To: ITWF Conference Participants
From: Joanne Cohoon
Date: 11/1/01

Below is the protocol for student focus groups at a subset of our study departments. These groups were sex-segregated except in one case. The purpose was to learn how students experience their recruitment and retention in undergraduate computing programs.

These focus groups were recorded and run by a moderator and an assistant moderator. They lasted between 1 and 2 hours. Instructions to the moderator are given in CAPS.

I hope you find the questions useful.
Good afternoon/evening. Thank you for taking the time to join our discussion of the computer science major at __INSTITUTION__. We're conducting research on why some undergraduates switch their major out of computer science. In particular, we hope to learn how academic departments affect this attrition from the computer science major.

We want to talk with you about your experiences as students in this department. So, we'll be asking about what originally drew you to this major and this department, and what it has been like for you here since you declared your major.

Before we begin, let me suggest some things to make our discussion more productive. Because we'll be recording for an accurate record, it is important that you speak up and that you only speak one at a time. We don't want to miss any of your comments.

We'll only use first names here. No reports will link what you say to your name, department, or institution. In this way, we will maintain your confidentiality. In addition, we ask that you also respect the confidentiality of everyone here. Please don't repeat who said what when you leave this room.

During the two hours we'll be here, I will ask you questions, and I will listen to what you have to say. I will not participate in the discussion. So please, feel free to respond to each other and to speak directly to others in the group.

We want to hear from all of you. We're interested in both majority and minority viewpoints, common and uncommon experiences. So I may sometimes act as a traffic cop by encouraging someone who has been quiet to talk, or by asking someone to hold off for a few minutes.

If it is OK with you, we will turn on the recorder and start now.

This student focus group is being conducted for the Departmental Attrition Study on [DATE] by __MODERATOR__ and __ASST MOD__.

The tape ID number is ________________.

START TIME - ________________.
I. Let’s begin with introductions.

   A. Please tell us your first name, what program you’re in, and what courses you are taking in your major this term.

II. Now that we know a little about you, I’d like you to think back to when you first decided to major in CS.

   B. What was it that drew you to this discipline?

MAKE A LIST: APPEAL OF CS.

   1. Anything else that led you to choose computer science?

   C. What drew you to this particular program?

CONTINUE LIST: APPEAL OF CS.

   1. Anything else that led you to choose this program at __INSTITUTION__?

ASST MOD: GROUP FACTORS BY NUMBERING ACCORDING TO CATEGORIES THAT YOU LIST SEPARATELY.
SUGGESTED CATEGORIES ARE: PERSONAL CHARACTERISTICS; SUBJECT MATTER/CONTENT; CAREER/EMPLOYMENT; STUDENTS; OUTSIDE FRIENDS/FAMILY; FACULTY; STAFF; CLASSES/TEACHING; RULES/REQUIREMENTS; DEPARTMENTAL RESOURCES; OTHER.

SUMMARIZE: It looks like there were (quite a few/some) positive features of computer science and this department that motivated your initial choices. These features included: NAME CATEGORIES.

III. Now, we’d like to talk about what has happened since you declared your major. What experiences have you had that encouraged you to continue or increased your initial enthusiasm for computer science here at __INSTITUTION__?

CHECK OFF NEXT TO APPROPRIATE CATEGORY OR ADD A NEW CATEGORY.
IV. We’re interested in why some people leave this major, so I’d like to list any experiences you have had that could have discouraged you or reduced your initial enthusiasm for computer science here at __INSTITUTION__.

D. Please take a minute to think this over and note these experiences on the paper in front of you.

GO AROUND THE ROOM TO CREATE A NEW LIST: DISCOURAGING EXPERIENCES.

1. Are there any other things you would like to add to our list? You can include things that caused students you know to switch out of the major.

PROBE AS NECESSARY:

   a) Any experiences with your classes you would like to add?

   b) Any experiences with rules or requirements you would like to add to the list?

   c) Any experiences with faculty you would like to add to the list? This could include changes on the faculty that affected you.

   d) Any discouraging experiences with students?

   e) Any discouraging experiences with departmental staff?

   f) Any discouraging employment experiences?

   PAUSE This could also include anticipated features of employment. PAUSE For example, I was wondering if having to move away from home to get a computing job makes a difference to any of you.

2. FOR THE WOMEN’S GROUPS:
I’d also like to hear about whether being female makes it difficult to be a CS major here.

   ADD RESPONSES TO THE LIST.
3. Which items on the list were serious enough for you to consider switching out of CS?
FLAG ITEMS ON THE LIST.

V. We especially want to know how some people succeed in the major. So, for each kind of discouraging experience on our list, I’d like to hear how you coped. Please take a minute to note what helped you overcome each type of experience on the list.

GO AROUND THE ROOM AND MAKE A LIST OF COPING METHODS/ENCOURAGING EXPERIENCES.

A. Is there anything else that encouraged you to stick with the major?

PROBE AS NECESSARY:

a) Has a faculty member ever helped in any way?
   (1) How?

b) Has another student helped you in any way?
   (1) How?

c) Have you ever asked for help from a (opposite sex) student?
   (1) Tell me about any ways that differed from asking for help from a (same sex) student.

d) Were there any programs or services that helped you stick with the major?
   (1) What and How?

e) Have any employment experiences encouraged you to stay?
   (1) How?

VI. If you had to choose the one most helpful thing from all the items we discussed, what would it be?
VII. To summarize what we discussed, you said...
SUMMARIZE THE POSITIVE AND NEGATIVE ASPECTS OF BEING A CS MAJOR IN THIS DEPARTMENT, ACKNOWLEDGING DIFFERENT POINTS OF VIEW.

VIII. Does that capture the essence of what was said here?

IX. Finally, as I told you at the beginning, the purpose of this study is to get information about how CS departments affect whether their students stay or leave the major. Is there anything we left out?

X. This focus group is one of a series we are holding at different institutions, so any suggestions you could make for improving it would be very helpful.

Thank you again for taking the time to participate in this discussion.

END TIME - ______________.