To:	NPSAS:16 Technical Review Panel
From:	Jennifer Wine, Director, NPSAS:16
Date:	October 27, 2015
Subject:	**TRP Meeting Executive Summary**

The third Technical Review Panel (TRP) meeting for the 2015–16 National Postsecondary Student Aid Study (NPSAS:16) was held in Washington, DC, on August 4 and 5, 2015. This memorandum summarizes the information presented to and recommendations made by the TRP. A meeting agenda and meeting slides from each presentation are posted on the TRP website as well.

Evolution of NPSAS

NPSAS staff began by presenting the purposes of NPSAS. First and foremost, NPSAS is a cross-sectional study conducted to meet the federal government's need to understand how students pay for college. Secondly, NPSAS is used to collect data that cannot be obtained from the Integrated Postsecondary Education Data System (IPEDS). The background of NPSAS was presented, including the study iterations along with the related longitudinal follow-up studies, Baccalaureate and Beyond (B&B) and Beginning Postsecondary Students (BPS). NPSAS:16 will be the base year for the B&B:16/17 study. NPSAS staff presented the current status of NPSAS:16, including a timeline and a review of past TRP meetings. Finally, goals for this panel meeting were provided, primarily reviewing the results of the field test, focus groups, and cognitive interviews in preparation for designing the full-scale study.

Field Test Methodology and Results

NPSAS staff provided an overview of the field test study. The timeline showed that the field test data collection was conducted during March through June 2015. Details of the institution participation (as defined by providing an enrollment list) were presented, including overall rate, rates by sector, and participation by initial request date. The number of students sampled from each type of institution was also shown. There was an overview of the Student Records data collection, including the options for providing data and participation rates by sector. NPSAS staff presented field test interview results. The number of students in each category (eligible, located, and interviewed) were shown as steps in the data collection process. Various interview response rates were provided: by sector, by student type (B&B, other undergraduate, graduate), and by mode (web, computer-assisted telephone interviewing [CATI], mobile).

Next, the data collection experiments were presented. The first experiment tested an interview divided into two modules. The control cases proceeded through the survey as one continuous instrument while the experimental cases were presented with two options upon completion of

module one: (1) stop the interview or (2) complete the rest of the interview (module two) for an additional incentive. The sample was divided into three groups by incentive offered and with or without modules:

(1) $20/$10 with modules of 10 to 15 minutes each,

(2) $15/$15 with modules also of 10 to 15 minutes each, and

(3) control, no modules, for a total of up to 30 minutes.

The results showed no difference in the response rates of the groups. Overall, all three groups responded at rates of 59–63%. In addition, those in the two module groups almost always opted to continue and completed the entire interview (less than 10% stopped after module one).

To explore new ways to maximize participation and minimize burden (for both the respondent and contractor), the second experiment provided respondents with the option of receiving their incentive via PayPal. Overall, 32% of the respondents chose to receive their incentives through PayPal, with the remainder choosing the traditional check. Incentive choices by institution type were also examined. Students from private nonprofit 4-year doctoral institutions were the most likely to choose PayPal (43%) as opposed to those at public less-than-2-year institutions, who were least likely (18%).

NPSAS Sample

The NPSAS:16 full-scale sample will consist of about 126,320 students sampled from 2,000 postsecondary institutions (including some from Puerto Rico). The sampling frame will be formed using IPEDS data, with recognition of recent changes, such as for-profit institutions that have closed or have switched from for-profit to nonprofit. New for NPSAS:16, public 4-year non-doctorate-granting institutions will be split into two strata, separating those that are mainly community colleges that offer a small number of bachelor's degrees in select fields (known as CCBA institutions) from the other institutions. NPSAS staff provided sample sizes by institution stratum.

The NPSAS sampling process was explained. After sampling institutions, student enrollment lists are requested. Data elements on the enrollment lists were reviewed for panelists. These include baccalaureate recipient indicators to be used for ensuring adequate sample for the B&B follow-up study. Additionally, some items were requested for the first time in the field test study and will be requested during the full-scale study:

- enrollment in high school and date of first enrollment (at the postsecondary level) to assess eligibility,
- grade point average (GPA), number of credit accumulated, and account status for determining the potential B&B sample,
- race/ethnicity and gender for weighting and nonresponse bias analysis purposes, and

- veteran status and first-time graduate student at the NPSAS institution indicator to be used for sample stratification.

Several groups will be oversampled as part of NPSAS:16. These include baccalaureate recipients who are veterans; enrolled in science, technology, engineering, and mathematics (STEM) and teacher education programs; enrolled in CCBAs, and those attending for-profit institutions. Similarly, among the other undergraduate students, veterans will be oversampled, along with those in CCBA institutions and those attending for-profit institutions. Finally, NPSAS:16 will oversample graduate students who are veterans, first-time graduate students, those in master's and doctoral STEM programs, and those in master's programs at for-profit institutions. Furthermore, baccalaureate recipients and graduate students in business programs and graduate students in education programs will be undersampled. Student sampling strata were shown in order of prioritization.

NPSAS staff plan to match to administrative databases to assist in sampling, including matching to data from Veterans Affairs to identify veterans who applied for Veterans Benefits Administration (VBA) benefits. NPSAS staff will identify actual veterans and not dependents using the benefits. In addition, students will be sorted by federally aided versus unaided within strata by matching to the National Student Loan Data System (NSLDS). Student sample sizes within institution stratum were provided to panelists, along with the expected B&B sample size.

Design of the Full-Scale Data Collection

The field of survey research is evolving, and NPSAS is adapting to these changes. While funding for survey data collections is decreasing, the costs are increasing due to increased difficulty in gaining cooperation. Declining response rates increase potential for error in survey estimates and uncertainty in the outcomes. Therefore, NPSAS:16 needs a survey design with a built-in contingency plan to meet both the budget and survey goals. Factors to consider when developing a survey design include the notion of a "phased approach," using complementary features designed to address motivation (such as incentives) and burden (e.g., an abbreviated interview), using experiments in early phases to determine which set of features is optimal, using paradata (frame, prior wave, administrative, interviewer observations) in phase evaluation, and addressing the notion of error-sensitive indicators (e.g., variables correlated with nonresponse and measurement error).

NPSAS:16 will use a two-pronged approach designed to both increase the number of study members and improve the data on hand for study members. In order to increase the number of study members, a reduced set of items will be offered in an abbreviated interview. In cases with a student record from the institution but no interview, a micro interview will be offered to improve the amount and quality of the data for those cases. NPSAS staff have begun the process of identifying items for this micro interview by determining which variables are of paramount interest to researchers and policymakers and which items cannot always or accurately be provided by the institution. This yielded 25 items across 9 domains. The suggested domains for the NPSAS responsive design were provided and discussed. These include private loans, income, parental education, work, debt relief, future wages, remedial education, dependency status, and reasons for

not applying for aid. The next step in the process is to multiply impute these select items and identify those with the greatest variance (i.e., impute poorly).

Some panelists advocated for dropping the "speculation" questions, such as the likelihood that the student will seek to use an income-based repayment plan for their loans. However, it was noted that there would be bigger variance in these items than in the factual items, which would be important for imputation. It was also noted that the *future wages* item could be less about speculation and more about debt tolerance and the student' decisions about financial aid.

The remedial items continue to be a challenge. Panelists were concerned about measurement error. Remedial courses are different at different types of institutions, and many students do not know they are taking remedial courses. However, because transcripts will be unavailable, the interview is the only source for this data and, therefore, a reason to keep the items in the micro interview.

At least one group thought that the *reasons for not applying for aid* item could be dropped. Income items could take a long time to administer, so dropping them could save time in the micro interview. However, at least one panelist thought it would be better to collect parent's occupation instead. Private loans and parent's income can be inaccurate, but few sources are available for these items. Because they are self-reported, they have higher variance, and the uncertainty is important.

NPSAS:16 Student Records

NPSAS staff gave panelists an overview of the field test student records collection and related focus groups. The field test data collection was performed in February–June 2015 and had an overall response rate of 97%. About 20% of institutions keyed data into a web-based data entry application; about 73% keyed or copied data into an Excel spreadsheet template; and about 7% created CSV files programmatically and uploaded them. The first round of focus groups occurred before the field test data collection in the summer of 2014. Participants were recruited from those that participated in NPSAS:12 and were divided based on institution sector. The second round of focus groups occurred after the field test data collection among some of the institutions that participated in the field test. Participants were divided into three groups based on their mode of providing data (web, Excel, or CSV). The focus groups were designed to assess usability of the instrument, review key items, and discuss potential changes for the full-scale study. These purposes mirror those for the TRP members. NPSAS staff presented key items to panelists along with targeted questions. Before each discussion, the item wording was provided, and panelists were able to hear a related discussion among the focus group participants.

The first item discussed was *terms enrolled*. Panelists were asked to consider whether terms shorter than one month were analytically useful and what the threshold should be. Panelists agreed that a term should be included if the student is earning a credential. Length is less important than what the student can do with it. Another consideration is how the terms fit into financial aid rules. The consensus was that shorter terms should be included, and 2 weeks is the recommended threshold. A

related comment offered for consideration was how institutions should handle competency-based programs.

The *program/degree* item was discussed next. Panelists were asked if it was useful to collect a second degree and, if so, what guidance should be provided for designating primary versus secondary degree. Most panelists did not see a need for collecting the secondary degree program. However, a few panelists thought that it would be useful for researchers that are interested in a particular group (e.g., all students that are pursuing law degrees). There was no concern about providing guidance to institutions for choosing primary versus secondary degree because those institutions that have dual programs know how to handle them. Panelists discussed the degree items further, including how to classify CCBA institutions, and considered splitting the dual doctoral degrees into (1) practice/practice and (2) research/practice. Instrument designers will also look at IPEDS, which had a recent TRP meeting on this subject.

The final item for discussion was *class level*. Panelists were asked to consider whether graduate class level was useful and, if so, what guidance should be provided. There was general consensus that graduate class level is not useful. However, the following values could be asked for: First year versus 2+ years, or New versus Continuing versus Expected to graduate this year. A few panelists suggested that class level is not needed at all, even for undergraduate students. The important pieces are knowing when the student started, credits earned, and credits needed.

NPSAS:16 Student Interview Key Item Review

Panelists were invited to review the plans for the NPSAS:16 full-scale interview and to recommend targeted improvements to the interview based upon findings from the NPSAS:16 field test study and from cognitive interviews. Panelists were cautioned that the NPSAS:16 field test results presented during the meeting were preliminary. During each presentation, panelists were presented findings on key items and were played a recording of the related NPSAS cognitive interview section to provide context. Panelists were then asked to discuss the specific items in their small groups and present their suggestions for improvement of the items back to the larger panel. Panelists' recommendations are highlighted below, organized by section of the interview.

Field Test Experiments

The field test interview included three instrument experiments. These items were administered in different ways using randomized samples to assess usability and reliability. The first experiment was with *high school course-taking* (AP, IB, other college-level courses). In NPSAS:12, these items were collected in a grid format. For the NPSAS:16 field test, the control group was given the NPSAS:12 grid format, while the experimental group was asked a series of three yes/no questions. The experimental version had 0% missing, whereas the grid format produced 2–6% missing responses. However, the cognitive interview respondents preferred the grid format because it was clear how the items were related. Panelists were asked to share their preferences. Most agreed that providing all questions on the same screen was best. There were concerns about the differences in the way the grid is displayed on a mobile device because it is very different than on a computer. Panelists also

suggested that responses should not be randomized; they should always be in this order: AP, IB, and other. If the grid format is used, the instructions must make clear that each item should be answered separately and not left blank.

The next experimental item was *parents' highest level of education*. The control group received the original items that asked specifically about mother's and father's education. The experimental group was given new question wording to align with the change to the Free Application for Federal Student Aid (FAFSA), which asks more generically about Parent 1 and Parent 2. Respondents in the experimental group were first asked to provide a Parent 1 and Parent 2. Then, for each parent, they were asked if the parent completed a college degree. Depending on the response, the appropriate follow-up question was displayed. When comparing father's highest level of education between both groups, there were significant differences. However, the experimental item took more than twice as long to administer. Furthermore, cognitive interviews revealed that some respondents felt strange assigning Parent 1 and Parent 2 designations. Panelists discussed the parents' highest level of education items. At least one panelist did not like the design of the gate questions in the experimental items because there were too many clicks necessary to get to the answer. There were several wording suggestions for how to ask about Parent 1 and Parent 2:

- What is the highest level of education by either parent or whomever raised you?
- What is the highest level of education of those that raised you? Pick the education level and then pick the relationship. Then ask again "What is the second highest level of education of those that raised you?" and pick the relationship.
- Who would you like to discuss first?
- Who are the people that raised you? Provide two drop-down lists with relationships. Then ask about those specific people (e.g., mother, father).
- Combine asking the designated parent with his or her highest level of education on the same screen.

One panelist suggested that the two parent degrees are often combined into one highest degree for analysis, but it is probably important to keep collecting both for comparisons to prior rounds.

The third experimental item was *study abroad*. NPSAS:12 did not include this item, but it was brought back into the interview for NPSAS:16 due to interest at the recent NPSAS:16 TRPs. The items asked if the respondent had ever studied abroad. If yes, the respondent was asked to provide information about where they had studied in one of two ways. One group provided a string response for the country where they studied, and one group had two drop-down lists—first for continent and then for country. Both groups were then asked how long they studied abroad. Based on the field test data, both formats produced missingness or unusable data. In addition, both formats had usability pros and cons. Generally, TRP members felt that study abroad information was important to collect in the NPSAS:16 survey. Information on where a student studied was nice to have but not essential. Panelists raised other considerations:

- It might be important to know "when".
- Why a student chose not to study abroad might be useful.

- Perhaps the study abroad item should be asked only of B&B respondents within the high-impact activities list.

Financial Aid

Because of increased interest in financial literacy, six items were added to the cognitive interviews that have been tested and considered effective in other surveys. Three of the items tested general knowledge of finance concepts: inflation, interest rates, and risk diversification. One item assessed knowledge of federal student loan collection using a question tested previously in the Federal Reserve Bank of New York's Survey of Consumer Expectations (SCE). Two items measured financial fragility, one that asked what the respondent would do with an extra $25,000 and one that asked if the respondent could come up with $2,000 for an unexpected need. Cognitive interview respondents felt that some of these items were test-like, were out of place in this survey, caused negative feelings, and that their purpose was confusing. Panelists were asked to provide their opinions on these new items. Overall, there were opinions on both sides of the spectrum. There is a strong interest in financial literacy but, if it does not work in the context of NPSAS, it should not be included. However, from a policy perspective, all six items are useful.

Most panelists liked the set of three questions designed to assess knowledge of finance but agreed with adding them at the end of the survey because respondents felt like they were being tested and might break off before completing the survey. Panelists also advocated for including an introduction to the three questions. At least one group did not like the risk diversification question (as it only applies to the top 1–2% of students) but understood that the three items go together. Some panelists thought each question should have a "don't know" response. After some discussion, panelists understood that these three items have been tested (and tested together) and therefore it is not advisable to change the wording because it would change the existing psychometric properties.

There was little discussion of the federal loan collection question. At least one panelist suggested to use another word rather than "garnish." There were suggestions surrounding the two items designed to measure financial fragility. Suggestions for the question of what the respondent would do with an extra $25,000 included separating the response that refers to household wants or needs into two separate response options (household wants in one, household needs in another) and adding an option of "use the money to pay for tuition" because that is relevant for the NPSAS:16 sample. Some panelists were unclear on what the $2,000 question (could the respondent come up with $2,000 for an unexpected need) is trying to measure. Is it an assessment of income or access to credit? At least one panelist recommended addition of "from all sources" to the question. Also, if borrowing from a credit card is an acceptable answer, that information should be added to the help text. If it is not, then "without credit" should be added to the question wording.

Loan repayment plans are also an emerging topic, so new questions regarding loan repayment strategies were added to the field test interview. Respondents with loans were first asked if they had heard of income-based repayment plans and/or loan forgiveness plans. Any B&B-eligible respondents who said "yes" were then asked what the likelihood was that they would use those programs. In cognitive interviews, respondents did not have any problems answering these

questions. Most panelists liked the first set of "have you heard of" questions, and some advocated asking them of all respondents, not just those with loans. Some suggested that more examples of the income-based repayment plan programs should be listed in the gate question. While some panelists recommended dropping the *likelihood you would use* items because they are not factual and could lead to misuse of data, the majority advocated keeping them. Many felt that these were useful items for all respondents and not just B&B-eligible sample members, especially given that those with sub-baccalaureate degrees are more likely to need these programs, and many baccalaureate students would not be eligible for them. A final suggestion for the financial aid section was to consider adding SAP ("satisfactory academic progress") awareness.

Education Experiences

The NPSAS:16 field test included *online course/program* items similar to those used in NPSAS:12. The first one asked if any of the respondent's classes were entirely online. If they said "yes," then they were asked if their entire program was online. All those whose program was not fully online were asked if any of their classes were partially online (yes/no) followed by a checkbox list of online components. Cognitive interview participants expressed confusion over what was meant by "partially online" and indicated that at least some part of almost every course is online. All panelists liked the fully online question but, as in cognitive interviews, there was confusion over the partially online questions. After discussion, it was decided to drop the partially online questions for the full-scale study because of the lack of clarity in what is being measured.

Items focused on *remedial course-taking* continue to be an area of discussion. The NPSAS:12 items were reviewed, and results from that interview showed that less than 12% of all students said they took remedial courses in the 2011–12 academic year. Transcript data indicate that the 12% self-report rate is too low. The NPSAS:16 field test retained the NPSAS:12 remedial questions; however, new items were also asked of first-year students in which the term "remedial" was replaced with a list of common math and reading remedial course titles. If it was not obvious that a course was remedial, a follow-up item asked if the indicated course would be counted toward the degree. Among first-year undergraduate students who answered both sets of questions, 16% reported taking remedial courses in the NPSAS:12 set of questions, and 47% reported courses that were considered remedial using the new set of questions. Telephone interviewers reported that respondents had some confusion with both sets of questions, although generally they were able to answer the NPSAS:12 set when they knew they had taken a remedial course. Cognitive interview respondents were also confused and answered the items inconsistently. Given the importance of these items, they must be kept.

Panelists discussed the two sets of remedial questions. Issues brought forth for consideration include that not all remedial education is in the form of "courses." For example, some students could be required to complete online work or a summer boot camp prior to enrolling in the regular class. In addition, many schools administer math tests at orientation and then offer an intensive math class for a few weeks and then retest. Some students will move on to a regular course immediately, while some will remain in the developmental class.

Panelists suggested several wording changes to the original remedial set, including asking specifically if the respondent took the course for credit (which might be easier for the respondent to recall) and cutting down on the text in the definition of "remedial," which was long. Also, instead of saying "before taking your first college-level course," say "to strengthen your skills in…." Some advocated sticking with the NPSAS:12 set but dropping the word "remedial," which may be more confusing than it is clarifying. It was recommended, if the new set of questions is decided upon, to list what content students had in their courses rather than course titles, which many students would not remember.

One TRP member suggested that the new set of questions be used, then a mini validation study be performed by also obtaining transcripts for a small sample of students. There is no plan for a transcript study for this cohort, but transcripts could be requested from the National Student Clearinghouse as a more affordable option for this activity. Finally, some researchers are more comfortable with a remedial course-taking number that is on the low side. The more conservative number might be used for policy because it is "at least" that rate, which is an argument for using the original set of questions in the survey.

B&B-Eligible Cohort

NPSAS:16 will identity potential baccalaureate recipients for the B&B follow-up study. In the base-year interview, the goal is to collect basic information about experiences at the NPSAS institution and plans for the future so that these responses can be compared with outcomes in the longitudinal study.

A set of items important for this cohort are the *high-impact undergraduate activities*. The items considered "high-impact" in the National Survey of Student Engagement (NSSE) were presented to panelists. The NPSAS:16 field test used similar items with some revision. For the field test, NPSAS staff decreased the number of items overall by one, attempted to simplify some language, and collapsed the response options to "yes/no" rather than providing a longer list including responses such as "plan to do" or "in progress." Field test results showed that none of these items had more than 2% missing and that there was a relatively even split between "yes" and "no" responses on most categories. These items were also presented in cognitive interviews, with some respondents expressing confusion over terms such as "learning community."

The group discussed *high-impact* items. Most panelists advocated bringing back the internship and co-ops item, but at least one suggested separating them and breaking out paid from unpaid. Other commenters noted that some percentages of "yes" seemed high, such as "culminating senior experience" and "research project with a faculty member," and that smaller institutions may not offer these services. Overall, most panelists preferred that NPSAS use the NSSE version of these items. In addition, some thought they were important predictors of persistence and completion for all students and not just for the B&B-eligible cohort.

The last set of items offered for discussion dealt with *graduate school plans*. Panelists were provided with the items used in the NPSAS:16 field test, including questions about likelihood of

attending/applying as well as why the respondent did not apply. The results of the questions that asked why the respondent decided not to apply to graduate school were shown and included various "other specify" strings. Some strings included responses that seemed to be covered in the original set of response options, while some offered new response options to be considered. Panelists were asked to provide guidance on which categories were useful.

Panelists recommended keeping all response options separate and not combining them at all. They also suggested that new options be added from the "other specify" responses: gaining job experience, needing a break, and not needing graduate school. In addition, panelists advocated rewording the question because "Why didn't you" has a negative connotation. Instead, the question could be phrased as "Did you think about these things when you decided not to go to graduate school?"

NPSAS:16 Products

Key topics for NPSAS publications were presented. These primarily focus on financial aid but also include tuition/price/need, debt, enrollment, demographics, employment, online education, degree program, high school experiences, remedial course-taking, and institution characteristics. NPSAS staff also explained the National Center for Education Statistics (NCES) publication types, showing examples of the First Look, Data File Documentation (DFD), Statistics in Brief (SIB), Web Tables (WT), Statistical Analysis Reports (SAR), and Data Point. Along with the First Look and DFD, the following reports will be produced from NPSAS:16: Undergraduate Financing by Institution Type web tables, Undergraduate Financing and Debt web tables, Undergraduate Profile web tables, Graduate Financing and Profile web tables, and a Statistics in Brief for Undergraduate Price of Attendance. Panelists were shown the statistics showing downloads by publication, topic, and type (SIBs and WTs) for NPSAS:08-related publications.

For NPSAS:16, NPSAS staff propose to add limited 1996–2016 trend data to our data release plans. A new NCES data tool called TrendStats will facilitate this type of analysis. Trend data are very valuable and beneficial in adding context to the estimates, and TrendStats makes production and replication of trend data cost effective. It will adjust for inflation and reflect the most current weights in order to allow for more accurate data reporting.

Key topics and subgroups will also be added to existing publications. The topics and subgroups under consideration were presented and briefly discussed. Panelists recommended that consideration be given to adding language proficiency and students with dependents. The process and format of product releases will continue to be improved, including release of publications sooner and improved ability to search and browse for publications. One panelist expressed a preference for reports with explanatory text as opposed to web tables. NPSAS staff explained the new format for the restricted-use data file in response to another panelist's experience using restricted-use data.