

# **A Guide to Contextualizing Your NSSE Data: Cognitive Interviews and Focus Groups**



**Center for Postsecondary Research  
Indiana University, School of Education  
Eigenmann Hall, Suite 419, 1900 East 10th Street  
Bloomington, Indiana 47406-7512  
Phone: 812-856-5824 Fax: 812-856-5150  
E-mail: [nsse@indiana.edu](mailto:nsse@indiana.edu)**

**March, 2007**

## **A Guide to Contextualizing Your NSSE Data: Cognitive Interviews and Focus Groups**

### Table of Contents

- I. Overview
- II. Purpose
- III. What Do Students *Really* Mean When They Say...?
  - a. What are Cognitive Research Testing Interviews and Focus Groups?
  - b. Why Conduct Cognitive Interviews and Focus Groups?
- IV. Conceptual Framework
  - a. Cognitive Interviewing
  - b. Focus Groups
  - c. Cognitive vs. Focus Group Interviewing
  - d. Three Stages of the Cognitive Interview
  - e. Data Analysis
- V. Step-by-Step Preparation for Conducting Cognitive Interviews and Focus Groups
  - a. Human Subjects and Informed Consent
  - b. Recruitment
  - c. Preparing the Interview Team
  - d. Set-up
  - e. Cognitive Interviews
  - f. Focus Groups
  - g. Data Collection Summary
- VI. Cognitive Interview Scripts for Evaluating the NSSE Survey
- VII. Focus Group Scripts for Evaluating the NSSE Survey
- VIII. References
- IX. Appendices
  - Appendix A: Sample Student Recruitment E-mail
  - Appendix B: Sample Student Recruitment Flyer
  - Appendix C: Sample Student Interview Sign-Up List
  - Appendix D: Sample Student Appointment Cards
  - Appendix E: Suggested Materials List
  - Appendix F: Sample Session Tape Log
  - Appendix G: Data Collection Summary Form
  - Appendix H: NSSE Survey

# A Guide to Contextualizing Your NSSE Data: Cognitive Interviews and Focus Groups

## I. Overview

Since 2000, about 1,100 colleges and universities have used the National Survey of Student Engagement (NSSE) as a way to assess quality in their undergraduate program and determine the extent to which students are engaged in activities research has associated with effective education and student learning. Results are generally used by institutions to document educational effectiveness and to identify potential areas for improvement.

Typically used in survey design and development, techniques such as cognitive research testing and focus groups can be used by institutions to provide a more contextualized understanding of survey responses. This step-by-step guide to conducting cognitive interviews and focus groups can help institutions develop a deeper understanding of their NSSE data.

## II. Purpose

Sharing this contextualized information about students' views of items and what they have in mind when they respond to survey questions can help enliven discussions about results by providing concrete examples of student behaviors and institutional practices. In addition, 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.
6. 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.

## III. What do students *really* mean when they say...?

### a. What are *Cognitive Research Testing Interviews and Focus Groups*?

Cognitive interviewing and focus groups can provide insight into the processes students use to answer survey questions, identify potential problems that might lead to survey response error, and allow students to elaborate on their responses to the survey questions. These techniques can also be used to analyze differences among student sub-populations – for example, race and gender - as well as across institutions. Focus groups reveal similar information but generate ideas through group discussion of, and reaction to, survey questions.

### b. Why Conduct *Cognitive Interviews and Focus Groups*?

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 survey item 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, let’s 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.”

## **IV. Conceptual Framework**

### **a. Cognitive Interviewing**

Cognitive interviewing is a methodology that examines how respondents comprehend, interpret, and answer survey questions. Cognitive theory encompasses comprehension of the information, retrieval from memory, decision processes, and response selection. Since cognitive interviewing is focused on the process of understanding and interpreting rather than on the standardized responses, specific interviewing techniques are used. For example, respondents are often asked questions such as, “What do you think the question is asking you to do” or “Please think aloud and tell me how you calculate your answer.”

### **b. Focus Groups**

Focus groups can be used to follow up on issues or problems revealed in student responses to survey items in the cognitive interviews or they can be used as a standalone protocol to generate ideas through group discussion of, and reaction to, survey questions. Focus groups can also be used in conjunction with quantitative studies as a triangulation procedure (Krueger, 1988). This is particularly helpful for correlation research, which NSSE uses, to validate a finding through more than one research technique, which then strengthens the veracity and reliability of these findings (Brodigan, 1992).

### **c. Cognitive vs. Focus Group Interviewing**

Focus groups are typically more open-ended and less structured than cognitive interviews. Focus groups offer an opportunity to assess group or negotiated meaning, and can help elicit a greater range of responses.

#### **d. Three Stages of the Cognitive Interview**

There are three stages and related sub-stages that respondents face during cognitive interviews:

1. Understanding the survey question and response options
  - a. Comprehending the survey question
  - b. Comprehending the response items
2. Performing the primary survey tasks
  - a. Retrieving information
  - b. Deduction; making conclusions about information
  - c. Mental arithmetic computation
3. Formatting responses
  - a. Mapping data yielded by primary task processes to an explicit response option
  - b. Response option is not available/offered

#### **e. Data Analysis**

Coding within the stages of the cognitive interview can address any of the following problems:

1. Language problems – Not knowing the meaning of words/phrases
2. Inclusion/exclusion problems – Determining whether certain concepts are to be considered within the scope of an item; e.g., does personal reading online or on the Web apply to “work completed for classes” and did a student include or exclude such experiences?
3. Temporal problems – The time period to which the question applies; e.g., how many years of high school did the student consider when answering the question about “high school grades?”
4. Logical problems – How do students interpret phrases like ‘and’ and ‘or’ in survey questions?
5. Computational problems – Difficult mental arithmetic, complicated syntax in questions

This coding process was adapted from Conrad, F. & Blair, J. (1996). *From impressions to data: Increasing the objectivity of cognitive interviewing*. Proceedings of the Survey Research Methods Section of the American Statistical Association, Alexandria, VA. This is a good resource to review when analyzing cognitive interview results.

## V. Step-by-Step Preparation for Conducting Interviews and Focus Groups

### a. *Human Subjects and Informed Consent*

- Follow all Institutional Research Board protocols and federal regulations pertaining to the protection of human subjects (45CFR46) before you carry out interviews or focus groups. Depending on your IRB policies, you will likely need to have students review a study information sheet or sign a consent form.

### b. *Preparing the Interview Team*

- **Identifying Interviewers:** Interviews and focus groups are best conducted by two people: one to run the session and ask questions, the other to record student comments and manage data collection. Select interviewers with good interviewing skills. Consider graduate students or advanced undergraduates who may be able to establish greater rapport with the interviewees and help them feel more at ease.
- **Training:** Spend time reviewing the interview packet with potential interviewers and conduct some practice interviews. Greater familiarity with the protocol and the instrument will help the interview flow more smoothly.

### c. *Recruitment*

- **Student Population:** Determine whether a random sample or targeted population of students is to be recruited. Obtain email addresses. Send e-mail to students (see sample in Appendix A).
- **Hand-Made Recruitment Flyers:** Creating hand made flyers can attract more students. Use phrases like “Help Us Evaluate a Survey & Receive a \$10 Bookstore Gift Certificate” with time and place of interviews or focus groups (see Appendix B).
- **Pre-Arranged Interviews:** When students sign up for interviews in advance, log their names on a “Master List” to keep track of the interviews (see Appendix C). Send or handout out student appointment cards with time and date of scheduled interview or focus group (Appendix D).
- **Recruiting:** Pre-registration occasionally results in no-shows. The best strategy for recruiting on-site is to create a recruitment area and ask students to interview on the spot. However, depending on the number of staff members available to help, this can be challenging to manage.

### d. *Set-Up*

- **Suggested Materials:** A list of useful materials to bring to the interviews is included in Appendix E.
- **Arrival Times:** Allow ample time to set-up and deal with any last minute details (i.e., parking, posting signs, arranging the room, meeting with the contact). Try to be on campus an hour before the first interview you expect to conduct on the first day.
- **Interview Rooms:** If a large number of students respond to the sign-up sheet, arrange for two rooms so that you can conduct two interviews concurrently (1-2 person set-up in each room with a tape recorder and interview materials). Rooms should have a table so that students will have someplace to write when completing the survey.

- **Gift Certificates:** Make one person responsible for auditing the gift certificates (see below) and ensuring that each student has completed a form acknowledging receipt of a gift certificate. Put signed acknowledgement forms in an envelope.

#### **e. Cognitive Interviews**

- **Interview Packets:** Have interview packets pre-assembled. Print copies of the survey in advance from the NSSE Web site. Packets should contain a study information or informed consent sheet, a gift-certificate acknowledgement form (if offered), an envelope to place tape and survey in, and a large envelope containing the survey.
- **Tapes:** Number and label with time and date of interview.
- **Labeling Envelopes:** Once completing the interview, label the outside of the envelope with the interviewer name(s), date, time, tape number, and interviewee's name, gender, and year in school. If using both sides of a tape, place both surveys in the same envelope and indicate which tape side corresponds to which interview date/time.

For example:

NSSEville State University  
 Jillian Kinzie & Susan Johnson  
 4/11/05; 4 pm; Tape 912 A, Male, School Year  
 4/11/05; 5 pm; Tape 912 B, Female, School Year

- **Labeling Surveys:** Place the tape number in top right corner of survey.
- **Taping and Typing:** Tape all interviews. PARTNER APPROACH: Have one partner conduct the interview while the other partner types responses on the laptop. SOLO APPROACH: Taping is essential if you are doing solo interviews. You may also want to take notes but typing on a laptop while interacting with the students uses up time and disrupts the flow of the interview. Enter information into session tape log (Appendix F).
- **Time Constraints:** If necessary, skip probes/questions that do not elicit a response if you feel your time is limited, other students are waiting, or you're approaching the maximum interview time. We recommend 35-45 minutes for individual interviews.

#### **f. Focus Groups**

- **Number of Students:** 3-5 students are a good number for focus groups. If multiple students want to participate at the same time slot for cognitive interviews, you can suggest they participate in a focus group.
- **Use Two Staff Members:** During focus groups, one person will ask the questions while the other takes notes. It's important to track responses by the person's initials so you can recognize their comments should you need to listen to the tape.
- **Tape focus groups.**
- **Session Length:** 60 minutes is recommended.

#### **g. Data Collection Summary**

Keeping records of the data collection process is helpful. A Data Collection Summary Form (Appendix G) helps to document information about the cognitive interview or focus group process.

## VI. Cognitive Interview Scripts for Evaluating the NSSE Survey

Institutions may want to customize or personalize the following scripts by inserting the name of their institution where appropriate. Scripts A and B address a different set of questions, although there is overlap in some instances where the same question was asked of both groups.

### Script A

#### Materials:

- Tape recorder and tapes
- Note taker (with script, pad, and pen or laptop)
- Copies of NSSE survey, Appendix H, or available from the NSSE Web site:  
<http://nsse.iub.edu/html/sample.cfm>
- Need copies of survey in envelopes for general review by students.
- Need copies of survey for students to complete.
- Human subjects consent forms
- Script A

#### Preparation

Mark survey envelope with:

- i. Institution \_\_\_\_\_
- ii. Tape Number \_\_\_\_\_
- iii. Gender \_\_\_\_\_
- iv. Ethnicity (if needed) \_\_\_\_\_
- v. School Year \_\_\_\_\_
- vi. Date \_\_\_\_\_

Introduce yourself, and the note taker, mention the recording, etc.

Turn on tape recorder.

Hand the envelope with survey and the human subjects consent form to the respondent.

#### Interviewer Introduction

"First, thank you for taking time to help us further explore our <institution's> results from the NSSE survey. To provide you with more background on the NSSE survey, students are asked to participate in the survey so that faculty, administration, campus leaders, and students can get a better understanding of the undergraduate experience at their institutions.

We have followed all of the human subjects protocols at <institution> and federal regulations pertaining to the protection of human subjects to carry out these interviews and focus groups. As part of human subjects protection regulations, we will need you to sign a consent form.

There is plenty of time for the interview and we would like you to be as honest and thoughtful as possible in your responses and comments. Occasionally, during the interview, we will ask you to speak aloud about what you are thinking as you respond to questions. For example:

**Interviewer:** 'Please tell me what you are thinking about when I ask you what kind of movies you like?'

**Student:** 'I usually like movies that are comedies because it's fun to watch them with my friends and laugh.'

Do you have any questions before we begin?"

#### Interview Script

"Please open this envelope and briefly look at each page of the survey. Later I am going to ask you about individual questions. But now, I'd like you to describe *your initial impression of the survey* as you removed it from the envelope, and looked at each page. I am going to ask that you

pay special attention to certain questions or elements of the survey. However, we are interested in any comments you have regarding the layout, the instructions for answering questions, the response options, and the overall 'flow' of the survey.

1. We will begin by asking you to complete certain survey items in question 1. Are you ready to begin? Please stop when you complete question 1.
  - a. For item a, what does *asked questions in or contributed to class discussions* mean to you?
    - i. PROBE: For item a, what does your response (read response) mean?
  - b. What does *made a class presentation* mean to you?
    - i. PROBE: For item b, what does your response (read response) mean?
  - c. What does *included diverse perspectives in class discussions or writing assignments* mean to you?
    - i. PROBE: For item e, what does your response (read response) mean?
  - d. What does *come to class without completing readings or assignments* mean to you?
  - e. What does *worked with other students on projects during class* mean to you?
    - i. PROBE: For item g, what does your response (read response) mean?
  - f. What does *worked with classmates outside of class to prepare class assignments* mean to you?
    - i. PROBE: For item h, what does your response (read response) mean?
  - g. What does *tutored or taught other students* mean to you?
  - h. What does *participated in community-based projects* as part of a course mean to you?
  
2. Now, let's move on to question 2. After you answer **all** of the items, please stop.
  - a. What does *analyzing* mean to you?
    - i. PROBE: Would you mind providing some concrete examples?
  - b. What does *synthesizing* mean to you?
    - i. PROBE: Would you mind providing some concrete examples?
  
3. Please complete questions 3 – 5 and then stop. For question 5, please look over the *response categories of 1, "very little" and 7 "very much."* Now that you completed this question, what did the unmarked categories or numbers mean to you?
  
4. For question 6, please tell me what you are thinking about as you determine your responses. This is a "Think Aloud" question like the exercise we practiced earlier.
  - a. For item a, *attend an art exhibit, gallery, play, dance, or other theater performance*. Think aloud.
  - b. For item c, *participated in activities to enhance your spirituality (workshop, meditation, prayer, etc.)*. Think aloud.
  - c. For item d, *examined the strengths and weaknesses of your own views on a topic or issue*. Think aloud.
    - i. PROBE: What does your response (read response) mean?
  - d. For item e, *tried to better understand someone else's views by imagining how an issue looks from his or her perspective*. Think aloud.
    - i. PROBE: Was this inside or outside of class?
  - e. For item f, *learned something that changed the way you understand an issue or concept*. Think aloud.
    - i. PROBE: Was this inside or outside of class?
  
5. Let's proceed to question 7. After you answer all of the questions, please stop.
  - a. How did you determine your response for item a?
  - b. How did you determine your response for item b?

- c. How did you determine your response for item c?
  - d. How did you determine your response for item d?
  - e. In question 7, are there any unfamiliar terms?
6. Complete question 8.
- a. For item a, when you think about *relationships with other students*, which students come to mind?
  - b. For item a, what does your response (read response) mean to you? How did you come to determine that answer?
  - c. For item b, when you think about *relationships with other faculty*, which faculty come to mind?
    - i. PROBE: Faculty in your major? Outside of your major?
  - d. For item b, what does your response (read response) mean to you? How did you come to determine that answer?
  - e. When you think about *relationships with administrative personnel and offices*, which offices come to mind?
  - f. For item c, what does your response (read response) mean to you? How did you come to determine that answer?
7. For question 9, please tell me what you are thinking about as you determine your responses. This is a "Think Aloud" question.
- a. For item a, what does *preparing for class* mean to you?
  - b. For item d, what does *participating in co-curricular activities* mean to you?
  - c. For item d, take a look at the examples provided for co-curricular activities. Does this list reflect your interests?
  - d. For item e, what does *relaxing and socializing* mean to you?
  - e. How much time each day do you spend time *relaxing*?
  - f. How much time each day do you spend time *socializing*?
  - g. Let's take a look at question f. Does the list of examples reflect your situation?
    - i. PROBE: How hard was it to answer question 9?
8. Answer questions 10 and 11 and then stop.
- a. In question 11, item a, what does *acquiring a broad general education* mean to you?
  - b. For item b, what does *acquiring job or work-related knowledge and skills* mean to you?
  - c. For item c, what does *writing clearly and effectively* mean to you?
  - d. For item d, what does *speaking clearly and effectively* mean to you?
  - e. For item e, what does *thinking critically and analytically* mean to you?
  - f. For item g, what does *using computing and information technology* mean to you?
  - g. For item h, what does *working effectively with others* mean to you?
9. For question 12, please tell me what you are thinking about as you determine your response. This is a 'Think Aloud' question.
10. For question 13, please tell me what you are thinking about as you determine your response. This is a 'Think Aloud' question.
11. Please answer question 14 and tell us how you determined your answer.
12. You may now complete questions 15 through 29 and stop. This concludes the formal process of completing the survey, but we'd like to conclude by asking a few general questions.
13. Please tell me any thoughts about the look of the survey.

- a. PROBE: Why do you feel that way?
- 14. Please tell me any thoughts about the organization of the survey.
  - a. PROBE: Why do you feel that way?
- 15. Are there additional questions you believe should be asked?
- 16. Are there questions you believe should be deleted?
- 17. Are there questions you believe should be modified?
- 18. Are there words used in the questions that you think could be changed to make it more understandable to students?
- 19. Do you have any questions for (me/us)?”

**Interview Conclusion**

“Thank you for participating in this discussion. Your responses will help faculty and administration on your campus can get a better understanding of the undergraduate experience at your institution.”

Give students gift cards and/or provide any additional information on incentives or follow-up sessions. Sign acknowledgement forms.  
 Mark survey with tape number, gender, ethnicity, and school year.

**Script B**

**Materials:**

- Tape recorder and tapes
- Note taker (with script, pad, and pen OR laptop)
- Copies of NSSE survey, Appendix H, or available from the NSSE Web site:  
<http://nsse.iub.edu/html/sample.cfm>
- Need copies of survey in envelopes for general review by students.
- Need copies of survey for students to complete.
- Human subjects consent forms
- Script B

**Preparation**

Mark survey envelope with:

- i. Institution \_\_\_\_\_
- ii. Tape Number \_\_\_\_\_
- iii. Gender \_\_\_\_\_
- iv. Ethnicity (if needed) \_\_\_\_\_
- v. School Year \_\_\_\_\_
- vi. Date \_\_\_\_\_

Introduce yourself, and the note taker, mention the recording, etc.  
 Turn on tape recorder.  
 Hand the envelope with survey and the human subjects consent form to the respondent.

**Interviewer Introduction**

“First, thank you for taking time to help us further explore our <institution’s> results from the NSSE survey. To provide you with more background on the NSSE survey, students are asked to participate in the survey so that faculty, administration, campus leaders, and students can get a better understanding of the undergraduate experience at their institutions.

We have followed all of the human subjects protocols at <institution> and federal regulations pertaining to the protection of human subjects to carry out these interviews and focus groups. As part of human subjects protection regulations, we will need you to sign a consent form.

There is plenty of time for the interview and we would like you to be as honest and thoughtful as possible in your responses and comments. Occasionally, during the interview, we will ask you to speak aloud about what you are thinking as you respond to questions. For example:

**Interviewer:** 'Please tell me what you are thinking about when I ask you what kind of movies you like?'

**Student:** 'I usually like movies that are comedies because it's fun to watch them with my friends and laugh.'

Do you have any questions before we begin?

### Interview Script

Please open this envelope and briefly look at each page of the survey. Later I am going to ask you about individual questions. But now, I'd like you to describe *your initial impression of the survey* as you removed it from the envelope, and looked at each page. I am going to ask that you pay special attention to certain questions or elements of the survey. However, we are interested in any comments you have regarding the layout, the instructions for answering questions, the response options, and the overall 'flow' of the survey.

1. We will begin by asking you to complete certain survey items in question 1. Are you ready to begin? Please stop when you complete question 1.
  - a. For item m, what does *used email to communicate with an instructor* mean to you?
    - i. PROBE: For item m, what does your response (read response) mean?
  - b. For item n, what does *discussed grades or assignments with an instructor* mean to you?
  - c. For item o, what does *talked about career plans with a faculty member or advisor* mean to you?
  - d. For item p, what does *discussed ideas from your readings or classes with faculty members outside of class* mean to you?
  - e. What does *received prompt feedback from faculty* mean to you?
  - f. What does *worked harder than you thought you could to meet an instructor's standards or expectations* mean to you?
  - g. What does *worked with faculty members on activities other than coursework* mean to you?
    - i. PROBE: For item s, what does your response (read response) mean?
  - h. What does *discussed ideas from your readings or classes with others outside of class* mean to you?
  - i. For item u, what does *had serious conversations with students of a different race or ethnicity than your own* mean to you?
    - i. PROBE: What does *serious conversation* mean to you?
  - j. Can you share the meaning of item v; *had a serious conversation with students who are very different from you in terms of their religious beliefs, political opinions, or personal values?*
    - i. PROBE: What does *serious conversation* mean here?
2. Please complete questions 2 – 5 and then stop. For question 6, please tell me what you are thinking about as you determine your responses. This is a "Think Aloud" question like the exercise we practiced earlier.
  - a. For item a, *attend an art exhibit, gallery, play, dance, or other theater performance*. Think aloud.

- b. For item c, *participated in activities to enhance your spirituality (workshop, meditation, prayer, etc.)*. Think aloud.
  - c. For item d, *examined the strengths and weaknesses of your own views on a topic or issue*. Think aloud.
    - i. PROBE: What does your response (read response) mean?
  - d. For item e, *tried to better understand someone else's views by imagining how an issue looks from his or her perspective*. Think aloud.
    - i. PROBE: Was this inside or outside of class?
  - e. For item f, *learned something that changed the way you understand an issue or concept*. Think aloud.
    - i. PROBE: Was this inside or outside of class?
3. Let's proceed to question 7. After you answer all of the questions, please stop.
- a. How did you determine your answer for item e?
  - b. How did you determine your answer for item f?
  - c. How did you determine your answer for item g?
  - d. How did you determine your answer for item h?
  - e. In question 7, are there any unfamiliar terms
4. Complete question 8.
- a. For item a, when you think about *relationships with other students*, which students come to mind?
  - b. For item a, what does your response (read response) mean to you? How did you come to determine that answer?
  - c. For item b, when you think about *relationships with faculty members*, which faculty come to mind?
    - i. PROBE: Faculty in your area of concentration? Outside of your area of concentration?
  - d. For item b, what does your response (read response) mean to you? How did you come to determine that answer?
  - e. When you think about *relationships with administrative personnel and offices*, which offices come to mind?
  - f. For item c, what does your response (read response) mean to you? How did you come to determine that answer?
5. After completing 9, please stop. Now we ask that you answer question 10 and "think aloud" as you complete each item.
- a. In question 10, item c, what does *different economic, social, and racial or ethnic backgrounds* mean to you?
  - b. In item d, what does *helping you cope with non-academic responsibilities* mean to you?
  - c. In item e, what does *providing the support you need to thrive socially* mean to you?
    - i. PROBE: What does *thrive socially* mean to you?
  - d. For item g, what does *using computers in academic work* mean?
    - i. PROBE: what *computer resources are available on- or off-campus to complete academic work?*
  - e. Are there other things that your institution emphasizes?
6. Answer question 11 and then stop.
- a. In question 11, item i, what does *voting in local, state, or national elections* mean to you?
  - b. For item j, what does *learning effectively on your own* mean to you?
  - c. For item k, what does *understanding yourself* mean to you?

- d. For item l, what does *understanding people of other racial and ethnic backgrounds* mean to you?
  - e. For item m, what does *solving complex real-world problems* mean to you?
  - f. For item n, what does *developing a personal code of ethics* mean to you?
  - g. For item o, what does *contributing to the welfare of your community* mean to you?
  - h. For item p, what does *developing a deepened sense of spirituality* mean to you?
7. For question 12, please tell me what you are thinking about as you determine your response. This is a 'Think Aloud' question.
8. For question 13, please tell me what you are thinking about as you determine your response. This is a 'Think Aloud' question.
9. Please answer question 14 and tell us how you determined your answer.
10. You may now complete questions 15 through 29 and stop. This concludes the formal process of completing the survey, but we'd like to conclude by asking a few general questions.
11. Please tell me any thoughts about the look of the survey.
- a. PROBE: Why do you feel that way?
12. Please tell me any thoughts about the organization of the survey.
- a. PROBE: Why do you feel that way?
13. Are there additional questions you believe should be asked?
14. Are there questions you believe should be deleted?
15. Are there questions you believe should be modified?
16. Are there words used in the questions that you think could be changed to make it more understandable to students?
17. Do you have any questions for (me/us)?"

### **Interview Conclusion**

"Thank you for participating in this discussion. Your responses will help faculty and administration on your campus can get a better understanding of the undergraduate experience at your institution."

Give students gift cards and/or provide any additional information on incentives or follow-up sessions. Sign acknowledgement forms.

Mark survey with tape number, gender, ethnicity, and school year.

## VII. Focus Group Scripts for Evaluating the NSSE Survey

### Focus Group Script

#### Materials:

- Tape recorder and tapes
- Note taker (with script, pad, and pen or laptop)
- Copies of NSSE survey, Appendix H, or available from the NSSE Web site:  
<http://nsse.iub.edu/html/sample.cfm>
- Need copies of survey in envelopes for general review by students.
- Need copies of survey for students to complete.
- Human subjects consent form
- Focus Group Script

#### Preparation

- Have student fill out consent form.
- Mark survey envelope with:

- i. Institution \_\_\_\_\_
- ii. Tape Number \_\_\_\_\_
- iii. Gender \_\_\_\_\_
- iv. Ethnicity (if needed) \_\_\_\_\_
- v. School Year \_\_\_\_\_
- vi. Date \_\_\_\_\_

- Introduce yourself, and the note taker, mention the recording, etc.
- Turn on tape recorder.
- Hand the envelope with survey and the human subjects consent form to the respondent.

#### Interviewer Introduction

"First, thank you for taking time to help us further explore our <institution's> results from the NSSE survey. To provide you with more background on the NSSE survey, students are asked to participate in the survey so that faculty, administration, campus leaders, and students can get a better understanding of the undergraduate experience at their institutions.

We have followed all of the human subjects protocols at <institution> and federal regulations pertaining to the protection of human subjects to carry out these interviews and focus groups. As part of human subjects protection regulations, we will need you to sign a consent form.

We're here to get your thoughts and interpretations of the NSSE survey. Some of you may have had the opportunity to complete the survey this spring. Now, I would like you to take about 10 minutes to complete the survey – you can stop at question 29. I've asked you to complete the survey now to re-acquaint you with the questions and the item response categories."

**[Note if anyone recalls completing the survey.]**

"We want to assure you that we have plenty of time. We are looking for honest, thoughtful responses, and comments. Do you have any questions before we begin?"

#### <10-15 minute pause while students fill out survey>

"Now that you have taken the survey, I'd like your assistance in helping us understand how you interpreted the questions and response categories. The survey has multiple sections focusing on college activities, educational and personal growth; opinions about your school, educational goals, and demographic information. What I'd like to do is go through each section and pick a few questions and discuss your interpretation of these items. Then, at the end, if you have a particular item that we didn't discuss, please bring it up. It is important that you understand that there are no

right answers and we welcome everyone's point of view. I'd prefer if only one person speaks at a time, however, since it's difficult when listening to the tape to hear all the comments when two people are talking at the same time."

### Questions for Focus Groups

[As a guide to what questions to ask, review items that seem to be problematic or generate different responses from the cognitive interviews.]

Suggested Follow-up Probes:

- "Would you explain further? Can you give me an example of what you mean?
  - Would you say more? Is there anything else? Please describe what you mean
  - Tell me more about that. Does anyone have a different response?"
1. "First, what is your impression of the survey?"
  2. "Let's look at 1h. What does it mean to you to have *worked with classmates outside of class to prepare class assignments*?"
    - a) PROBE: "Was this required?"
  3. "Let's look at 1q. What does it mean to you to *receive prompt feedback from faculty on your academic performance*?"
  4. "Let's look at 1u. What does it mean to you to have had *serious conversations with students of a different race or ethnicity than your own*?"
  5. "Let's look at 2b. How did you respond to this item? What does your response mean – can you provide an example of coursework that emphasizes *analyzing*?"
  6. "Let's look at 5. How did you respond to this item? How did you determine your response? What do the unlabeled boxes mean?"
  7. "Let's look at 6d. What does it mean to you to have *examined the strengths and weaknesses of you own views on a topic or issue*?"
  8. "Let's look at 7. Are there other experiences not on this list that you plan to do before you graduate?"
  9. "Let's look at 8. "
  10. "Let's look at 9. Tell me about completing this item. What do you do that is not represented in the list?"
  11. "Let's look at 10. What does it mean to you to for you institution to emphasize *helping you cope with your non-academic responsibilities (work, family, etc.)*?"
  12. "Let's look at 11. What else should be on this list?"
  13. "Let's look at items 12-14. How did you find these questions?"
  14. "Do you have any comments about questions 15- 29?"

### General Concluding Questions

1. "Are there any questions that you found difficult to answer?"
2. "Did you find any response sets hard to use or confusing?"
3. "Was there anything that you expected us to ask you about that's not on the survey?"
4. "What should we add or change on the survey?"
5. "Is there anything that we failed to ask you about on this survey – anything that you see as very important to your learning and your ability to stay in school?"

### Interview Conclusion

"Thank you for participating in this discussion. Your responses will help faculty and administration on your campus can get a better understanding of the undergraduate experience at your institution."

Give students gift cards and/or provide any additional information on incentives or follow-up sessions. Sign acknowledgement forms.

## VIII. References

- Brodigan, D.L. (1992). Focus group interviews: Applications for institutional research. *AIR Professional File 43*, 1-6.
- Conrad, F. & Blair, J. (1996). *From impressions to data: Increasing the objectivity of cognitive interviewing*. Proceedings of the Survey Research Methods Section of the American Statistical Association, Alexandria, VA.
- Drennan, J. (2003). Cognitive interviewing: Verbal data in the design and pre-testing of questionnaires. *Journal of Advanced Nursing*, 42(1), 57-63.
- Krueger, R.A. (1988). *Focus groups: A practical guide for applied research*. Newbury Park, CA: Sage Publications.

## IX. Appendices

### Appendix A

#### **Sample Student Recruitment E-mail**

Hi. Would you be interested in participating in an interview to help us learn more about our National Survey of Student Engagement (NSSE) survey results? The survey was administered to <institution name> students this spring. We will be conducting interviews on campus, <date>, to get feedback from students on the survey. Could we plan a day/time to meet for an interview that will take about an hour? We are available this <date> from <time>, and then on <date> from <time>. The interviews will be conducted in <room, building>.

Interviews follow all Institutional Research Board protocols and federal regulations pertaining to the protection of human subjects (45CFR46). You will need to sign a consent form. If you want more information on human subjects protection, please contact: <institution's IRB contact info/Web site>.

#### **What's involved in the interviews?**

##### **Time commitment**

About an hour

##### **Location**

<room, building>

##### **What's in this for you?**

<incentive>

##### **How to schedule a time**

Pick a time and respond to this email – [staff@somecollege.edu](mailto:staff@somecollege.edu). We will also try to accommodate “drop-in” appointments if you just want to show up at <room, building>. If you have any questions feel free to send us an email at the address above.

One more thing: if you think a friend or two may also be interested in participating, feel free to pass their names and email addresses to me as well.

The information that you provide will help us plan and improve the college experience at <institution>, so we look forward to hearing from you soon and to meeting you later in the week. Thanks very much!

Regards,

Appendix B

Sample Student Recruitment Flyer

HELP US EVALUATE A SURVEY AND RECEIVE  
A BOOKSTORE GIFT CERTIFICATE!

APRIL 11, XXXX • 9AM - 6PM

APRIL 12, XXXX • 9AM - 3PM

University Center, Rooms xxx & xxx

We need STUDENTS to participate in an interview that will help us evaluate a survey that asks about your college experience.

Please participate in a short, 60-minute interview with a research professional and receive a Bookstore Gift Certificate!!

**No experience required.**

**Please note: Interviews follow all Institutional Research Board protocols and federal regulations pertaining to the protection of human subjects (45CFR46). You will need to sign a consent form. If you want more information on human subjects protection, please contact: <institution's IRB contact info/Web site>.**

Interview April 11 April 12 Center, Rooms Contact info:	Interview April 11 April 12, Center, Rooms Contact Info:	Interview April 11 April 12, Center, Rooms Contact Info.	Interview April 11, April 12, Center, Rooms Contact Info:	Interview April 11 April 12 Center, Rooms Contact Info:	Interview April 11 April 12 Center, Rooms Contact Info.
---	--	--	---	---	---

## Appendix C

### Sample Student Interview Sign-Up List

**Institution:**

**Location:**

**Date:**

TIME	NAME	EMAIL	PHONE	GENDER
10:00 AM				
10:30 AM				
11:00 AM				
11:30 AM				
Noon				
12:30 PM				
1:00 PM				
1:30 PM				
2:00 PM				
2:30 PM				
3:00 PM				
3:30 PM				
4:00 PM				
4:30 PM				
5:00 PM				
5:30 PM				
6:00 PM				
6:30 PM				
7:00 PM				
7:30 PM				

**Appendix D**

**Sample Student Appointment Cards**

Your Interview is scheduled for:

Date:

Time:

Location:

Your Interview is scheduled for:

Date:

Time:

Location:

Your Interview is scheduled for:

Date:

Time:

Location:

## Appendix E

### **SUGGESTED MATERIALS LIST**

- Human Subjects Consent Forms
- NSSE paper surveys, Appendix H, or on NSSE Web site:  
<http://nsse.iub.edu/html/sample.cfm>
  - 1 for each student
  - Extra copies for review
- Script A for Cognitive Interviews
- Script B for Cognitive Interviews
- Focus Group Script
- Gift card acknowledgment forms
- Business envelopes for keeping completed scripts, tapes, gift card acknowledgment form, etc
- Study information sheets
- Tapes
- Interview list (the form)
- 2 tape recorders
- 2 sets of RECHARGEABLE batteries
- 2 battery chargers
- 1 box of pens
- Flip chart and a marker for making signs
- Tape for posting signs
- Signs
  - “Want to earn a gift certificate?”
  - Appointment reminders
  - “Interviews this way”
  - “Interview in progress” for each interview site



## Appendix G

### Data Collection Summary Form

Institution:

Dates of Visit:

Total number of students interviewed:

Number of focus groups conducted:

Participant demographic information (#):

First-Year Students:

Senior Students:

Males:

Females:

Racial-Ethnic categories:

How were participants recruited?

Describe interview location:

Concerns about data collection (i.e., recruitment was challenging, no men responded to the email, tapes broke, etc.)

Institutional contacts helpful to the site visit:

Additional information about the visit:

**Appendix H**  
**NSSE Survey**