

“NSSE’S BENCHMARKS – ONE SIZE FITS ALL?”

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Administrators of the National Survey of Student Engagement (NSSE) argue that the results from the five benchmarks, constructed of about forty out of the survey’s eighty items, “produce a set of national benchmarks of good educational practice that participating schools are using to estimate the efficacy of their improvement efforts” (Kuh, 2001b). The objective of this paper is to show that any assessment of educational quality cannot be separated from students’ expectations and goals. To the degree that traditional and nontraditional students differ on these dimensions, benchmarking must carefully avoid bias toward one “type” of student over the other. Traditional college students (those starting as freshmen and attending college immediately after high school) expect a broad range of non-academic options as part of their educational experience, such as extracurricular activities, community involvement, and interaction with faculty and peers outside the classroom. Nontraditional students’ educational goals are more narrowly focused. We argue that three of the five NSSE benchmarks mix items that primarily reflect the expectations of traditional college students with more “universal” educational experiences that focus on academics, classroom activities and institutional support, and therefore are not appropriate for assessing the quality of education for *all* college students. The paper also argues for the restructuring of these problematic benchmarks to accurately reflect educational practices common to all types of students instead of using the current benchmarks, which penalize institutions with large nontraditional student populations.

Brief Literature Review

Developed in part as an alternative to reputation- and resource-based ranking, the NSSE was designed to assess the extent to which students are engaged in educationally purposeful activities that contribute to their learning and success during college (Kuh, 2001a, 2001b; Pike, 2003). Based on accumulated research, starting with the “Seven Principles for Good Practice in Undergraduate Education” (Chickering & Gamson, 1987), NSSE administrators argue that there is a correlation between students’ engagement and the quality of education they receive. “As a survey NSSE annually assesses the extent to which students at hundreds of four-year colleges and universities are participating in educational practices that are strongly associated with high levels of learning and personal development” (Kuh, 2001a). In addition to including activities that are traditionally associated with learning, such as reading and writing, preparing for class, and interacting with instructors, “the engagement concept also encompasses some other key activities that more recently have come to the fore as being important, such as collaborating with peers on projects, problem solving tasks, and community service” (Kuh, Gonyea, & Palmer, 2001).

Using a questionnaire that consists of over eighty items, NSSE assesses student engagement in activities its researchers contend contribute to learning and success during college. In order to make the survey results more accessible and manageable, five benchmarks were created: “To facilitate the conversation about student engagement, learning, and institutional improvement, we grouped key questions from the survey into five clusters or benchmarks of effective educational practices” (Kuh, 2003). The five NSSE benchmarks are: 1) level of academic

challenge, 2) active and collaborative learning, 3) student-faculty interaction, 4) enriching educational experiences, and 5) supportive campus environment. Overall, the benchmarks “are intended to help steer the national conversation about collegiate quality away from resources and reputational rankings toward what matters more to student learning—good educational practice” (NSSE 2000, p.1). Survey administrators claim that NSSE’s results, including the benchmarks, can be used to compare the quality of education at different institutions: “Those institutions that more fully engage their students in the variety of activities that contribute to valued outcomes of college can claim to be of higher quality in comparison with similar types of colleges and universities” (Kuh, 2001b). “The NSSE benchmarks are a window into student and institutional performance at the national, sector, and institutional levels” (Kuh, 2003).

Several analyses (conducted by NSSE researchers among others) show, however, that nontraditional students (older, commuters, transfers) respond differently on many of the NSSE questions – especially those items inquiring about activities outside the classroom – and consequently have lower scores on several of the NSSE benchmarks. For example, students enrolled full-time have consistently higher scores on NSSE benchmarks, probably because full-time students have more opportunities to become engaged in educationally purposeful activities (Pike, 2003). Similar results are shown for students who entered the institution as transfers. “Overall, transfer students are less engaged in effective educational activities than their non-transfer peers. Transfer students tend to be older and have more external responsibilities such as working for pay off-campus and caring for dependents. Transfer students believe their coursework provides more emphasis on cultivating higher-order thinking abilities than their peers, yet they interact with faculty members and engage in enriching educational programs at levels lower than their counterparts” (NSSE 2004 overview, p.9). Commuter students were also found to be less “engaged” overall, although this was not true in the classroom (Kuh, Gonyea & Palmer, 2001; Chickering, 1974; Pascarella & Terenzini, 1991). Finally, older students were found to be less engaged in activities outside the classroom: “Younger traditional age students (18-24 years) report spending slightly more time in educationally productive activities and perceive their campus environment as more supportive than older students. However, older students did not differ much from their younger counterparts in educational and personal growth and in their perceptions of course emphasis on higher-order mental activities” (NSSE 2004 overview, p.9). Other research has found that older seniors (those over age 25) had similar responses to younger seniors on most NSSE items an institution can “control” – classroom activities, relationships with faculty and administrators, and institutional support – but had different responses on items that were related to student lifestyle. These older seniors mainly showed less engagement in activities and less interaction with other students and faculty outside the classroom (Hicks & Lerer, 2002).

The educational goals of nontraditional students cannot and should not be ignored by NSSE researchers as though this group is inconsequential. Quite the contrary: the proportion of *traditional* students is steadily declining on college campuses. “According to NCES, just over 40 percent of postsecondary students today attend part time, compared with less than one-third a generation ago. Similarly, the proportion of students 25 and older has jumped from just over one-quarter in 1970 to nearly 40 percent today. Moreover, nearly 40 percent of students now attend more than one institution in their college career. All in all, we live in nontraditional times when obtaining a ‘four year’ degree in four years is the exception rather than the rule” (*The*

Chronicle of Higher Education, June 27, 2005). Nontraditional students, who are usually older, live and work off-campus and have families and responsibilities not related to their experiences as students, do not seek the same outcomes from their education as traditional college students. They tend to focus on academics, and do not have the time (or perhaps the inclination) to participate in off-campus activities or interactions outside the classroom.

Accordingly, NSSE *should not* ignore the preferences and experiences of this distinct group of students by expecting the same behaviors and practices from *all* college students. Educational practices that are applicable to all students, such as classroom-related activities and institutional support, should be distinguished from activities that clearly reflect preferences and behaviors of traditional college students, such as study abroad, participation in extracurricular activities, and interactions with faculty and students outside the classroom. Even Chickering & Gamson, whose seven principles of good educational practice serve as the basis for NSSE's conceptual framework, argued against a one-size-fits-all scheme: "The ways different institutions implement good practice depend very much on their students and their circumstances" (1991).

Combining the educational needs and preferences of traditional and nontraditional students under a few all-encompassing (and arguably biased) benchmarks puts institutions with large nontraditional student populations at a comparative disadvantage. While NSSE researchers clearly imply by the way the benchmarks are constructed that out-of-classroom activities are an essential part of students' educational experiences, they have not proven (or even argued) that nontraditional students, who tend to engage in these activities less than traditional students, receive an inferior education. In fact, NSSE's own researchers show that nontraditional students are more satisfied with their overall educational experiences (NSSE 2004 overview).

Brief Summary of the Methodology

To test the argument of the paper, we created distinct traditional and nontraditional groups using students' age and whether they had started at Adelphi as freshmen or transfers. We also chose to focus on seniors, a group that includes a larger proportion of nontraditional students. Traditional students were defined as seniors younger than 25 who had started at Adelphi as freshmen. Nontraditional students were defined as seniors older than 30 (since the average age of Adelphi senior respondents was 30.5) who started as transfers. Seniors who did not fit this "pure" traditional/nontraditional typology were excluded from the analysis. Other independent variables included in the regression equations were on-campus residence, gender, ethnicity and parents' education.

We expected that there would be no significant difference between the two groups in analyzing the two benchmarks that include items applicable to all students: 1) The "level of academic challenge" benchmark, which focuses on classroom and academic activities; and 2) the "supportive campus environment" benchmark, which is applicable to the successful educational endeavors of all students. In contrast, we hypothesized that a large number of items in the remaining benchmarks are primarily applicable to traditional students. 1) In the "student-faculty interaction" benchmark, a smaller proportion of older students are likely to engage in three of the five activities specified: fewer will need to "talk about career plans with faculty members," or will have time for interacting with faculty members outside class to "discuss ideas from readings

or classes,” or “work on activities other than coursework (committees, orientation, student-life activities, etc.)” They also will probably spend less time on the fourth item, “discussed grades or assignments with an instructor,” since this activity tends not to occur in the classroom, although they might speak with instructors immediately after class or e-mail them. 2) In the “active and collaborative learning” benchmark, three of seven items refer to activities outside the classroom: “worked with classmates outside class to prepare class assignments,” “tutored or taught other students,” and “participated in community-based project as part of a regular course.” 3) In the “enriching educational experiences” benchmark, four of twelve variables inquire about out-of-classroom, non-academic activities: participating in “co-curricular activities,” “practicum, internship, field experience, co-op experience or clinical assignment,” “community service or volunteer work,” and “study abroad.” A fifth item – “learning communities” – is problematic in that it is usually a part of students’ first-year experience and not of students who started as transfers (although transfer students might think that taking classes with the same students in their majors is “other formal program where groups of students take two or more classes together”). This benchmark is also conceptually questionable since it includes seemingly unrelated items covering at least four areas: participation in activities outside the classroom, participation in activities inside the classroom, campus diversity, and technology use.

Brief Summary of the Data Sources

Data are drawn from two sources: NSSE’s data and Adelphi’s data. Adelphi has participated in NSSE each year since its introduction in spring 2000. Adelphi has five years of NSSE results (since NSSE created its benchmarks in 2001) at its disposal. The final file included 432 seniors: 192 traditional and 240 nontraditional (Table 1).

Table 1: Respondents’ distribution within the groups

	Age		
	Less than 25	25 – 30	Over 30
Freshmen	192 ⁱ	10	32
Transfers	165	81	240 ⁱⁱ

ⁱ = Traditional group

ⁱⁱ = Nontraditional group

Note: On-campus residence was not used to create the traditional/nontraditional groups because the vast majority of all seniors live off-campus. The off-campus (commuter) specifics are: traditional group, 144 commuters; nontraditional group, 240 commuters.

While NSSE created aggregate benchmarks to derive scores for an entire institution, we applied the same process to create benchmark scores for individual students – using the SPSS syntax NSSE provides on its website. These constructed benchmarks were the dependent variables in the analyses. Variables used as controls were those found in the literature to affect students’ educational experiences: entrance status, on-campus residents versus commuters, gender, ethnicity, and parents’ education.

Results

When the demographic characteristics of the traditional and nontraditional groups are examined, the results show a similar proportion of women. The nontraditional group includes a

slightly higher proportion of minority students (non-white) and a considerably higher proportion of respondents whose parents did not graduate from college (Table 2).

Table 2: Demographic characteristics

	Traditional	Nontraditional
% Women	77.1%	80.4%
% Minority	15.1%	23.8%
% At least one parent graduated from college	60.1%	39.5%
% Commuters	75.0%	100.0%
Average age	21.8	42.0

As hypothesized, when the mean responses of the two groups to the benchmarks are examined, the results show similar responses to the “level of academic challenge” and “supportive campus environment” benchmarks, slightly larger differences to the “active and collaborative learning benchmark,” and markedly larger differences to the “student-faculty interaction” and “enriching educational experiences” benchmarks (Table 3).

Table 3: Average scores of the benchmarks

	Traditional	Nontraditional
Level of academic challenge	54.2	53.4
Active and collaborative learning	49.3	44.6
Student-faculty interaction	50.3	39.3
Enriching educational experiences (2004, 2005 data only)	41.8	30.2
Supportive campus environment	56.9	59.1

As a first step, we conducted OLS regression analyses using the five NSSE benchmarks as dependent variables and the traditional/nontraditional groups (nontraditional=1, traditional=0), gender (men=1, women=0), minority (non-white=1, white=0) and parents’ college education (college graduates=1, none=0) as independent variables (Table 4).

As hypothesized, the traditional/nontraditional variable was not a significant predictor for the “level of academic challenge” benchmark ($p=.60$) or the “supportive campus environment” benchmark ($p=.22$). Additionally, with the exception of gender in the equation where the “supportive campus environment” benchmark is the dependent variable, none of the other independent variables were significantly related to these two benchmarks. It should be noted, however, that virtually no variance in the “level of academic challenge” benchmark is explained by the demographic variables included ($R^2=.004$). Also, while the traditional/nontraditional variable explains 6 percent of the variance in the “supportive campus environment” benchmark, neither this variable nor any of the other independent variables is significantly related to this benchmark.

As expected, the traditional/nontraditional variable was significant in the other benchmarks. Seniors in the nontraditional group had significantly lower scores on the “active and collaborative learning” benchmark ($p=.004$) and the “student-faculty interaction” benchmark

($p < .001$). When the other independent variables are included, the traditional/nontraditional variable was still highly significant and, with the exception of gender in the equation where the “student-faculty interaction” benchmark is the dependent variable, none of the other independent variables is significant. The proportion of variance explained by the traditional/nontraditional variable for these two benchmarks is, however, very small (less than 2%).

Table 4: OLS Regressions of NSSE’s Benchmarks (B & significance)

	Level of academic challenge	Active and collaborative learning	Student-faculty interaction ⁱ	Enriching educational experiences ⁱⁱ	Supportive campus environment
<u>With Traditional/Nontraditional variable only</u>					
Constant	54.209 (.000)	49.071 (.000)	50.390 (.000)	41.693 (.000)	56.803 (.000)
Traditional/Nontraditional	-.463 (.604)	-4.514 (.004)	-10.917 (.000)	-11.974 (.000)	2.244 (.221)
Adjusted R ²	-.002	.017	.001	.104	.060
<u>With all other independent variables</u>					
Constant	52.765 (.000)	49.780 (.000)	48.915 (.000)	41.668 (.000)	54.707 (.000)
Traditional/Nontraditional	-.477 (.754)	-4.796 (.003)	-10.131 (.000)	-11.156 (.000)	2.297 (.223)
Gender	1.217 (.501)	-.576 (.763)	5.717 (.024)	5.429 (.111)	5.019 (.025)
Minority	.802 (.655)	.332 (.862)	-2.830 (.260)	-5.869 (.129)	2.314 (.298)
Parents’ college	1.751 (.246)	-1.040 (.515)	-.955 (.650)	-.984 (.734)	1.015 (.587)
Number of respondents	418	420	420	132	417
Adjusted R ²	-.004	.012	.010	.132	.061

ⁱ Excludes “working on research project with faculty member outside the classroom”

ⁱⁱ Includes only the 2004 and 2005 respondents

The benchmark most strongly related to the traditional/nontraditional variable is “enriching educational experiences” – nontraditional seniors have significantly lower scores on this benchmark than traditional seniors ($p < .001$). Moreover, belonging to one of these two groups by itself explained 10 percent of the variance of this benchmark, with an adjusted $R^2 = .098$ (compared with an adjusted R^2 of .01 to .03 in the other benchmarks). These results reinforced our earlier argument that in addition to being inconsistent conceptually, this benchmark also includes a large number of items that depict outside-of-classroom activities, which are not applicable to nontraditional students.

We further analyze the benchmarks in which the differences between traditional and nontraditional seniors are significant, by indicating our opinion of the applicability of each of the items in the benchmarks to *all* students and showing the correlations between the items and the two groups. We hypothesize that the groups will not be significantly different for the items we consider as universally applicable to “good educational practices,” but significantly different for items that we consider as applicable solely for traditional college students (Table 5).

Almost all items that we argued are only applicable to traditional students (less than 25 years old who started as freshmen) compared with nontraditional students (over 30 years old who started as transfers) were significantly correlated with the traditional/nontraditional indicator. About half of the items we argued are applicable to all students, however, were significant as well. In the “active and collaborative learning” benchmark, nontraditional students asked significantly more questions and participated in class discussions ($p=.008$), but made fewer class presentations ($p=.005$) – two items we hypothesized are equally applicable to both groups. While older students probably feel less intimidated by professors and fellow students and are therefore more inclined to express their opinion, it is not clear why they would make fewer class presentations.

Similar results are shown for the “student-faculty interaction” benchmark – the groups significantly differed on all the items we hypothesized they would, but were also significantly different on some of items we thought were equally applicable to both groups. Nontraditional students discussed grades or assignments significantly less than traditional students ($p=.01$) – an item we were not sure about. We would also like to add that the questionnaire item we consider the most important indicator for student-faculty interaction, quality of relationships with faculty members, should have been a part of this benchmark.

Finally, in the “enriching educational experiences” benchmark, the two groups significantly differed on almost all items we thought were not equally applicable to all students. The only exception was the “study abroad” item; there was no significant difference between the groups, probably because very few traditional Adelphi students participate in this experience. In addition, we were not sure whether nontraditional students have the same opportunity to interact with diverse groups of students as do traditional students, because they spend less time on campus outside the classroom; the traditional and nontraditional groups responded in significantly different ways to two items that focused on conversations with other students. We were also not sure whether respondents would understand what is meant by “learning communities,” since many transfers might have thought that this concept applied to taking classes in their majors with the same students (although this is not the item’s intent) – and the groups were indeed not significantly different in their response. In addition, the two groups were significantly different on taking foreign language courses – an item we were not sure about – probably because Adelphi does not require that all students take foreign languages, and students who started as transfers might have been either less inclined to do so or had taken these courses at their prior institutions.

Table 5: Applicability of items in the three NSSE benchmarks and their correlation with the traditional/nontraditional indicator

Benchmarks	Applicability to all students	Correlation
Active and collaborative learning		
Asked questions in class or contributed to class discussions	yes	.127**
Made a class presentation	yes	-.135**
Worked with other students on projects during class	yes	-.015
Worked with classmates outside of class to prepare class assignments	no	-.104*
Tutored or taught other students	no	-.291***
Participated in a community-based project as part of a regular course	no	-.122*
Discussed ideas from your reading or classes with others outside of class	yes	-.015
Student-faculty interaction		
Discussed grades or assignments with an instructor	not sure	-.157***
Talked about career plans with a faculty member or advisor	no	-.108*
Discussed ideas from reading/classes with faculty members outside of class	no	-.267***
Worked with faculty members on activities other than coursework	no	-.294***
Received prompt feedback from faculty on your academic performance	yes	-.062
Enriching educational experiences		
Serious conversations with students with different religious beliefs, political opinions, or values	not sure	-.256***
Serious conversations with students of a different race or ethnicity	not sure	-.222**
An institutional climate that encourages contact among students from different demographic backgrounds	yes	-.077
Using electronic technology to discuss, complete an assignment	yes	-.024
Participating in internships, field, co-op experiences ¹	no	-.238**
Participating in community service or volunteer work ¹	no	-.219***
Participating in foreign language coursework ¹	not sure	-.266***
Participating in study abroad ¹	no	-.139
Participating in independent study or self-designed major ¹	yes	-.193*
Participating in culminating senior experience ¹	yes	-.047
Participating in co-curricular activities	no	-.257***
Participated in learning community/some other formal program ⁱ	not sure	.010

Significance level: * <.05; ** <.01; ***<.001

ⁱ 1=done; 0=plan to do, do not plan to do, have not decided

Conclusions and Implications for Future Research

While NSSE items are important indicators of experiences that certain types of students might be seeking and expect from their college, the benchmarks are supposed to provide an overall picture of colleges' educational practices. The fact that students' needs and expectations differ is to be expected – traditional students usually prefer educational experiences that provide activities outside the classroom in addition to their classroom education, while nontraditional students are more focused on an education that provides the academic experiences and support services they need, apart from extracurricular offerings and activities outside the classroom. The current NSSE benchmarks are biased, however, toward traditional college students. They mix items that clearly reflect the particular experiences of traditional students with experiences reflecting the quality of education that *all* students need and deserve.

The results of the regression analyses support our argument. By including items in the benchmarks that are skewed toward the goals and expectations of traditional students, NSSE penalizes institutions with a high concentration of nontraditional students (especially older students who started as transfers). The quality of education in institutions with a large proportion of nontraditional students will inevitably look worse when compared on the benchmarks with institutions serving more traditional students.

More specifically, we believe that a benchmark claiming to capture “student-faculty interaction” cannot focus on activities outside the classroom. Such a benchmark must also include the only item that directly asks students about their interaction with faculty – students' rating of the quality of their relationships with faculty members (this item is included in the “supportive campus environment” benchmark instead).

The “enriching educational experiences” benchmark is also problematic; in addition to the fact that this benchmark includes a large number of items that we believe are only applicable to traditional students, we find the benchmark itself to be conceptually muddled. While an enriching educational environment is very important to all students, NSSE might want to consider developing two benchmarks. One should cover areas applicable to all students while the other should cover activities that are almost exclusively applicable to traditional students, such as study abroad, extracurricular activities, and social or community activities outside the classroom.

In conclusion, we strongly recommend that NSSE either restructure their benchmarks so they are more applicable to all students or at least consider excluding items from its benchmarks that are biased against nontraditional students. As an alternative, some benchmarks should apply to all types of students while others might be geared towards distinct subcategories. This type of specialization would reflect the growing diversity of postsecondary student populations and institutional efforts to serve those populations. The Carnegie Foundation's current engagement in a fundamental reconsideration of the Carnegie Classification provides a model here. “We plan to develop a more flexible system that will permit institutions to be grouped in several ways, in recognition of the fact that a single classification scheme can conceal the many ways that institutions resemble or differ from one another,” said Carnegie Senior Scholar Alexander McCormick (<http://www.carnegiefoundation.org>). As the Foundation recognizes, one size does not fit all. We ask that NSSE administrators consider the same line of reasoning.

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