




Using Qualitative Methods to Contextualize Your NSSE Results
AIR Forum 2006, Chicago



Jillian Kinzie
Center for Postsecondary Research, Indiana University

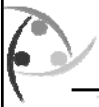


Overview



- ◆ Background Information on NSSE
- ◆ Qualitative Investigations Through Cognitive Interviewing and Focus Groups
- ◆ Demonstration of Methodology
- ◆ Applications for Institutional Research


2



Background on NSSE

- ◆ Since 2000, nearly 1,000 institutions have used NSSE to assess quality in undergraduate education
- ◆ Results generally used by institutions to document educational effectiveness and to identify potential areas for improvement
- ◆ Like any new survey NSSE was rigorously tested to ensure the instrument yields discriminating, valid, and reliable data

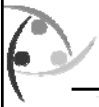
3



Testing NSSE for Validity and Reliability

- ◆ Psychometric analyses show that items are sound and reliable;
- ◆ Survey items have high face validity, many have been tested on the CSEQ, and are grounded in empirical research;
- ◆ Items also satisfy conditions for valid self-reports
 - ◆ Questions are phrased clearly and unambiguously
 - ◆ Questions refer to recent activities
 - ◆ Respondents think questions merit a serious and thoughtful response

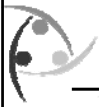
4



Testing NSSE for Validity and Reliability cont'd

- ◆ Cognitive research interviews and focus groups are used to discover how students interpret items, and response options, and if this differs from what survey intends
- ◆ Cognitive testing and focus groups conducted at 8 institutions in 2000
 - ◆ Overall, students interpreted items & response categories as intended; but, meaning of response categories were item specific.
 - ◆ Results used to improve phrasing and clarity of questions; response options changed to binary sets in cases where frequency was inappropriate; Some items revamped, ex: "came to class unprepared" to "came to class without completing readings or assignments" to reduce ambiguity


5



Today's Focus

- ◆ Valuable for institutions to conduct their own in-depth explorations of NSSE survey results locally
- ◆ Cognitive research testing and focus groups allow institutional researchers to examine how students interpret NSSE items and whether selected response options mean similar things
- ◆ Such findings produce a more contextualized understanding of survey responses which can support campus conversations intended to foster institutional change


6



Research Design: Cognitive Interviewing

- Provides information about processes used to answer survey questions, to identify potential problems that might lead to survey response error, and to gain a better sense of respondents' perceptions of items.
- Offers insight into the ways cognitive tasks posed by a survey question are handled by respondents (i.e., comprehension of item, information retrieval), whether the respondent's answer demonstrates what the question intended, and potential differences by institution, race, or gender (Drennan, 2003).


7



Cognitive Interviewing Overview and NSSE Questions

- **Item Comprehension**
 - For item 1b, What does "Made a class presentation" mean to you?
- **Retrieval from Memory**
 - For item 2b, What does "Analyzing" mean and can you provide some concrete examples?
- **Decision Processes**
 - For item 7b, "Community service or volunteer work," How did you determine your answer?
- **Response Selection**
 - For item 1h, "Worked with classmates outside of class to prepare class assignments," what does your response "Often" mean?


8



Research Design: Focus Groups

- Focus groups generate ideas through group discussion of, and reaction to, survey questions
- Can be used in conjunction with quantitative studies as a triangulation procedure (Krueger, 1988)
- Particularly helpful for correlation research, which NSSE uses, to validate findings through more than one research technique, which strengthens veracity and reliability of findings (Brodigan, 1992)


9



Focus Group Overview and NSSE Questions

- Because data collection occurs among group, there are natural checks and balances that can weed out false or extreme views (Patton, 2002; Robson, 2002).
 - For item 1q, What does it mean to receive prompt feedback from faculty on your academic performance?
- Group dynamics allow moderator to assess agreement or divergence among perceptions (Patton; Robson).
 - For item 9, what do you think is not represented on this list?
- Focus groups reduce intimidation that some participants may find in one-on-one interviews, and ideally create a safe environment to explore questions (Madriz, 2000 as cited in Patton).
 - For item 11, what else should be on this list?


10



Cognitive Interviews and Focus Groups Can

- Help determine or verify how students on your campus are interpreting survey items.
- Provide specific examples of what your results mean in the local context
- Help develop a deeper understanding of differences in the responses of particular groups of students (i.e. underrepresented students in specific majors; commuter students; non-traditional age students).
- Provide additional evidence on topics of interest to the institution.
- Help enhance understanding of results to increase the likelihood that reform efforts based on survey results would prove effective.

11



Demonstration: Cognitive Interviews

- **Demonstration:** Process of doing cognitive interviews and focus groups
- 1) Comprehension and response option question: For item 1a, what does *asked questions in or contributed to class discussions* mean to you? PROBE: what does your response (read response) mean?
- 2) Comprehension and response option question: For item 10, complete as a "think aloud". Follow up: In item d, what does *helping you cope with non-academic responsibilities* mean to you?
 - jot down your responses and then pair up with another person to share interpretations.

12

Demonstration: Interpretation of Data

Student Responses from Cognitive Interviews

Item	Very Often	Often	Sometimes	Never
1a. Asked questions in class or contributed to class discussions	Most days in most classes; Asked questions and felt free to ask for help	Verbally participated in most classes, some classes may allow less verbal participation	Less active in class, spoke when had something important to share; selectively asked questions	
	Very Much	Quite A Bit	Some	Very Little
10d. Helping you cope with your non-academic responsibilities (work, family, etc.)	Identified multiple campus resources, that include Student Affairs, faculty, and student peers	Named multiple campus resources and also identified areas of unmet needs	Identified one campus resource, but also expressed concern over unmet needs	Described multiple unmet needs or special circumstances and sense of despair about lack of resources

Demonstration: Focus Groups

- Groups arranged by class year, or mixed (FY & SR)
- Determine questions based on CI results (items where there is great variation in responses, or disagreement about intent); or pose questions based on institutional interests
 - “What did everyone mark for item 1q ‘Prompt feedback from faculty’? Tell me what you were thinking about when you responded to this item
 - Prompt: Does anyone have a different answer, or example?

Application to Your Campus

- How might these methods help triangulate NSSE results on your campus?
- What questions are you most concerned about in terms of what your students mean by their response?
- Are there item terms that may have less face validity with your student populations?
- How might it help to know more about students’ interpretations of response options in terms of what to do with findings?
- How might you initiate this activity on your campus? Who might be interested in this work? Who should conduct the interviews?

Recent NSSE Cognitive Testing and Focus Groups

- Cognitive interview testing of NSSE completed at eight campuses, April-May 2005; focused examination of perceptions of underrepresented students
 - Large Public Research University, Historically Black Universities, Hispanic Serving Institutions, Public Master’s Comprehensive, and Private Liberal Arts College
- Student Interviews
 - Sample conveniently selected based on student interest and availability. Some interviews pre-arranged by campus contacts. Remaining students recruited by interviewers located in highly-trafficked campus buildings.
 - Students received \$10 gift card in exchange. Interviews lasted 35 - 50 minutes.
 - Interviewers either taped and later transcribed interviews or paired-up with another researcher who took notes during interviews.

For More Information

- Email: jeabuckl@indiana.edu
jikinzie@indiana.edu
- NSSE website: <http://www.nsse.iub.edu>

Copies of papers and presentations, including this one, as well as annual reports and other information are available through the websites

National Survey of Student Engagement

Using Qualitative Methods to Contextualize Your NSSE Results – AIR Forum 2006

Jillian Kinzie, jikinzie@indiana.edu

What do students *really* mean when they say....

What are Cognitive Research Testing Interviews and Focus Groups?

The purpose of cognitive interviewing and focus groups is to obtain information about the processes respondents use to answer survey questions, to identify potential problems that might lead to survey response error, and to in general gain a better sense of respondents perceptions with regard to items. These techniques provide insight into the ways cognitive tasks posed by a question are handled by respondents (i.e., comprehension of the question, information retrieval), whether the answer given by the respondent represents what the question intended, and additional question-response problems such as, differences across institutions, and race, gender, etc. Focus groups reveal similar information but are used to generate ideas through group discussion of, and reaction to, survey questions.

Why Conduct Cognitive Interviews and Focus Groups?

New surveys must be rigorously tested to ensure the instrument yields discriminating, valid, and reliable data. In addition to testing psychometric properties, conducting cognitive interviews and focus groups can help us to learn how students — in their own words — interpret the meaning of survey items. By conducting focus groups with students on your campus, you can help your institution meaningfully interpret your NSSE data.

Here is one example of what we found...the data can be quite revealing...

What does “Had serious conversations with students of a different race or ethnicity than your own” mean to you? (NSSE 1u.)

- Maybe sitting down with a student of different race, talking with them more than just what did you do last night, but to ask what do you do different than me for thanksgiving.
- I would think conversations that are more than what did you do last week. More like your background, what it means to experience life with your race, ethnicity. But it could also be with political opinions, how things are in the world. Could even be serious conversations about literature.
- It means that you could get into any subject and just have a nice long in depth conversation, maybe learning new things on how their ethnicity has influenced their views and learning more about them.

In this context (1u.), what does “serious conversation” mean to you?

- Anything other than hey what are you doing tonight, not what are you wearing, but more serious, sit down and talk about race, or you’re different than me, lets talk about it.
- I immediately thought politics. I could talk about racism with them, but I guess I speak about that as much as with anyone else. Serious means: politics, being open, not joking around that much; ya know...serious. You’ve got your formal gear on.
- Talking to someone that hasn’t been exposed to the same (not the same type) events that have had a huge impact on them.
- Maybe educational. I’m learning something. You’re more involved, more interested in hearing something.

Information gleaned from interviews and focus groups can...

1. Help you determine or verify how students on your campus are interpreting survey items.
2. Provide you specific examples of what your results mean in the local context.
3. Help you develop a deeper understanding of differences in the responses of particular groups of students (i.e. underrepresented students in specific majors; commuter students; non-traditional age students).
4. Provide additional evidence on topics of interest to the institution.
5. Help you enhance understanding of results to increase the likelihood that reform efforts based on survey results would prove effective.

A few focus groups, and a dozen cognitive interviews, can be a good investment on your campus and can help make your NSSE data more meaningful.

How might you initiate this activity on your campus? Who might be interested in this work? Who should conduct the interviews? What NSSE questions raise the most concern on your campus in terms of what the data represent?

Using Qualitative Methods to Contextualize Your NSSE Results – AIR Forum 2006

Student Responses from Cognitive Interviews

Item	Very Often	Often	Sometimes	Never
1a. Asked questions in class or contributed to class discussions	Most days in most classes; Asked questions and felt free to ask for help	Verbally participated in most classes, some classes may allow less verbal participation	Less active in class, spoke when had something important to share; selectively asked questions	
1e. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments	Regularly part of each class; Habitually incorporated into assignments	Once a week in each class; Often incorporated into assignments	Less courses with this emphasis; Only sometimes included in assignments	Courses and class assignments never encourage including diverse perspectives; or student has no idea what this references
	Very Often	Often	Sometimes	Never
6a. Attended an art exhibit, play, dance, or other theater performance.	Attended all the time; identified multiple arts venues	Attended ~6-10 events, identified multiple arts venues	Attended ~1-5 events, no specification of multiple venues	Never did this, no interest and not required.
6d. Examined the strengths and weaknesses of your own views on a topic or issue	Every day; in-class and out-of-class contexts	Fairly regularly, but not daily, in-class and out-of-class contexts	One or twice a week	Never encountered questions to cause reflection on beliefs/perspectives
	Very Much	Quite A Bit	Some	Very Little
10c. Encouraging contact among students from different economic, social, and racial or ethnic backgrounds	Discussed overall institutional ethos, particular offices, or curricular expectations toward this goal	Identifies cultural student organizations, campus events and speakers, but sees more institution could do	Focused only on cultural student organization and lack of structural campus diversity	
10d. Helping you cope with your non-academic responsibilities (work, family, etc.)	Identified multiple campus resources, that include Student Affairs, faculty, and student peers	Named multiple campus resources and also identified areas of unmet needs	Identified one campus resource, but also expressed concern over unmet needs	Described multiple unmet needs or special circumstances and sense of despair about lack of resources