Validity
Focus Groups

Are students interpreting survey items consistently and do their responses accurately represent the behaviors or perceptions the survey authors intended to capture?

Purpose

If students are interpreting a survey item in inconsistent ways or in ways that have a meaning different than intended by researchers, the data collected will not inform the desired avenue of research. The data are irrelevant, because the researcher cannot know if any differences seen are due to differences in the actual behaviors of the students or differences in the ways that they are making sense of the question. In an ideal situation, focus group data would reveal that students of multiple backgrounds, interests, academic abilities, programs of study, etc. make similar meaning of an item and therefore process their responses through a similar lens.

Data

First- year focus groups and senior focus groups were conducted at eight disparate colleges and universities during the spring of 2000. Two hundred students from each campus, who had been in the NSSE 2000 sample, were personally invited by an institutional representative to participate in the project. Students were compensated with a $10 phone card or bookstore gift certificate. (Participating institutions: Colgate College, Eckerd College, New Mexico State University, Randolph-Macon Woman's College, St. Lawrence University, Southwest Texas State University, The University of Texas at Austin, and University of Missouri-Columbia.) Each focus group had between 1 and seventeen student participants. A total of 221 students participated in all. Between 3 and 6 focus groups took place on each campus. In total, thirty-five unique group sessions were conducted.

Methods

Each focus group lasted between 75 and 90 minutes. Snacks were provided and a brief introduction was given which included an overview of the background and purpose of the study and personal introductions. Students were then given 10 minutes to review and complete a portion of the NSSE survey instrument. Then students were given time to familiarize themselves with the response option categories and to review the survey invitation cover letter and other communication materials. In the formal discussion time students were first asked to identify ambiguous survey items or sections on the instrument. Students were also asked to compare their answers with the various response categories and to explain what they were thinking when selecting their answers. The facilitator sometimes guided the conversation to specific areas of the instrument or asked for additional clarification of the meaning of specific student comments.

Following analyses methods recommended by Krueger (1994), Merriam (1988), and Yin (1984), at the end of each day NSSE staff reviewed the focus group notes in order to determine key themes. After the first wave of focus groups, the facilitators held a discussion on the emerging themes with other NSSE staff. After additional focus groups were held, another debriefing discussion identified emergent substantive themes. An analysis of the psychometric properties of the survey items discussed in the focus groups was then conducted and compared to the comments collected in the focus groups to investigate if those items with lower psychometric properties could somehow be improved by information gathered through the focus group process.

A limitation of this method is that it is time and resource intensive, particularly when conducting research at multiple sites, as was done in this instance. Also, researchers are limited to collecting only the feedback of participants that can be recruited to participate in the study, which may or may not be representative of all students.

Results

Students' first impression is that the survey instrument "looks like a test" and appears longer than it actually is. Students were surprised how easy it was complete as compared to what they anticipated by first looking at the instrument. Left-handed students and those who had previously taken the instrument online found paper instrument cumbersome. The Web version of the survey was seen as faster to complete. Students did not remember very much about cover letter materials and did not necessarily even remember who the signatory had been on the invitation. Students did not carefully read instructions and said they rarely read instructions on these kinds of instruments. They suggested reducing the depth of wording in the instructions as a way to encourage more students to consider reading them.

Generally, students considered items easy to read and understand. The following five "College Activities" items were carefully examined based on focus group and psychometric feedback:

- **Used e-mail to communicate with an instructor or other students.** Item is double-barreled, or asks two questions. The item did not distinguish the purpose of contact (e.g., Mostly personal with other students and primarily academic with faculty.)
- **Rewrote a paper or assignment several times. "**Several" language was confusing for students who only rewrite a paper once. Some also read this as revising a paper after it had been graded or received feedback from an instructor. The item-to-scale correlation for this item was also low compared to other activity items.
- **Came to class unprepared. S**tudents interpreted item differently. Some thought the item meant not having paper or a pencil with them, while others read it as not having completed assigned readings. This item was also unrelated to other college activities items indicating that it should be changed.

- **Tutored or taught.** Most students interpreted this item narrowly to only mean a formal tutoring situation and did not consider informal assistance that they give to fellow students.
- **Worked with a faculty member on a research project.** Some students were uncertain about what would be considered a "research project." Would a research paper be eligible for consideration, or only projects more akin to lab-work? The response options also posed a challenge because most students indicated *never*. Not all of the response options were used, and they functioned more like a dichotomous yes/no answer.

The Academic Workload items were the most difficult for students to answer. It was difficult to recall the amount of reading and writing from a previous semester. The response options were also too limited ("20 pages or more" and "fewer than 20 pages"). Does a one page paper really equate to a 19 page paper? The "number of books read on your own" item also confused some students who were not sure if we only wanted books for pleasure. Several students simply did not see the "nature of exams" item on the survey and skipped it. This item is the most frequently omitted item on the instrument (6% as compared to 1% overall).

Time on Task items were seen as fairly representative of the things students spend their time on. The "relaxing and socializing" item was the most challenging because of its double-barreled nature. Many students recommended that "0" be added as a response option, instead of the current "5 or fewer" hours option. Students were confused by the Enriching Educational Experiences item related to "interdisciplinary coursework." Some did not understand the term or did not believe the experience was available on their campus.

In the Educational and Personal Growth section, students questioned the 1) "voting in elections," 2) "being honest and truthful," and 3) "contributing to the welfare of your community" items. There was confusion regarding whether national, local, or campus elections were intended. Students felt that they came to college "honest and truthful" and that the institution did not really influence this personal attribute that they already did or did not possess. And again on the "contributing" item, students were unclear whether this referred to the campus or local community.

Response category options were also explored in these focus groups. Students clearly indicated that the response option meanings were item specific. In other words, the meaning they assigned to "very often" varied based on the activity being considered.

Overall, several survey items required revision based on the results of these focus groups and the corresponding psychometric analyses. These item changes are reflected in the table below. For other relevant tables and figures, see Ouimet et al. (2001) article appendix.

Table 1 Item Wording Revisions

NSSE 2000 Items	NSSE 2001 Revised Items
Used email to communicate with an instructor or other students	Used e-mail to communicate with an instructor
Rewrote a paper or assignment several times	Prepared two or more drafts of a paper before turning it in
Came to class unprepared	Came to class without completing readings or assignments
Tutored or taught other students	Tutored or taught other students (paid or voluntary)
Used an electronic medium (e-mail, list-serve, chat group, etc.) to discuss or complete an assignment	Used an electronic medium (list-serve, chat group, internet, etc.) to discuss or complete an assignment
Received prompt feedback from faculty on your academic performance	Received prompt feedback from faculty on your academic performance (written or oral)
Had serious conversations with other students whose religious beliefs, political opinions, or personal values were very different from yours	Had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values
Worked with faculty member on a research project	Relocated item and changed the response category to a dichotomous
Number of written papers or reports fewer than 19 pages	Made two questions: fewer than 5 pages, and between 5 and 19 pages
Mark the oval that best represents the nature of the examinations you have taken this year	Mark the box that best represents the extent to which your examinations during the current school year have challenged you to do your best work
Voting in elections	Voting in local, state, or national elections
Being honest and truthful	Developing a personal code of values and ethics

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