

STUDY SERIES
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**Final Report: National Teacher and Principal Survey (NTPS)
Teacher Questionnaire Instruction Experiment**

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This report is released to inform interested parties of research and to encourage discussion. The views expressed are those of the author and not necessarily those of the U.S. Census Bureau.

Final Report: National Teacher and Principal Survey (NTPS) Teacher Questionnaire Instruction Experiment

Abstract:

Staff members from the Center for Survey Measurement (CSM) at the U.S. Census Bureau conducted 24 cognitive interviews with a shortened teacher questionnaire of the National Teacher and Principal Survey (NTPS) on behalf of the National Center for Education Statistics (NCES). The goal of the testing was to evaluate question wording, as well as compare answers to question pairs in which a question is asked both with and without instructions in a within respondent experiment. These results will be used to guide question selection for an upcoming field test.

Results of the cognitive testing showed that a new question about bachelor's degrees largely worked as worded; respondents were able to report their degree correctly. We found mixed results for the instruction experiment. NCES hypothesized that respondent reports to a question with instructions would be lower than reports to that same question without instructions. Only some questions elicited answer changes in the expected direction. A question pair about respondents' postsecondary degrees performed particularly poorly, with no answer changes in the expected direction, while a pair about interactions with other teachers mostly performed well. Other pairs, such as one about homework assignments, performed inconsistently throughout rounds of testing. Additionally, we found that some of the instructions elicited negative reactions from respondents. A complete list of findings and recommendations is included in this report.

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Final Report: National Teacher and Principal Survey (NTPS) Teacher Questionnaire Instruction Experiment

Staff members from the U.S. Census Bureau Center for Survey Measurement (CSM) conducted three rounds of cognitive interviews with a shortened teacher questionnaire of the National Teacher and Principal Survey (NTPS) on behalf of the National Center for Education Statistics (NCES).¹

The goal of the testing was to evaluate additional and revised questions and question instructions, as well as to compare answers to question pairs in a within respondent experiment. In these pairs, a question was asked without instructions and then immediately asked again with instructions. NCES is interested in whether respondents' reported values are lower to the "with instruction" versions of the paired questions. Recommendations from CSM's cognitive testing of this questionnaire will be used to produce a questionnaire for an upcoming field test that will further assess differences in responses to questions with and without instructions. Five pairs of questions were tested in the first round, eight pairs of questions were tested in the second round, and ten pairs of questions were tested in the third round.

This report follows two interim reports from the first two rounds of testing. In this report, results are shared from all three rounds of the NTPS cognitive interviews, focusing on specific questions of interest to the sponsor. Eight² interviews were conducted in each round for a total of 24 interviews, with respondents teaching various grade levels at both public and private schools in the Washington, D.C. metropolitan area. Information about respondents' schools and teaching can be found in Appendix A: School and Teaching Demographics.

Paired No Instruction/With Instruction Questions

Five pairs of questions were tested without instructions and then immediately asked again with instructions in the first round, eight pairs of questions were tested in the second round, and ten pairs of questions were tested in the third round (see Appendix B: Questionnaires and Cognitive Testing Protocols). Some pairs of questions remained the same throughout multiple rounds while others were modified or introduced as new pairs. Paired questions are organized in this report by the round(s) in which they appeared. The paired questions tested were:

- **In Round 1:** 20/21, 22/23, 31/32, 35/36, and 38/39
- **In Round 2:** 11/12, 14/15, 16/17, 23/24, 25/26, 28/29, 30/31, and 33/34
- **In Round 3:** 10/11, 12/13, 14/15, 16/17, 20/21, 22/23, 25/26, 27/28, 29/30, and 32/33

The first question in each pair was probed before the respondent moved on to the next question. Respondents were asked to read the instructions for the second question in the pair if they did not already do so while answering the question. However, respondents generally read the instructions aloud without prompting. This may have been influenced by the attention given to the previous question during concurrent probing. Individual respondents' answers to the paired questions can be found in Appendix C: Numerical Results to Paired Instructions.

¹ Cognitive interviews were conducted by Jessica Holzberg, Aleia Clark Fobia, and Jasmine Luck.

² Twenty-six interviews were conducted in rounds of nine, nine, and eight, respectively. However, two interviews had to be dropped from analysis because the respondents were not eligible to complete the questionnaire.

Round 1 Only Paired Questions

Questions 22/23 and 35/36, on postsecondary degrees and classroom observations for evaluation, respectively, were only asked in the first round of cognitive testing.

Postsecondary Degrees

22. How many postsecondary degrees do you currently hold?

None or

 Number of postsecondary degrees

For the first question in the pair, asked without instructions, seven of the eight respondents expressed confusion or hesitated at the term “postsecondary.” They were unsure of whether it referred to post-high school or post-bachelor’s degree. Of those seven, two answered incorrectly by excluding bachelor’s degrees.³ One of these respondents was from the United Kingdom. Another respondent answered incorrectly but changed her answer to the correct answer while answering the probes on this question. The eighth respondent, who did not express confusion or hesitate, also answered incorrectly.

23. How many postsecondary degrees do you currently hold?

- ☛ *For the purposes of this question, do not include certificates of study below the associate’s degree.*
- ☛ *Do not include associate’s degrees, that is, a degree that normally requires at least 2 but less than 4 years of full-time-equivalent college work.*
- ☛ *Do not include degrees that were paid for, or partly paid for, by a state, school, or school district.*
- ☛ *Do not include postsecondary degrees that you are currently working on, but have not yet been awarded.*
- ☛ *If you do not hold any postsecondary degrees (as we have defined them), mark (X) the “None” box.*

None or

 Number of postsecondary degrees

Respondents generally understood the second question. The respondent who did not hesitate but misreported in the previous question realized she had made an error in the previous question. She asked if she should change her response. She answered this question correctly. One respondent continued to think of “postsecondary” as referring to graduate school only and answered incorrectly.

Several respondents mentioned seeing the instruction about associate’s degrees. One person said that he had not thought about associate’s degrees until the instructions mentioned them and commented “it threw [him] off for a second.” A respondent from the United Kingdom who was confused in the bachelor’s degree question discussed later in this report was also confused about “associate’s degree” because she did not know how her degree translated to United States terminology.

None of the respondents who answered this pair wrote a smaller value for the second question containing instructional text. If the one respondent who recognized her error had corrected her answer, she would

³ One respondent who eventually answered correctly was given a leading probe by the interviewer.

have written a smaller value for the second question. One respondent wrote a larger value for the second question. The rest of the respondents recorded the same number.

CSM Recommendation, Round 1: This pair was problematic for respondents. They were confused by the term “postsecondary.” Additionally, the experimental manipulation did not work as expected because none of the respondents wrote a smaller value for the second question. It is unlikely that a question about degrees can be sufficiently amended to elicit the desired responses because the number of degrees each respondent obtains is typically small in number.

NCES decided to drop this pair from further testing.

Classroom Observations for Evaluation

Note: This question pair was not applicable to one respondent because it referred to the current 2014-2015 school year which had just started at the time of the interview. The question was amended after that interview.

35. In the LAST SCHOOL YEAR (2013-14), how many times were you observed IN YOUR CLASSROOM for the purpose of evaluating your performance?

None or

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 Number of times

For the first question, three respondents explicitly interpreted this question as asking about more formal observations. Two respondents commented that the phrase “evaluating your performance” made them think of more formal observations, with one saying it “sounds like the sort of hire-or-fire [observations].”

36. In the LAST SCHOOL YEAR (2013-14), how many times were you observed IN YOUR CLASSROOM for the purpose of evaluating your performance?

- 🍏 *For the purposes of this question, please consider only instances of formal observations conducted in your classroom by a school administrator for the purpose of evaluating your performance. Formal observations are standardized using an instrument, form, rubric, or checklist.*
- 🍏 *Do not include informal observations conducted by a school administrator, coach, mentor, or peer.*
- 🍏 *If last school year (2013-14), you were not observed (as we have defined it), mark (X) the “None” box.*

None or

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 Number of times

For the second question, respondents commented that this version of the question confirmed their interpretation of the previous question. Only three respondents lowered their response to the second question; the remaining four respondents all gave the same answer.

CSM Recommendation, Round 1: Because only three respondents wrote a smaller value for the second question, this manipulation was largely ineffective. The sponsor may want to revisit the wording of the first question to broaden its interpretation.

NCES decided to drop this pair from further testing.

Rounds 1, 2, and 3 Paired Questions

Three pairs of questions intended to capture information about homework assignments, teacher interactions, and student assessments were asked over all three rounds of testing. While some wording changes were made between rounds, the intention of the question pairs remains the same.

Homework Assignments

The pair of questions about giving homework was not revised throughout the cognitive testing; however, the placement in the questionnaire differed. The first number listed below is the numbering from Round 1, with the second number representing the changed location in Round 2 and the third number representing the changed location in Round 3.

38/33/32. On average, over the course of three months, how many times would you say that you assign homework?

None or

 Number of times

Round 1

For the first question, respondent difficulties were very similar to those observed in the pair about teacher interactions. Several respondents immediately asked questions about what the question entailed, such as, “For one subject? Or all? For one grade level? Or all?” Most respondents chose to count homework for all classes.

One respondent expressed confusion at the word “times.” She said she was unsure whether this meant a number of assignments or number of days.

Round 2

Respondents generally answered this question with ease. Two respondents said that they do not assign homework. The other respondents who answered this question thought of how many times they assign homework each week and multiplied to arrive at their answers.

Round 3

Two respondents who do not assign homework were easily able to answer this question. Two elementary school teacher respondents were confused about what this question was asking:

“Is it the number of days, or number of assignments?”

“How many times a day do I assign it, or how many days a week do I assign it?”

One respondent chose the number of assignments while the other respondent chose the number of days she assigns homework. This latter respondent only counted the number of times in one month instead of three months.

39/34/33. On average, over the course of three months, how many times would you say that you assign homework?

- 🍏 *For the purposes of this question, pick the grade and the subject in which you tend to assign the least amount of homework per month.*

- ☛ Do not include working on projects, small investigations, or the gathering of data and the writing of long reports as homework.
- ☛ Include doing problems/questions sets, reading textbooks or supplementary materials, and short writing assignments as homework.
- ☛ If, on average, you do not assign homework (as we have defined it), mark (X) the “None” box.

None or

 Number of times

Round 1

For the second question, respondents were generally able to answer this easily. One respondent said she could not choose a “least amount” because the amount of homework assigned in two classes was the same.

Another respondent commented:

“Why do you want to know the subject that you give the least amount in? What kind of data are you collecting? I’m just curious. If I’m picking the grade and subject that I tend to assign the least amount of homework to, that would be science or social studies, and I don’t give any homework, so I would mark none. That’s skewed because that’s not true. I don’t never give homework. But I guess that’s what I was getting at when I said why do you want the least amount of homework?”

Six of the eight respondents lowered their response to the second question. Two respondents did not change their answer.

CSM Recommendation, Round 1: The manipulation for this pair was largely effective, with most respondents lowering their answer. Most respondents were also able to answer the question easily. There are no recommendations for changes.

Round 2

The two respondents who said none to the first question were able to answer this question easily with the same answer. Three other respondents also did not change their answers. They indicated that they generally did not assign the type of homework that was excluded in this question, such as projects.

Other respondents expressed confusion and asked whether certain assignments should be counted here. Questions asked included:

- Does breaking up a paper into small writing assignments count?
- Do less traditional assignments (make flash cards, find an article, participate in an online class discussion) count?
- How should weeklong assignments be counted?

One elementary school teacher was confused about whether she should count her class, which remains the same for the entire day with the exception of math, as a subject or if she should count each individual topic (i.e., phonics, social studies, science, etc.) instead.

Additionally, three respondents indicated confusion specifically over the second instruction bullet, making comments like:

“Well, that’s odd. It seems strange to not include those specific things. Including [items in the third bullet] but not [the ones in the second bullet] is odd.”

“Weird. Why? It bothers me. I want to know why you’re asking these questions this way.”

Three of the eight respondents lowered their response to the second question. Five respondents did not change their answer.

CSM Recommendation, Round 2: In the first round of testing, the manipulation for this pair was largely effective, with most respondents lowering their answer. However, in the second round, the manipulation only worked effectively for three respondents. It is unclear why this worked so differently in the two rounds. It may be due to the fact that a greater number of respondents who either do not assign homework or do not assign certain types of homework participated in this round. There are no recommendations for changes. Given the current mixed results, the third round of cognitive testing can provide more insight into this pair if the sponsor wishes to keep it.

Round 3

Two respondents who said “none” to the first question also said “none” to this question. Four other respondents who did not change their answers indicated they had not included things like projects in their previous answers. One elementary school teacher said that picking the grade/subject in which she tends to assign the least amount of homework was difficult for her because she teaches all classes. She added that she did not want to pick a subject in which she never gives assignments.

The two respondents who lowered their answers changed their answer from all classes to one class in particular.

CSM Recommendation, Round 3: Given the largely ineffective manipulation, this pair is unlikely to elicit the pattern of responses NCES hypothesized. Most of the instructions tell teachers to exclude things they were already excluding in their previous answers. If NCES wishes to keep this pair, the instructions should be heavily revised to exclude types of homework typically included in respondents’ answers. However, given the mix of subjects and grade levels respondents teach, identifying these types of homework is difficult.

Question Summary

In the first round of testing, the manipulation for this pair was largely effective, with most respondents lowering their answer. However, the manipulation only worked effectively for three and two respondents in the second and third rounds, respectively. In the latter rounds of testing, some respondents indicated confusion over whether they should count the number of homework assignments or number of times homework is given, and how to count elementary school classes as “subjects.” Given these mixed results, the pair is unlikely to be effective in the NCES field test.

Teacher Interactions

The pair of questions about interacting with teachers was revised slightly between rounds of cognitive testing. Before the second round of testing, the terminology was changed from “number of interactions” to “time spent communicating,” the instruction order was changed, and the second instruction was revised from “do not include” to “include.” Before the third round of testing, the “about how to teach” text was removed.

Round 1

31. On average, over the course of three months, how many times would you say that you have interactions with other teachers, both from your school and from other schools, about how to teach?

None or  Number of interactions

For the first question, several respondents immediately asked questions about what this question entailed and that it would be difficult for them to quantify their responses because they interacted every day:

“Am I counting my in school interactions? Or am I counting interactions that I have with teachers outside of school where I am talking about how I teach?”

Two respondents indicated that they wished there was a clearer response scale. One person said she wanted to specify a number of hours, and another person said she wanted to check a daily/weekly/monthly type scale. Two respondents also indicated confusion about the phrase “how to teach.”

Because this question was so broad, respondents appeared to apply a stricter definition in order to feel they could provide an answer, or wrote down a large number that was a guess. One respondent who counted only meetings said:

“I don’t think [the meetings] are the only time but I felt like if you were looking for [an average], what I could guarantee you I regularly do, it would be [the meetings] but I don’t think that nearly covers it. [It would also include] any time we do common planning, lunch time but not always, things like that, before or after school, in the hall passing each other going to the bathroom, all those times. So yeah it’s sort of a poor number for what I really think happens but when I have to go with an average, I don’t think I could count all of those up.”

Another respondent commented:

“I feel like I am just making a number. This is not accurate at all. When you are teaching you have a lot of interactions, whether it’s ‘hey, how did you do this?’ Or ‘hey, can I borrow this?’ Or ‘hey, could you use this?’ You have a lot of interactions and sometimes your interactions are through email. Sometimes they are actual verbal conversations. Sometimes it’s sitting there planning what you are going to do for the week. Sometimes it’s just a conversation of discussing a student. So it’s hard. The question says over three months but it would be easier if it were in hours or per day. Three months is a long time to try to figure out your interactions. I just picked a number.”

Response values varied widely to this question, with a range of 6 to 200.

32. On average, over the course of three months, how many times would you say that you have interactions with other teachers, both from your school and from other schools, about how to teach?

- ☛ *For the purpose of this question, do not include discussing how to teach a particular topic with other teachers.*
- ☛ *Do not include collaborating with other teachers in planning and preparing instructional materials.*

- ☛ Include visiting another classroom to learn more about teaching.
- ☛ Include working together with other teachers to try out new ideas.
- ☛ If, on average, you do not have any interactions with other teachers (as we have defined them), mark (X) the “None” box.

None or

 Number of interactions

For the second question, most respondents liked that they were given more specific instructions. However, two respondents were confused and preferred the previous question. One of the respondents made comments like, “That negates the question” and “That’s silly” while reading the instructions.

Before eventually answering the question with “0,” this respondent noted:

“I can’t answer this question because it doesn’t make any sense at all to me. I’m not going to answer it. We work together when we’re discussing how to teach a particular topic. We work together in collaborating and planning and preparing instructional materials. So if you say to include working together with other teachers to try out new ideas but you’re saying not to include collaborating, those are the same things. You’re saying ‘don’t eat an apple,’ then ‘eat an apple.’”

When asked about the instructions, the respondent said she would word all of the instructions differently, but it “depends on what the purpose of the question is.” The other respondent who preferred the former question commented:

“I think when you get rid of some of these things like planning and preparing, I co-plan with a colleague for language arts and social studies and we do talk about our teaching practice during that time. It’s not just strictly listing out lesson plans so I think you’re missing things if you exclude it completely.”

One respondent misread the “include” instructions as “do not include” and was very confused by the question.

Seven of the eight respondents in this first round wrote a smaller number for the second question. One respondent wrote a larger number.

CSM Recommendation, Round 1: This manipulation was effective in the first round, as all but one respondent lowered their answers. However, respondents struggled to define what the question was asking and included very different types of interactions in their answers. Depending on how NCES intends to use this question going forward, the sponsor may want to clarify the concept of “interactions.”

Round 2

23. On average, how many hours per week would you say that you spend communicating with other teachers, both from your school and from other schools, about how to teach?

None or

 Average WEEKLY hours

Respondents expressed that this encompassed a wide variety of communications and mostly tended to include more informal things like talking to teachers who teach the same subject or the same students, asking questions, sharing articles, and getting together with friends who are also teachers.

Communications included emails, phone calls, text messages, Facebook messages, and “popping” into other teachers’ classrooms.

Three respondents expressed a dislike of or confusion over the term “how to teach”:

“I don’t like that wording- ‘about how to teach.’ Unless that’s very open-ended on purpose I think there is so much room for interpretation on that...I don’t know if that does you any favors in getting accurate responses.”

“‘How to teach’ seems kind of subjective. How to teach itself...you might be talking about teaching and also a lot of not teaching. Actually teaching and how to implement lessons and how they went, reflecting on it, and things like that. I wouldn’t necessarily consider that ‘how to teach.’”

“Is ‘how to teach’ about how you actually do things or teaching in general? Talking about your kids wouldn’t be included in that I guess? I feel like most of the time that you’re communicating you’re talking about a specific child or child improvement or whatever, student growth, things like that. I don’t know if that includes how you teach or if it’s just like what you do when you teach, things you use. That’s usually what we talk about in meetings. But we spend a lot of time talking about kids so I would say if you don’t want to include that then I would say planning and prep time rather than communicating time.”

24. On average, how many hours per week would you say that you spend communicating with other teachers, both from your school and from other schools, about how to teach?

- ☞ *For the purposes of this question, do NOT include informal discussions with other teachers about how to teach.*
- ☞ *Include formal collaborations with other teachers in planning and preparing instructional materials.*
- ☞ *Include working together with other teachers to try out new ideas.*
- ☞ *Include visiting another classroom to learn more about teaching.*
- ☞ *If, on average, you do not spend time communicating with other teachers (as we have defined it), mark (X) the “None” box.*

None or Average WEEKLY Hours

Several respondents expressed confusion with and dislike of the exclusion of informal discussions. One respondent expressed that there was a fine line between “informal discussions” and “formal collaborations” and that she had trouble differentiating these two types. She was not sure if talking with other teachers about how the curriculum is going and what they are going to test on counts. Another respondent asked if emails counted as “formal.”

An additional respondent added:

“The first bullet is crazy. I don’t know why that’s not included. I think that’s a push right now for teachers to recognize that we have so much opportunity for professional development, especially because of social media and things of that nature, but also the value of a one-to-one conversation and being evaluated by our peers, not even in the classroom. Things like, ‘hey, let me tell you about this thing that happened today- what do you think? What’s your take? This is how I handled it but I don’t think I did a great job.’ It’s informal but it’s not less valuable, so this irked me. It made me feel invalidated.”

One respondent increased her answer because she did not include preparing and planning in her answer to the previous question. Another respondent did not include meetings in her answer to the previous question but her answer still changed in the expected direction.

Five of the eight respondents in the second round lowered their response to the second question. Two respondents did not change their answer and one respondent increased her answer.

CSM Recommendation, Round 2: While five respondents changed their answer in the expected direction in this round compared to the seven in the first round of testing, this does not seem to be a result of the question revisions. The sponsor may consider revising “informal discussions” in the first bullet. The third round of cognitive testing can provide more insight into this pair if the sponsor wishes to keep it.

Round 3

20. On average, how many hours per week would you say that you spend communicating with other teachers, both from your school and from other schools?

None or Average WEEKLY Hours

Two respondents asked what modes of communication counted here, such as emailing and text messaging. Another respondent indicated she spends time talking with teacher friends, but not necessarily about school things. She decided to count this time anyway.

Two respondents who co-teach answered this question differently. One included all of the time spent co-teaching and another included specific informal and formal communications in addition to meetings.

21. On average, how many hours per week would you say that you spend communicating with other teachers, both from your school and from other schools?

- ☛ *For the purposes of this question, do NOT include informal discussions with other teachers about anything, including how to teach.*
- ☛ *Include formal collaborations with other teachers in planning and preparing instructional materials.*
- ☛ *Include working together with other teachers to try out new ideas.*
- ☛ *Include visiting another classroom to learn more about teaching.*
- ☛ *If, on average, you do not spend time communicating with other teachers (as we have defined it), mark (X) the “None” box.*

None or Average WEEKLY Hours

Respondents were able to answer this question and generally indicated that their answers to the pair differed because they were now excluding informal discussions. One respondent commented that the first instruction was surprising because a discussion about how to teach would be formal.

Both respondents who questioned which modes of communication should be included in the previous question interpreted these instructions as telling them to exclude email communications.

In this question, both of the co-teachers included all of the time that they spend with their co-teacher in their answers.

Seven of the eight respondents lowered their answer to this question. One respondent increased her answer because she was now thinking of all the time spent with her co-teacher.

CSM Recommendation, Round 3: This manipulation largely works as worded. The sponsor may consider providing specific instruction to co-teachers on what to include in their answers. Additionally, since “about how to teach” was removed from the question stem, the first instruction could be modified to remove the reference to conversations about how to teach.

Question Pair Summary

The change in terminology after the first round of testing from “interacting” to “communicating,” the revision of the second instruction, and the removal of “about how to teach” seems to have alleviated some sources of respondent frustration and made it easier for them to answer. While the sponsor may consider revising instructions about informal discussions and providing guidance to co-teachers, this question pair works for most respondents.

Student Assessments

In the first round, this pair of questions was about giving tests or examinations. In the second and third rounds, it was modified to “student assessments.” The instructions were also altered slightly before the second round of testing.

Round 1

20. On average, over the course of three months, how many times would you say that you give tests or examinations?

None or Number of tests

One respondent skipped this pair of questions because of an incorrect skip pattern that was corrected after the interview.

For the first question, four respondents wondered aloud whether they should include quizzes and other types of assessments and were inconsistent in whether or not they did so. Two respondents decided to include these other assessments and two decided not to include them.

Respondents tended to think about the first three months of school or to not think about any three months in particular. This may be because the interviews were administered at the beginning of the school year.

21. On average, over the course of three months, how many times would you say that you give tests or examinations?

- 🍎 *For the purposes of this question, pick the grade and the subject in which you tend to give the fewest number of tests or examinations in a marking period.*
- 🍎 *Do not count quizzes.*
- 🍎 *Do not count standardized tests that are administered by the state.*
- 🍎 *If, on average, you do not give any tests or examinations (as we have defined them), mark (X) the “None” box.*

None or Number of tests

Generally, respondents did not find the question or the instructions confusing. One respondent said that the term “marking period” was vague. Another respondent commented:

“I guess the only question for me is how you define the difference between a test and an examination. Why are they a different word? Or are they interchangeable? I also speak Spanish too so in my head the word for exam and the word for test are the same so I use them interchangeably but not everyone does.”

Only three of the seven respondents who answered this pair wrote a smaller value for the second question. The remaining respondents recorded the same number.

CSM Recommendation, Round 1: Because only three respondents wrote a smaller value for the second question, this manipulation was largely ineffective. The sponsor may want to revisit the wording of the question, as “tests and examinations” seems to be limited in scope.

Round 2

14. On average, over the course of three months, how many times would you say that you give student assessments?

None or Number of assessments

Respondents were generally able to answer this question, but asked several questions while doing so. Two respondents asked if this was asking about all classes/subjects or just one. Five respondents asked if this was asking about major, formal assessments only or both formal and informal assessments. Respondents were evenly divided in whether they chose to include these more informal assessments. Some respondents only counted tests, while others included quizzes, homework assignments, and even “yes/no visual type assignments.”

15. On average, over the course of three months, how many times would you say that you give student assessments?

- 🍎 *For the purposes of this question, pick the grade and the subject in which you tend to give the fewest number of student assessments in a three month period.*
- 🍎 *Count tests and examinations as assessments.*
- 🍎 *Do NOT count quizzes.*
- 🍎 *Do NOT count standardized tests that are administered by the state.*
- 🍎 *If, on average, you do not give any assessments (as we have defined them), mark (X) the “None” box.*

None or Number of assessments

This question was generally easy for respondents to answer, with many indicating this question was much clearer than the previous one and they wished these instructions were included in question 14.

As in the question about homework assignments, one respondent said she thought the first instruction was confusing for elementary school teachers: “Pick only one? Would that be for teachers that only teach one thing? I mean I teach everything all day.” This sentiment was similar to the one expressed by another respondent in the homework question pair.

Another respondent had difficulties because of her answer to question 12, which asked about class periods taught. She did not include afternoon classes in question 12 as instructed, but one of these excluded classes was the class in which she assigned the least homework:

“I didn’t have them in the list for question 12 because of how I was asked to qualify- so should I not be considering them because I should be working from the data I’ve already given? Since I’m a rule follower and it doesn’t tell me not to include them I will include them. So this is based on a section of learners I did not include in my previous answer.”

She also added:

“I found the instructions clear even if I didn’t understand the motivation for a particular instruction. For me, I would follow the instructions as given but if it’s important that this question only be answered by the means of that data that’s already been supplied [in question 12] then there needs to be another bullet to instruct that.”

Six of the eight respondents lowered their response to the second question. Two respondents did not change their answer.

CSM Recommendation, Round 2: This manipulation worked well for most respondents, and obtained more responses in the expected direction than the “tests and examinations” question in the previous round. There are no recommendations for changes.

Round 3

12. On average, over the course of three months, how many times would you say that you give student assessments?

None or Number of assessments

Respondents were able to answer the question, but asked questions and made comments about what should be included:

“Can you clarify what you mean by a ‘student assessment’? That’s not very clear to me. Is it a written student assessment? I assess students every day as I’m teaching them, especially in the lower grades where we don’t really give grades every day. We’re just assessing where they are.”

“I don’t know if I’m counting the number of assessments total between all of my classes or if I’m counting how many one class gets.”

“That’s a really open-ended question.”

One respondent said there are differences between the assessments the school, county, and state expect her to administer and her own personal assessments she likes to administer. Additionally, one respondent wondered if she should include standardized tests and informal assessments. She decided not to, and decided to answer about one class instead of all of the classes that she teaches.

Two respondents mentioned counting tests and quizzes, one mentioned counting only written assessments, and three respondents explicitly said they were not including informal assessments.

13. On average, over the course of three months, how many times would you say that you give student assessments?

- 🍏 *For the purposes of this question, pick the grade and the subject in which you tend to give the fewest number of student assessments in a three month period.*
- 🍏 *Count tests and examinations as assessments.*
- 🍏 *Do NOT count quizzes or homework.*
- 🍏 *Do NOT count standardized tests that are administered by the state.*
- 🍏 *If, on average, you do not give any assessments (as we have defined them), mark (X) the “None” box.*

None or

--

 Number of assessments

Respondents were generally able to follow the instructions well, and some commented that the instructions helped clarify the previous question. However, one respondent said that she thought the first instruction was confusing because she teaches every subject to her elementary school class so it seemed strange to pick only one.

One respondent kept “benchmark assessments” in his answer even though they are standardized tests because he felt they were assessments that marked students’ growth.

Seven of the nine respondents lowered their answer to the second question. One respondent kept his answer the same. He only reported a formal, 10-item rating assessment with written comments that every student receives once a trimester in both questions. One respondent increased her answer; it is unclear why she did so because she indicated she was thinking of the same assessments in both questions.

CSM Recommendation, Round 3: This manipulation worked well for most respondents. The sponsor may want to consider instructing elementary school teachers on how to answer this question so they understand what constitutes a “subject.”

Question Summary

While this manipulation performed poorly in the first round of testing, changes to the question pair in the second and third rounds seem to help elicit the answers NCES was anticipating. However, elementary school teachers in both the second and third rounds of testing expressed confusion at the third instruction. The sponsor may want to consider providing clearer instructions for elementary school teachers.

Rounds 2 and 3 Paired Questions

There were five pairs of questions that were tested in the second and third rounds of testing. These question pairs asked about classes/training courses taken, class periods, parent communications, classrooms, and bathrooms. While some wording changes were made between rounds, the intention of the question pairs remained the same.

Classes and Training

While the instructions for the second question remained the same between rounds, the question wording was slightly expanded in the third round of testing to include more types of activities.

Round 2

16. In total, how many classes or training courses have you taken that focused solely on teaching methods?

None or Number of classes or courses

As in many other question pairs, respondents commented on how broad this question was and many attempted to narrow the scope so they could come up with an answer. Most respondents who had taken training and/or classes in both school and the field counted only school courses, but one respondent only counted professional courses:

“Would it be college classes or professional development classes since college? It’s probably since college in the field.”

A few respondents considered including professional development and short one-day programs but decided not to include them.

Two respondents were also confused about what constituted “teaching methods.” One respondent commented:

“Would this include classes like behavior management, or the mindset of being a teacher and how to get back a positive mindset and incorporate that into your classroom? I wasn’t sure if that was methods or just practices. I’m not sure [what the distinction is between the two].”

17. In total, how many classes or training courses have you taken that focused solely on teaching methods?

- 🍏 For the purposes of this question, do NOT include student teaching (sometimes called practice teaching).
- 🍏 Do NOT include classes or training courses taken as part of your undergraduate or graduate studies.
- 🍏 Include professional development courses, workshops, or seminars.
- 🍏 If you have not taken any classes or courses (as we have defined them), mark (X) the “None” box.

None or Number of classes or courses

The instructions in this question clarified most respondent concerns in the previous question, but it prompted some respondents to include things they had not previously. The respondents who increased their answer to this question tended to add professional developments, conferences, and seminars and workshops. One respondent expressed he was still not sure if conferences count and how they should be counted.

Respondents who lowered their answers tended to lower them as a result of excluding undergraduate and/or graduate coursework in the second question. One respondent said that most people will think only of undergraduate or graduate work when the term “classes” is used.

Four respondents lowered their answers to the second question and four increased their answers.

CSM Recommendation, Round 2: Because this manipulation was not very effective, with only half of respondents giving a response in the hypothesized direction, the sponsor may want to consider revising the classes and courses terminology used in the initial question or dropping it from subsequent rounds of testing.

Round 3

14. In total, how many classes, training courses, programs, or activities have you participated in that focused solely on teaching methods?

None or Number of teaching methods classes

Seven respondents answered this question. One respondent who taught for over 20 years refused to answer the question. She laughed at the question and wondered what time period it covered. She said, “If I were at my school I would skip this one. I am not going to go over 20 years to try to figure it out.”

Five other respondents also made comments about the time period and/or wondered if classes taken in college should be counted here:

“I assume you’re talking about college too? Which would be forever ago. Are you talking about start/end of the year workshops, plus workshops we go to outside of school? I can’t put a number on that for 34 years. I’ll just make up a number.”

“I’m feeling glad that I’m a relatively new teacher because a total over a longer career would be probably difficult.”

“Classes, courses. Throughout college. That’s a hard one.”

“I don’t know a time frame here. Like, ever?...I mean, if we’re talking college, then that’s a lot.”

One respondent asked if classes for recertification counted. Another respondent asked what classes on teaching methods entails:

“Does teaching methods also include behavior management and anything that has to do with curriculum planning? There are classes I’ve taken that actually have methods in the title but there are classes I’ve taken that are related to teacher behavior or methods of delivery that don’t have methods in the title. I guess I would include all of them.”

15. In total, how many classes, training courses, programs, or activities have you participated in that focused solely on teaching methods?

- 🍌 *For the purposes of this question, do NOT include student teaching (sometimes called practice teaching).*
- 🍌 *Do NOT include classes or training courses taken as part of your undergraduate or graduate studies.*
- 🍌 *Include professional development courses, workshops, or seminars.*
- 🍌 *If you have not taken any classes or courses (as we have defined them), mark (X) the “None” box.*

None or

 Number of teaching methods classes

Respondents were able to answer this question more easily. The respondent who refused the previous question in the pair answered this question, though she commented it was odd and needed a better defined timeframe.

The respondent who asked about what “teaching methods” entailed in the previous question continued to be confused by what this meant.

Of the seven respondents who answered both questions in the pair, five lowered their responses to the second question. Two respondents did not change their answer because they had not taken any classes in school and did not student teach.

CSM Recommendation, Round 3: The initial question in this pair confused respondents with its broad time period and “teaching methods” terminology. More concerning, respondents indicated they were just making up numbers. While the manipulation was effective, the data quality is suspect. We suggest altering the terminology to elicit estimates that are more realistic or shortening the reference period.

Question Summary

Changes made to this question pair between rounds of testing increased the number of respondents who answered in the direction NCES hypothesized. However, respondents in both rounds of testing expressed some confusion about what qualifies as an activity focusing solely on teaching methods. The sponsor may want to consider narrowing the scope of the question, providing additional guidance in the second question on what kinds of activities should count, and shortening the reference period.

Class Periods

The question text remained the same throughout testing, but the second instruction was revised slightly between rounds of testing.

Round 2

11. How many separate class periods or sections do you currently teach at THIS school?

None or

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 Number of classes

Respondents were generally able to answer this question easily. One of the elementary school teacher respondents who expressed confusion at other questions was also confused by what periods/sections meant in this question:

“I guess it would be two since math is different. It’s math, and then for everything else I have the same kids. Unless I thought subject-wise as periods...it’s elementary school. We don’t have bells so it’s kind of hard to answer.”

However, another respondent commented that she thought the term “sections” was useful.

12. How many separate class periods or sections do you currently teach at THIS school?

- ☛ For the purposes of this question, do NOT include homeroom periods or study halls.
- ☛ Do NOT include class periods or sections that you teach in the afternoon.
- ☛ If you do not teach class periods or sections (as we have defined them), mark the “None” box.

None or Number of classes



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Six respondents who answered this question were mostly able to do so, but all expressed some dislike of the second instruction and/or confusion with it. One respondent laughed when she read the instruction.

Several respondents thought that the instruction must mean after school because they did not understand why a distinction between morning and afternoon classes would matter:

“I don’t know what that means. Afternoon meaning after noon- so after lunch or after school?”

“Does that mean after school or after 12 or what does that mean? I assume they mean after school especially in high school if you teach the [SAT] or something like that, but I don’t know if it means towards the end of the day or after school.”

“Does that mean after school?”

Others expressed a more general confusion about the purpose of this instruction:

“Huh, that’s weird. [The instructions] weren’t confusing, but it seemed strange to only ask for morning classes.”

“In the afternoon? Does that mean like anything after...that’s kind of confusing because does that mean [afternoon classes] don’t count at all? I’m going to say five class periods. Some of them are in the afternoon but I’m just going to stay with this number of class periods. I would normally include [afternoon classes] in my mind. Do the ones in the afternoon count as a class or no?”

“[Does this mean] afternoon classes are somehow not valid or important? As somebody who likes to learn I would be curious why there is this differentiation.”

Two teachers who teach at a school with a rotating schedule were not sure how to answer this question:

“At least one, if not two, are in the afternoon depending on the day because of the schedule change, but I will still include them in the total.”

“This trips me up because I teach different blocks at different times during the day because of how our schedule goes, so any given morning I might not be teaching the same number. It makes me want to consider what the average is for the morning and write that in the box but it would frustrate me that I couldn’t give an accurate answer because it makes me feel like I’m lying.”

The elementary school teacher who expressed earlier confusion about the idea of “subjects” was still confused about class periods:

“I don’t know how you’ve defined class periods. I’m not really sure where they were defined. High school is easy because you have eight periods in the day or whatever you teach, but in elementary we don’t really have periods. If I wanted reading to take 3.5 hours instead of 2.5 hours I could do that potentially so it’s a little different. I guess I’ll put two again.”

Four respondents lowered their answer in the hypothesized direction and two did not change their answers.

CSM Recommendation, Round 2: While the manipulation worked for most respondents, the overwhelming reaction to the second instruction suggests that this question may induce unnecessary confusion and negativity. We suggest dropping this pair from future testing or heavily revising the second instruction to exclude something more intuitive to respondents instead of afternoon classes.

Round 3

10. How many separate class periods or sections do you currently teach at THIS school?

None or Number of classes

Three respondents answered this question pair; the remaining five respondents did not answer this pair because they were skipped out of it after question 9.

Two of the three respondents expressed confusion because their schools are on a trimester schedule:

“I guess it’s a little confusing for me because we have trimesters and I have different numbers each trimester.”

“Are you talking about the school year or just for this trimester?”

One respondent chose to count his classes for the current trimester, and the other respondent chose a typical number across trimesters.

The third respondent who answered this question chose to count how many times each student receives each class (i.e., if she taught a second grade class three times a week, she counted that as three class periods).

11. How many separate class periods or sections do you currently teach at THIS school?

- ☛ For the purposes of this question, do NOT include homeroom periods or study halls.
- ☛ Do NOT include class periods or sections that you teach in the afternoon, that is, after lunch.
- ☛ If you do not teach class periods or sections (as we have defined them), mark the “None” box.

None or Number of classes

All three respondents who received this question lowered their answer to the second question in the pair and were able to do so easily. However, one respondent commented that she did not understand why afternoon classes were not included.

CSM Recommendation, Round 3: This manipulation worked for all three respondents who answered the questions. There are no recommendations for change.

Question Summary

While this manipulation worked for nearly all respondents across both rounds of testing, CSM recommends continuing to consider a new second instruction that will invite a less negative reaction from respondents.

Communications with Parents

The pair of questions about communications with parents was not revised between rounds of cognitive testing; however, the placement in the questionnaire differed. The first number listed below is the numbering from Round 2, with the second number representing the changed location in Round 3.

25/22. On average, how many hours per week would you say that you spend communicating with parents?

None or Average WEEKLY Hours

Round 2

As in the questions about student assessments and teacher communications, respondents wondered what exactly this entailed and whether it included both formal and informal communication. Most respondents included informal communication and communication over email, phone, and notes home. One respondent included time filling out reports in an online grading system. Only one respondent explicitly included face-to-face meetings with parents.

Round 3

As in the questions about communicating with other teachers, respondents wondered what modes of communication might be included. Six of the eight respondents mentioned including email contact explicitly. Respondents also included things like face-to-face meetings, weekly bulletins, talking to parents in the carpool line, and phone calls.

A few respondents said it was hard to estimate the time spent but were still able to answer the question.

26/23. On average, how many hours per week would you say that you spend communicating with parents?

- 🍏 *For the purposes of this question, include parent-teacher conferences and face-to-face meetings about student performance.*
- 🍏 *Do NOT include telephone or email communications about student performance.*
- 🍏 *Do NOT include communications related to school functions, such as dances, field trips, or student exhibits.*
- 🍏 *If, on average, you do not spend time communicating with parents (as we have defined it), please mark (X) the 'None' box.*

None or Average WEEKLY Hours

Round 2

Most respondents lowered their answers because they have little face-to-face communication with parents. Respondents commented that face-to-face meetings tend to only happen at specific times of the year, such as a scheduled week for parent-teacher conferences, and that it thus does not happen “on average.”

One respondent asked why email communications were excluded in this question.

Both respondents who did not change their answers expressed that they were thinking of different types of communication for the two questions but that their answers happened to be the same number.

Six respondents lowered their answers in the hypothesized direction and two did not change their answers.

CSM Recommendation, Round 2: This manipulation worked as worded. The two respondents who did not change their answers happened to arrive at the same number of hours while counting different types of communications. There are no recommendations for changes.

Round 3

The inclusion of parent-teacher conferences was confusing for some respondents. One respondent gave a number despite not feeling as though she “should or could” answer the question:

“To me this is not very clear. This says how many hours per week, but we just finished parent-teacher conferences. That week it was big but normally it would be none.”

“This is how many hours per week. That’s kind of hard because you don’t have parent-teacher conferences every week. I don’t know if I can answer that. ”

Another respondent thought specifically of parent-teacher conference time, even though that is only three weeks of the school year. He did not include parent-teacher conferences in his previous answer. This increased his answer to the second question.

Two respondents took careful note of the phrase “on average.” One of these respondents added up all the time spent during the school year and divided it by the weeks of the school year to come up with an actual average, which was higher than her answer to the previous question.

Five of the eight respondents lowered their answers, with one respondent not changing her answer because she only counted face-to-face time in the previous question, and two respondents increasing their answers.

CSM Recommendation, Round 3: This manipulation worked for most respondents. However, the sponsor may consider altering the instructions to remove parent-teacher conferences if they are not central to this question. This will eliminate respondent confusion over how to count them in an “average” week.

Question Summary

There were no major issues identified for this question pair and the manipulation largely worked as worded across the rounds, though small changes to the question could help eliminate potential confusion.

Respondents tended to answer by counting by hallway or by grade. One respondent was unsure how to answer because he teaches in multiple buildings. He decided to count for the building in which he spends the most time.

One respondent explicitly excluded the gym and music room. During probing, he said he would also want to exclude the art room and two “special” rooms if he could change his answer, because he felt that all of these rooms “weren’t really like [his] classroom” in terms of their set-up. Another respondent excluded the art room, gym, and music room. She only counted grade-level classrooms in her elementary school.

26. How many separate classrooms are in the building in which your classroom is located?

- ☛ For the purposes of this question, please do NOT include classrooms used primarily for teaching STEM subjects , that is, science, technology, engineering and math courses. .
- ☛ If there are no classrooms in your building (as we have defined them), mark (X) the “None” box.

None or Number of classrooms

Two elementary school teacher respondents commented that there were not any classrooms dedicated to teaching STEM classes and mentioned a STEM computer lab. They answered this question differently. Neither included the STEM computer lab in either answer to the pair, but for this question, one respondent kept his previous answer, while the other respondent chose to mark none. This respondent appears to have marked none because she focused on the idea of teaching STEM subjects in the classrooms, as opposed to teaching *primarily* STEM subjects in the rooms.

Six of the eight respondents lowered their answer as hypothesized. One respondent kept her answer the same because the classrooms were not dedicated to a single subject. She also commented that this question was odd. One respondent who lowered his answer only did so because he used his “corrected” answer to the previous question that he arrived at after probing.

CSM Recommendation, Round 3: This manipulation worked well for most respondents, but two elementary school respondents had difficulty following the first instruction. The sponsor may want to consider being more explicit about how elementary school teachers should answer.

Question Summary

The change made between rounds of testing to the first instruction seems to have been largely successful. This manipulation works for most respondents, though some clarifications could be made for elementary school teachers.

Bathrooms

The pair of questions about bathrooms was not revised between rounds of cognitive testing; however, the placement in the questionnaire differed. The first number listed below is the numbering from Round 1, with the second number representing the changed location in Round 2.

30/27. How many bathrooms are in the building in which your classroom is located?

None or Number of bathrooms

Round 2

Respondents were mostly able to answer this question with ease. However, two respondents asked if boys and girls bathrooms should be counted separately or in pairs.

One respondent said, “Can I just ask, ‘who cares?’” and wrote “WHO CARES?” on the questionnaire.

Round 3

Respondents were generally able to answer this question easily. Four respondents mentioned including both faculty/staff and student bathrooms. One respondent decided not to include faculty/staff bathrooms or bathrooms that were inside of classrooms.

31/28. How many bathrooms are in the building in which your classroom is located?

- 🍎 *For the purposes of this question, please include bathrooms primarily meant for use by staff members only.*
- 🍎 *Do NOT include bathrooms primarily meant for use by students.*
- 🍎 *If there are no bathrooms in your building (as we have defined them), mark (X) the “None” box.*

None or Number of bathrooms

Round 2

Respondents did not have many issues with this question. One respondent indicated she did not include faculty/staff bathrooms in the previous question. Another respondent said:

“There’s only three intended just for staff members. There are two bathrooms on the top floor that would be questionable. They are most geared towards the administrators and visitors but they are not marked, whereas the other three in the building are marked as for adult use only. I will choose three.”

All respondents lowered their answer to this question.

CSM Recommendation, Round 2: Because this manipulation worked for all respondents, there are no recommendations for changes.

Round 3

Respondents were generally able to answer this question, with a few noting that some of the faculty/staff bathrooms were also used by students.

All but one respondent lowered their answers to this question. One respondent who increased his answer to this question did not include faculty/staff bathrooms in his previous answer.

CSM Recommendation, Round 3: This manipulation worked for nearly all respondents. There are no recommendations for changes.

Question Summary

Since this manipulation worked for all but one respondent across both rounds, there are no recommendations for change.

Round 3 Only Paired Questions

Two pairs of questions which asked about desktop computers and hours spent in in-service/professional development were asked in the third round only.

Desktop Computers

29. How many desktop computers are available for use at your school?

None or Number of computers

Most respondents carefully noted that the question was referring to desktops though one respondent decided to include laptops in his answer. Several respondents did not have desktops at their schools, only laptops, and easily answered the question with “0.”

Three respondents commented on the “available for use” terminology in this question. Two respondents included all desktops, but one only counted desktops for student use:

“What do you mean by use? For student use? For faculty use? For my use?”

“I’m looking at ‘available for use.’ I know people who have desktops at their desk but they’re really not student ones. So there really aren’t desktop computers available for use here.”

“I hope there is another part to that question. There are computers in classrooms. With ‘available for use,’ you’re not just going to go into someone’s class and start using their computer...and it doesn’t say use by teachers or students.”

30. How many desktop computers are available for use at your school?

- ☛ For the purposes of this question, please include desktop computers primarily meant for use by staff members only.
- ☛ Do NOT include computers primarily meant for use by students.

None or Number of computers

Respondents were able to answer this question fairly easily. One respondent continued to include laptops in his answer.

Five of the eight respondents who answered this question lowered their answer. Two respondents did not change their answer because of the desktop/laptop distinction. One respondent increased her answer because she was thinking of computers for student use in the previous question.

CSM Recommendation, Round 3: This manipulation was effective with only about half of respondents, largely because of respondents who worked in schools with laptops. It is unclear how this question pair will work moving forward for NCES’s question experiment interest. If the pair is kept, the sponsor should consider modifying the “available for use” terminology to be clearer.

Professional Development

16. In the past two years, how many hours have you spent in in-service/professional development workshops or seminars?

Number of professional development hours

Respondents were generally able to answer this question. One respondent commented that having access to her transcripts would make her answers much more accurate.

Two respondents commented on the timeframe. One respondent asked if the “past two years” meant the two years prior to the current date. A respondent who is in her second year of teaching asked if she should only include the one year and four months she has been teaching. Another respondent answered for one year but then noticed the timeframe and changed her answer.

One respondent was confused by the “number of professional development hours” terminology next to the answer space. He began to answer in hours, but then saw the label and started counting the number of workshops instead. After he gave his answer the interviewer asked him to report in hours.

17. In the past two years, how many hours have you spent in in-service/professional development workshops or seminars?

- ☛ *For the purposes of this question, do NOT include workshops or seminars focused solely on teaching methods.*

Number of professional development hours

One respondent refused to answer this question because she did not know how to answer. She said she could not discriminate which were focused solely on teaching methods. Another respondent who did answer the question felt similarly: “I feel like everything mentions teaching methods in some way.”

Two respondents mentioned that examples of things that would or would not count would be helpful and one respondent said the current instruction did not help her answer the question. One of these respondents mentioned several professional development workshops that she was unsure of how to count, including:

- A seminar on administering one of the county benchmark assessments
- Workshops going over standards, which questions students got wrong on assessments, and discussing how to help them learn better
- Classes that cover changes that the county wanted to administer for report cards or sites/programs to be used to help students with certain subjects

A respondent who wrote “96” said she was surprised there were not more boxes provided to answer the question.

Four of the seven respondents who answered both questions in this pair lowered their answer to the second question. Two respondents did not change their answers.

CSM Recommendation, Round 3: This manipulation largely works as worded. The sponsor should consider providing examples or further clarification to the instruction in this question pair. We also

suggest revising the box label from “**Number of professional development hours**” to read “**Hours of professional development.**”

Context and Bachelor's Degree Findings

Question Context

NCES was concerned that the shortening of the teacher questionnaire prior to the first round of testing could affect the flow of the questionnaire or introduce context effects. The questionnaire was altered further for the second and third rounds of testing. Interviewers were instructed to note whether respondents expressed any confusion or difficulties with the instructions or flow of the questions. Probes were also included in the debriefing section to assess this. These included:

1. Were there any questions that confused or surprised you because they didn't seem to flow from the preceding questions?
2. Were there any questions that seemed out of context?

Round 1

None of the respondents expressed confusion or difficulties with the flow of the questions during the interview. All respondents who were asked the debriefing probes said there were no questions that seemed out of context.⁴ Two respondents said that the questions flowed well. However, one respondent said that she thought the easiest questions were at the end of the questionnaire and that she was surprised by the inclusion of the demographic questions.

CSM Recommendation, Round 1: There was no evidence of the current shortening of the questionnaire affecting respondents. We recommend further shortening the questionnaire for future rounds of testing if possible to allow the cognitive interviewer to focus on questions of interest.

Round 2

None of the respondents expressed confusion or difficulties with the flow of the questions during the interview.

When asked if they thought any questions seemed out of context or surprising, one respondent mentioned the bathroom questions and two respondents mentioned both the classroom and bathroom questions. One respondent commented those types of questions might be better suited for a building superintendent. Another respondent asked why they mattered.

Additionally, one respondent mentioned the question about classes only in the afternoon and said she did not understand why anyone would want to know that.

CSM Recommendation, Round 2: Consider how the questionnaire might provide better context for the classroom and bathroom questions, with either similar questions or introductory text explaining their purpose. Overall, we recommend further shortening the questionnaire for future rounds of testing. Questions not of interest often took up a large portion of interview time, particularly grid questions.

Round 3

None of the respondents expressed confusion or difficulties with the flow of the questions during the interview.

⁴ Due to a printing error, not all of the interview folders contained the revised probes. Four respondents were asked these probes after they were added to the protocol.

In the debriefing section, none of the respondents said they found anything surprising. When asked if any questions seemed out of context, two respondents mentioned the bathroom questions. Another respondent said:

“You don’t think [that for] professional development you’re going to be answering questions about...how many bathrooms are in your school, but they are all school related and, I mean, they kind of went along with it.”

CSM Recommendation, Round 3: While the sponsor may want to continue to consider providing additional context for the bathroom questions, we found no issues with the flow of the questionnaire.

Context Summary

While respondents across rounds had no issues with the context and flow of the questionnaire as a whole, some questions took respondents aback. This was particularly true for the classroom questions in the second round of testing and the bathroom questions in the second and third rounds of testing. The sponsor may want to consider exploring ways to provide a better framework for these questions if they are retained.

Bachelor’s Degree

NCES asked CSM to probe on the question about respondents’ bachelor’s degree because it had been heavily revised by NCES prior to the CSM cognitive interviews. The second round question was very similar to the one tested in the previous round, with the exception of the “your institution” language. Previously, the question read “your school.” In the third round, the second round question was further revised from “institution” to “degree institution.”

Interviewers asked the following probes during the interview: “What was your major? Minor? What department issued your degree(s)?” We also asked an if-needed probe in the debriefing about this question, which read, “Did you have any difficulty coming up with an answer to this question? How would you word it?”

Round 1

25. Which of the following best describes your bachelor’s degree?

🍌 *Mark (X) only one box.*

- It was awarded by your school’s college of Education, school of Education, or department of Education
- It was awarded by another college, school, or department, not in Education

Seven respondents answered this question. Five selected the first option and two selected the second option. All but one respondent answered the question correctly, based on additional information they gave in response to the probes. A respondent who went to school in the United Kingdom was confused by this question and misreported. She did not read the full answer categories and thought that “another college” referred to a school separate from the one she attended. She selected option one even though her degree was from the Department of Music and Drama. The respondent commented that “college” is not used the same way in the United Kingdom as it is in the United States.

Another respondent said he was confused by the answer options because the term “your school” had

previously been used to refer to the school where the respondent taught. He commented, “My middle school would not provide me a degree” but answered the question correctly.

CSM Recommendation, Round 1: The question largely works as worded. The sponsor may consider alternative terminology for “your school” to clarify that the question is referring to a college or university. If the sponsor believes that there will be sufficient respondents to the NTPS with a degree outside of the United States, the sponsor should consider modifying the question further to accurately capture their responses.

Round 2

19. Which of the following best describes your bachelor’s degree?

☛ *Mark (X) only one box.*

- It was awarded by your institution’s college of Education, school of Education, or department of Education
- It was awarded by another college, school, or department, not in education, within your institution

Respondents were able to answer this question correctly. However, three respondents expressed confusion.

In the previous round, one respondent said he was confused by the answer options because the term “your school” had previously been used to refer to the school where the respondent taught. A respondent in the second round expressed this confusion with “your institution”:

“I don’t really like the use of ‘by your institution’ or ‘within your institution’ only because right now my institution is my school, so I’m thinking that my school didn’t give me my degree. I think other wording would confuse less but I don’t know what that wording should be.”

Two other respondents asked, “What is my institution?”

One respondent said that reading the second answer option helped her understand that the first one was the option she should select. The phrase “not in education” in the second option was helpful to her.

CSM Recommendation, Round 2: The question largely works as worded. The sponsor may consider alternative terminology for “your institution.”

Round 3

19. Which of the following best describes your bachelor’s degree?

☛ *Mark (X) only one box.*

- It was awarded by your degree institution’s college of Education, school of Education, or department of Education
- It was awarded by another college, school, or department, not in education, within your degree institution

All eight respondents who answered this question answered correctly. Only two respondents initially had trouble answering the question. One respondent initially thought that the question was asking about a

“teacher’s college” but quickly figured out that the question was asking about her degree. Another respondent had some trouble because the state of Virginia does not allow students to major in Education. However, since she was in the Elementary Education program she felt that the first option was appropriate.

These two respondents also mentioned in the debriefing probe about this question that the phrase “degree institution” was strange and confusing. One indicated she had to read both options to be sure of her answer, and the other respondent said that there were “a lot of commas going on” in the second option.

CSM Recommendation, Round 3: This question largely works as worded. There are no recommendations for change.

Bachelor’s Degree Summary

Nearly all respondents were ultimately able to answer this question correctly across rounds, though some were initially confused by the terminology. The changes made between rounds of testing seem to have eliminated some of these issues. There are no recommendations for change.

Appendices

A: School and Teaching Demographics

NTPS Teacher Instruction Experiment School and Teaching Demographics

	Round 1 (n=8)	Round 2 (n=8)	Round 3 (n=8)	Total
School type				
Public	4	3	4	11
Private	4	5	4	13
Level taught				
Elementary	2	3	4	9
Middle	3	0	0	3
High	3	4	0	7
Secondary (middle and high)	0	1	4	5
Full or part-time teacher				
Full-time	8	8	8	24
Part-time	0	0	0	0
Location of school				
Maryland	7	8	5	20
Virginia	0	0	3	3
Washington, D.C.	1	0	0	1

B: Questionnaires and Cognitive Testing Protocols

The full questionnaires and cognitive interview protocols used in each round of testing are not included in this report due to their length. However, they are available by request. To request a copy of the Round 1, Round 2, and/or Round 3 questionnaires or cognitive testing protocols, please contact the report author, Jessica Holzberg, at Jessica.Holzberg@census.gov.

C: Numerical Results to Paired Instructions

Round 1

NTPS Instruction Experiment, Round 1

Respondent	Pair 1		Difference	Pair 2		Difference	Pair 3		Difference
	20	21		22	23		31	32	
*R1	2	2	0	1	1	0	60	4	56
**R2	n/a	n/a	n/a	2	2	0	10	3	7
***R3	3	3	0	1	1	0	200	0	200
R4	24	6	18	0	0	0	45	30	15
****R5									
R6	3	3	0	2	2	0	16	16	0
R7	0	0	0	0	1	-1	150	30	120
*****R8	10	3	7	3	3	0	38	24	14
R9	12	3	9	2	2	0	6	12	-6
Sum	54	20		11	12		525	119	
Mean	6.8	2.5		1.4	1.5		65.6	14.9	

Respondent	Pair 4		Difference	Pair 5		Difference
	35	36		38	39	
*R1	8	4	4	48	36	12
**R2	n/a	n/a	n/a	2	0	2
***R3	1	1	0	30	0	30
R4	1	1	0	122	24	98
****R5						
R6	2	1	1	12	12	0
R7	2	2	0	28	10	18
*****R8	2	1	1	180	45	135
R9	1	1	0	60	60	0
Sum	17	11		482	187	
Mean	2.1	1.4		60.2	23.4	

Green cells = difference was in the hypothesized direction. Yellow cells = no change. Red cells = change in the opposite direction.

* Pair 2 may have been biased by interviewer, who accidentally told her what she considers to be postsecondary.

** Pair 4 is n/a because of the reference year. Date was changed for subsequent interviews.

*** Respondent should have written 2 for 22 but misunderstood “postsecondary.”

**** Respondent was not a teacher; interview dropped from analysis and replaced by R9.

***** Initially wrote 12 for question 31 then changed her answer.

Round 2

NTPS Instruction Experiment, Round 2

Respondent	Pair 1		Difference	Pair 2		Difference	Pair 3		Difference	Pair 4		Difference
	11	12		14	15		16	17		23	24	
*R1	Skipped	Skipped	n/a	60	5	55	2	4	-2	3	5	-2
R2	6	3	3	6	6	0	1	0	1	7	2	5
**R3	4	Skipped	n/a	70	7	63	2	10	-8	5	5	0
R4	4	3	1	5	3	2	2	3	-1	1	0	1
R5	2	2	0	36	10	26	30	8	22	5	2	3
***R6												
R7	5	3	2	0	0	0	1	5	-4	0	0	0
R8	5	3	2	80	3	77	8	3	5	5	1	4
R9	5	5	0	33	4	29	10	5	5	2	0.5	1.5
Sum	31	19		290	38		56	38		28	15.5	
Mean	3.9	2.4		36.3	4.8		7	4.8		3.5	1.9	

Respondent	Pair 5		Difference	Pair 6		Difference	Pair 7		Difference	Pair 8		Difference
	25	26		28	29		30	31		33	34	
*R1	1	0	1	32	32	0	14	4	10	48	48	0
R2	1	1	0	30	30	0	11	3	8	0	0	0
**R3	3	1	2	36	28	8	5	3	2	60	48	12
R4	1	1	0	41	33	8	9	3	6	48	24	24
R5	2	0	2	22	22	0	16	6	10	44	44	0
***R6												
R7	2	0	2	15	12	3	7	5	2	0	0	0
R8	7	0	7	23	18	5	8	3	5	35	25	10
R9	1	0	1	24	19	5	6	3	3	24	24	0
Sum	18	3		223	194		76	30		259	213	
Mean	2.3	0.4		27.9	24.3		9.5	3.8		32.4	26.6	

Green cells = difference was in the hypothesized direction. Yellow cells = no change. Red cells = change in the opposite direction.

* Skip pattern prevented R from answering the first pair.

** Respondent's incorrect navigation caused her to skip a question in the first pair.

*** Respondent skipped out of questionnaire almost immediately; interview dropped from analysis.

Round 3

NTPS Instruction Experiment, Round 3

Respondent	Pair 1		Difference	Pair 2		Difference	Pair 3		Difference	Pair 4		Difference
	10	11		12	13		14	15		16	17	
*R1	skipped	skipped	n/a	24	12	12	92	80	12	78	0	78
*R2	skipped	skipped	n/a	15	2	13	35	26	9	26	13	13
*R3	skipped	skipped	n/a	5	6	-1	refused	10	n/a	20	20	0
*R4	skipped	skipped	n/a	23	12	11	32	12	20	33	6	27
**R5												
R6	18	4	14	3	0	3	1	0	1	78	72	6
*R7	skipped	skipped	n/a	6	0	6	25	25	0	50	refused	n/a
R8	14	7	7	1	1	0	120	100	20	70	50	20
R9	3	2	1	27	3	24	3	3	0	96	96	0
***Sum	35	13		104	36		308	246		451	257	
***Mean	11.7	4.3		13	4.5		44	35.1		64.4	36.7	

Respondent	Pair 5		Difference	Pair 6		Difference	Pair 7		Difference	Pair 8		Difference
	20	21		22	23		25	26		27	28	
*R1	4	26	-22	2	5	-3	41	23	18	14	6	8
*R2	22	18	4	7	1	6	29	0	29	18	3	15
*R3	15	5	10	2	1	1	40	40	0	14	6	8
*R4	7	4	3	1	4	-3	32	29	3	4	5	-1
**R5												
R6	25	18	7	2	2	0	11	10	1	13	0	13
*R7	10	2	8	2	1	1	11	10	1	11	2	9
R8	8	5	3	2	0	2	7	6	1	3	1	2
R9	6	2	4	1	0	1	45	35	10	11	3	8
***Sum	97	80		19	14		216	153		88	26	
***Mean	12.1	10		2.4	1.8		27	19.1		11	3.3	

Green cells = difference was in the hypothesized direction. Yellow cells = no change. Red cells = change in the opposite direction.

* Skip pattern prevented R from answering the first pair.

** Respondent was not a teacher; interview dropped from analysis and replaced by R9.

***R3 is excluded from pair 3 calculations and R7 is excluded from pair 4 calculations for sum and mean because of an incomplete comparison.

NTPS Instruction Experiment, Round 3 (continued)

Respondent	Pair 9		Difference	Pair 10		Difference
	29	30		32	33	
*R1	8	0	8	60	60	0
*R2	146	41	105	16	16	0
*R3	100	90	10	12	12	0
*R4	80	39	41	7	3	4
**R5						
R6	0	0	0	0	0	0
*R7	0	0	0	30	30	0
R8	21	14	7	0	0	0
R9	0	12	-12	132	12	120
***Sum	355	196		257	133	
***Mean	44.4	24.5		32.1	16.6	

Green cells = difference was in the hypothesized direction. Yellow cells = no change. Red cells = change in the opposite direction.

* Skip pattern prevented R from answering the first pair.

** Respondent was not a teacher; interview dropped from analysis and replaced by R9.

*** R3 is excluded from pair 3 and R7 is excluded from pair 4 calculations for sum and mean because of an incomplete comparison.