

I.5b: Pretest and Redesign

L. Write a questionnaire with 20–30 questions. Up to approximately 1/3 of these can be background or demographic questions and the rest should be directly related to the research questions you will try to answer with your survey. NOTE: If your survey involves observations instead of asking people questions, then instead you should carefully describe your observation protocol. That is, list 20–30 things you will always look for when observing each unit in your survey.

N. Pretest of a revised version of your questionnaire (or observation protocol) on a group of possible respondents/units.

Updated Questionnaire

What is your gender?

Male Female

What year are you?

Freshman Sophomore Junior Senior 5th year Undergraduate Other

What school are you in?

CIT CFA H&SS TSB Heinz MCS SCS
Interdisciplinary(BHA, BHS, etc.)

What is your current cumulative GPA?

What is your current primary major?

Have you declared your major yet?

If Undeclared

What area is the major you considering to declare?

Engineering Sciences Business/Economics Art/Music/Drama Computer Science
Humanities/Social Studies Math/Statistics
Other(Please specify)

Is the major you're thinking about in your current college?

Yes No

What major(s) are you considering to declare? (List all that apply)

What attracts you to these majors? (check all that apply)

Future Job conditions Interested in the Subject provide a well rounded education
Recommendations from others (i.e parents) Ease of coursework
Did well in subject in high school CMU program is well-known Other

If Declared

Which category does your current primary major belong to?

Engineering Sciences Business/Economics Art/Music/Drama Computer Science
Humanities/Social Studies Math/Statistics
Other(Please specify)

Do you like your primary major?

Yes No

What led you to choose your current major? (Check all that apply)

Future Job conditions Interested in the Subject provide a well rounded education
Recommendations from others Ease of coursework
Did well in subject in high school CMU program is well-known Other

Would you pursue the field of your major in future professional career?

Yes No

Have you changed majors?

If YES:

From which school was your original major?

CIT CFA H&SS TSB Heinz MCS SCS Interdisciplinary(BHA,
BHS, etc.)

Which area is your original major within?

Engineering Sciences Business/Economics Art/Music/Drama Computer Science
Humanities/Social Studies Math/Statistics
Other(Please specify)

Why did you choose your original major? (Check all that apply)

Future Job conditions Sounded interesting provide a well rounded education
Recommendations from others Ease of coursework
Did well in subject in high school CMU program is well-known Other

Why did you leave your first major? (Check all that apply)

Didn't like the courses had academic difficulties didn't match career
interests
Materials different from what expected Didn't match personal interests Other

What factors influenced your choice to change majors? (Check all that apply)

Future Job conditions Sounded interesting provide a well rounded
education Recommendations from others Ease of coursework Prepare
for graduate school
Other

How soon did you start thinking about another major?

Before College Freshman Sophomore Junior
Senior

What year did you change your major?

Freshman Sophomore Junior Senior 5th year Other

If No:

Have you considered changing majors?

Yes No

**Please indicate your level of satisfaction with your current major from 1-5 (1-strongly
dislike, 5-strongly like).**

1 2 3 4 5

If Considered changing majors

Why did you consider changing majors? (Check all that apply)

Future Job conditions Interested in the Subject
provide a well rounded education Recommendations from others
Ease of coursework Did well in subject in high school
Current major is harder than expected CMU program is well-known Other

What area is the major you were thinking about switching to?

Engineering Sciences Business/Economics Art/Music/Drama Computer Science
Humanities/Social Studies Math/Statistics
Other(Please specify)

Why didn't you change? (Check all that apply)

Not enough time to complete Financial Issues Parents don't agree Other

If Not Considered changing majors

**What possible changes in your current major will lead you to reconsider? (Check all that
apply)**

More difficult curriculum Poor Professor/Instructor/Faculty Bad future job
prospects Less school support for program/related research

Would you consider changing majors if there are no restrictions.

Yes No

Do you think the University should put more emphasis on major selection counseling?

Yes No

If you have any other comments regarding what the school can do to help you in exploring your interests please list them here:

If you do not wish to be contacted with further emails reminding non-respondents to take our survey, please provide us with your Andrew ID so we can place you on our do-not-contact list.

O. Report on the specification of and results from the pretest, and any redesign of the questionnaire (or observation protocol) that may be required.

After testing our questionnaire on a group of possible respondents, we gathered important information regarding our question order, choices, and wording. Some of our users were concerned when they were asked to put in their GPA. This is in part due to us as (survey givers?) watching the respondent fill out the questionnaire. However, this prompted us to add a reminder that their responses will be kept confidential in the survey. From your feedback we decided to make almost every question multiple choice to make our project more code-able during our analysis. Our testing provided us with common choices for multiple choice questions, particularly those involving majors as well as reasons for liking and disliking majors. To account for any answers we missed, we provided an “Other” option on many questions, just in case. We also decided to group majors into categories according to college and area of study for the purpose of inference. By collapsing majors into categories, we have bigger response groups, decreasing the risk of bias for those subgroups. There is the possibility that a two respondents with the same major may categorize their responses differently (i.e. with interdisciplinary fields), so we have added a slight redundancy as a fail-safe, asking for the respondent’s actual major so that we can double check that the respondents have been correctly categorized by major category. We chose to retain the question regarding opt-out of future emails because our follow-up emails are meant to target people in the initial sample who did not respond.