL data. We know of no other data set that allows for such extensive introduction of controls to remove confounding influences from the primary relationship of interest.

## FURTHER RESEARCH

Having found that differences by institution type exist in African-American students' experiences of good practices, it is important for future research to examine how and in what ways students experience these differences. How do African-American students experience good practices in undergraduate education on their campus? Do these experiences differ by institutional type? In what ways does a clearly defined mission manifest a supportive environment dedicated to good practices in undergraduate education? Qualitative and ethnographic studies can help to inform our understanding along these lines of inquiry. We have posited that the differences uncovered are connected to an institutional mission focused on student learning and development, in other words, a common valuing of the mind. This is an assumption that qualitative and ethnographic studies would be more amenable to test.

## CONCLUSION

This study responds to the call for research testing the salience of our student development models and increased accountability for student learning by examining to what extent African-American students experience good practices in undergraduate education differently by institutional type. The differences found were overwhelmingly between HBCs and research and regional institutions, net of student background characteristics, enrollment status, and institutional selectivity. We conclude that institutional missions that vary

by type are the probable reason for these differences. Whereas research universities and regional institutions have multi-faceted missions, HBCs and liberal arts colleges tend to have more narrowly focused missions dedicated to student learning. We assert uncompromising attendance to a clearly defined mission of student learning manifests a purposeful social–psychological environment

of which good practices in undergraduate education serve as the foundation. Because of the similarity in attending to the focused institutional mission, HBCs function in a manner much like that of liberal arts colleges.

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## APPENDIX.

### Operational Definitions of Independent and Dependent Variables

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#### Dependent Variables

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##### *Student-Faculty Contact*

**Quality of nonclassroom interactions with faculty:** An individual's responses on a five-item scale that assessed the quality and impact of one's nonclassroom interactions with faculty. Examples of constituent items were: "Since coming to this institution I have developed a close personal relationship with at least one faculty member," "My nonclassroom interactions with faculty have had a positive influence on my personal growth, values and attitudes," and "My nonclassroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas." Response options were: 5 = *strongly agree*, 4 = *agree*, 3 = *not sure*, 2 = *disagree*, and 1 = *strongly disagree*. Alpha reliability = .83.

**Faculty interest in teaching and student development:** An individual's responses on a five-item scale assessing students' perceptions of faculty interest in teaching and students. Examples of constituent items were: "Few of the faculty members I have had contact with are genuinely interested in students" (coded in reverse), "Most of the faculty members I have had contact with are genuinely interested in teaching," and "Most of the faculty members I have had contact with are interested in helping students grow in more than just academic areas." Response options were: 5 = *strongly agree*, 4 = *agree*, 3 = *not sure*, 2 = *disagree*, and 1 = *strongly disagree*. Alpha reliability = .71.

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#### Dependent Variables

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##### *Cooperation Among Students*

**Instructional emphasis on cooperative learning:** An individual's responses on a four-item scale that assessed the extent to which the overall instruction received emphasized cooperative learning. Examples of constituent items were: "I am required to work cooperatively with other students on course assignments," "In my classes, students teach each other in groups instead of only having instructors teach," and "Instructors encourage learning in student groups." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .81.

**Course-related interaction with peers:** An individual's responses on a ten-item scale that assessed the nature of one's interactions with peers focusing on academic coursework. Examples of constituent items were: "Studying with students from my classes," "Tried to explain the material to another student or friend," and "Attempted to explain an experimental procedure to a classmate." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .79.

*appendix continues*

APPENDIX. *continued*

## Operational Definitions of Independent and Dependent Variables

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**Dependent Variables**

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*Active Learning/Time on Task*

**Academic effort/involvement:** An individual's response on a 37-item, factorially derived, but modified scale that assessed one's academic effort or involvement in library experiences, experiences with faculty, course learning, and experiences in writing. The scale combined four, 10-item involvement dimensions from the CSEQ, minus three items that were incorporated into the Course-Related Interaction with Peers Scale described above. Examples of constituent items were: "Ran down leads, looked for further references that were cited in things you read," "Did additional readings on topics that were discussed in class," and "Revised a paper or composition two or more times before you were satisfied with it." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .92.

**Number of essay exams in courses:** An individual's response to a single item from the CSEQ. Response options were: 1 = *none*, to 5 = *more than 20*.

**Instructor use of high-order questioning techniques:** An individual's responses on a four-item scale that assessed the extent to which instructors asked questions in class that required high-order cognitive processing. Examples of constituent items were: "Instructors' questions in class ask me to show how a particular course concept could be applied to an actual problem or situation," "Instructors' questions in class ask me to point out any fallacies in basic ideas, principles or points of view presented in the course," and "Instructors' questions in class ask me to argue for or against a particular point of view." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .80.

**Emphasis on high-order examination questions:** An individual's responses on a five-item scale that assessed the extent to which examination questions required high-order cognitive processing. Examples of constituent items were: "Exams require me to point out the strengths and weaknesses of a particular argument or point of view," "Exams require me to use course content to address a problem not presented in the course," and "Exams require me to compare or contrast dimensions of course

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**Dependent Variables**

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content." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .77.

**Using computers:** An individual's response on a three-item scale indicating extent of computer use: "Using computers for class assignments," "Using computers for library searches," and "Using computers for word processing." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .65.

*Prompt Feedback*

**Instructor feedback to students:** An individual's response on a two-item scale that assessed the extent to which the overall instruction received provided feedback on student progress. The items were: "Instructors keep me informed of my level of performance," and "Instructors check to see if I have learned well before going on to new material." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .70.

*High Expectations*

**Course challenge/effort:** An individual's responses on a six-item scale that assessed the extent to which courses and instruction received were characterized as challenging and requiring high level of effort. Examples of constituent items were: "Courses are challenging and require my best intellectual effort," "Courses require more than I can get done," and "Courses require a lot of papers or laboratory reports." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .64.

**Number of textbooks or assigned readings:** An individual's response on a single item from the CSEQ. Response options were: 1 = *none*, to 5 = *more than 20*.

**Number of term papers or other written reports:** An individual's response on a single item from the CSEQ. Response options were: 1 = *none*, to 5 = *more than 20*.

*appendix continues*

APPENDIX. *continued*

Operational Definitions of Independent and Dependent Variables

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**Dependent Variables**

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**Scholarly/intellectual emphasis:** An individual's responses on a three-item scale that assessed perceptions of the extent to which the climate of one's college emphasized: 1) the development of academic, scholarly, and intellectual qualities; 2) the development of esthetic, expressive, and creative qualities; or 3) being critical, evaluative, and analytical. Response options were on a semantic differential-type scale where 7 = *strong emphasis* and 1 = *weak emphasis*. Alpha reliability = .79.

*Quality of Teaching*

**Instructional skill/clarity:** An individual's responses on a five-item scale that assessed the extent to which the overall instruction received was characterized by pedagogical skill and clarity. Examples of constituent items were: "Instructors give clear explanations," "Instructors make good use of examples to get across difficult points," and "Instructors interpret abstract ideas and theories clearly." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .86.

**Instructional organization and preparation:** An individual's responses on a five-item scale that assessed the extent to which the overall instruction received was characterized by good organization and preparation. Examples of constituent items were: "Presentation of material is well organized," "Instructors are well prepared for class," and "Class time is used effectively." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .87.

*Influential Interactions With Other Students*

**Quality of interactions with students:** An individual's responses on a seven-item scale that assessed the quality and impact of one's interactions with other students. Examples of constituent items were: "Since coming to this institution I have developed close personal relationships with other students," "My interpersonal relationships with other students have had positive influence on my personal growth, attitudes and values," and "My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas." Response options were: 5 = *strongly agree*, 4 = *agree*, 3 = *not sure*,

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**Dependent Variables**

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2 = *disagree*, and 1 = *strongly disagree*. Alpha reliability = .82.

**Non-course-related interactions with peers:** An individual's response on a ten-item scale that assessed the nature of one's interactions with peers focusing on non-class, or non-academic issues. Examples of constituent items were: "Talked about art (painting, sculpture, architecture, artists, etc.) with other students at the college," "Had serious discussions with students whose philosophy of life or personal values were very different from your own," and "Had serious discussions with students whose political opinions were very different from your own." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .84. The scale was summed through the first and second year.

**Cultural and interpersonal involvement:** An individual's response on a 38-item, factorially-derived, but modified scale that assessed one's effort or involvement in art, music, and theater, personal experiences, student acquaintances and conversations with other students. The scale combined items from five involvement dimensions of the CSEQ, minus eight items that were incorporated into the Non Course-Related Interactions With Peers Scale described above. Examples of constituent items were: "Seen a play, ballet, or other theater performance at the college," "Been in a group where each person, including yourself, talked about his/her personal problems," "Made friends with students whose interests were different from yours," "Had conversations with other students about major social problems such as peace, human rights, equality, and justice," and "In conversations with other students explored different ways of thinking about the topic." Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. Alpha reliability = .92.

*Independent Variable*

**Historically Black Colleges vs. other institutions:** Three dummy variables that represented students at historically black colleges vs. students at research universities, students at historically black colleges vs. students at regional institutions, and students at historically black colleges vs. students at liberal arts colleges.

*appendix continues*

APPENDIX. *continued*

## Operational Definitions of Independent and Dependent Variables

**Dependent Variables***Background Characteristics*

**Gender:** A dummy variable denoting men and women.

**Age:** A continuous variable subtracting year of birth from 1972.

**Parents' education:** A continuous variable reflecting sum of mother and father's formal education. Response options were: 1 = *grammar school or less*; 2 = *some high school*; 3 = *high school graduate*; 4 = *postsecondary school other than college*; 5 = *some college*; 6 = *college degree*; 7 = *some graduate school*; 8 = *graduate degree*; 9 = *professional degree (Law, Medicine, etc.)*.

**Family income:** A continuous variable reflecting student's best estimate of family income from previous year. Response options were:

1 = *less than \$6,000*; 2 = *\$6,000 to \$9,999*; 3 = *\$10,000 to \$14,999*; 4 = *\$15,000 to \$19,999*; 5 = *\$20,000 to \$24,999*; 6 = *\$25,000 to \$29,999*; 7 = *\$30,000 to \$34,999*; 8 = *\$35,000 to \$39,999*; 9 = *\$40,000 to \$49,999*; 10 = *\$50,000 to \$59,999*; 11 = *\$60,000 to \$74,999*; 12 = *\$75,000 to \$99,999*; 13 = *\$100,000 to \$149,999*; and 14 = *\$150,000 or more*.

**Pre-college educational aspirations:** A dummy variable denoting graduate degree aspirations, coded 0 = *B.A./B.S.*, 1 = *degree aspirations greater than B.A./B.S.*

**Pre-college CAAP:** An individual's score on a composite of the Fall 1992 administration of the CAAP reading comprehension, mathematics, and critical thinking modules. The composite was formed by standardizing each module and then summing across standardized scores. The alpha reliability for the composite measure was .83. The overall sample from NSSL was standardized with a mean of 0 and a standard deviation of 1.

**Dependent Variables**

**College as first choice:** A dummy variable reflecting whether or not the college attended was the student's first choice.

**Self-reported high school G.P.A.** An individual's response to the question: "What is your best estimate of your grade point average in high school?" Response options were: 1 = *D+ or lower*; 2 = *C, C-*; 3 = *B-, C+*; 4 = *B*; 5 = *A-, B+*; and 6 = *A*.

**High school involvement:** A continuous scale comprised of the student's engagement in the following summed items: studying/homework, socializing with friends, talking with teachers outside of class, working for pay, exercising or sports, studying with friends, and extracurricular activities. Response options were: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*.

**Pre-college educational motivation:** An individual's Fall 1992 score on an 8-item Likert-type scale (5 = *strongly agree*, to 1 = *strongly disagree*) assessing motivation for academic work and learning. The scale items were based on existing research on academic motivation (e.g., Ball, 1977)

*Institutional Characteristics*

**College hours completed:** Continuous variable reflecting the number of credit hours students had completed after their first semester at the institution.

**Institutional selectivity:** A continuous variable estimated by the average level of precollege composite cognitive development (i.e. Fall 1992 reading comprehension, mathematics, and critical thinking) in the sample at each of the 18 institutions in the study. The overall sample from NSSL was standardized with a mean of 0 and a standard deviation of 1. Each student was then assigned the mean score of the sample at his or her institution.

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