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The Measurement of Home Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Graders to Questionnaire Items and Parental Assessment of the Invasiveness of These Items

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**The Measurement of Home Background Indicators:
Cognitive Laboratory Investigations of the Responses of
Fourth and Eighth Graders to Questionnaire Items and
Parental Assessment of the Invasiveness of These Items**

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U.S. Department of Education
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National Center for Education Statistics

September 2001

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EXECUTIVE SUMMARY

Cognitive interviewing procedures were developed to investigate how fourth and eighth grade students respond to survey items asking about home and family factors. The survey items studied were taken from large, U.S. Department of Education studies, including the National Assessment of Educational Progress (NAEP) background questionnaires and the National Educational Longitudinal Study (NELS:88).

Students were trained to think aloud, providing insights into the cognitive processes they employed in responding to these survey items. In addition, specific probes were created and used to provide further information about their response processes. The procedures also included a validation component. Information relevant to each item was provided by a parent in the first half of the data collection session. This material was integrated with additional information provided by the parent and the student in the second half of the session, producing a criterion against which the student's initial response could be compared. With this knowledge, it was possible to identify errors and the reasons that these errors occurred. This information was used to revise many of the items, which underwent further testing in the second phase of this project.

- ▶ *The procedures that were employed were positively evaluated by participants. Unsolicited thank-you letters were received, indicating that both parents and students found the experience both enlightening and enjoyable.*

Although relatively small numbers of students (48 fourth graders and 23 eighth graders) participated in this research, when these kinds of procedures are employed in usability testing of computer hardware and software, they are capable of detecting 90 percent of the problems and all of the global usability problems – with samples of only ten participants.

Comparisons of error rates for the original items and the modified items suggest that the modifications were effective. However, since the sample sizes were small and since the sample of 24 fourth grade students who responded to the revised items was younger and contained proportionally more minority group members than the sample of 24 fourth graders who responded to the original items, results are suggestive rather than probative.

- ▶ *Compared to the error rate of 43 percent prior to modification, the error rate for the modified items was 32 percent.*
- ▶ *The error rate for the 23 eighth graders who were administered the revised items was 27 percent. Since eighth graders were only administered the revised items, error rate comparisons with the original items are not possible. As expected, the error rate for eighth graders was less than the error rate for fourth graders.*
- ▶ *Certain items required students to estimate the frequency with which specific behaviors occurred or to estimate time durations and then to average these estimates. Many fourth graders and several eighth graders produced incorrect answers because they lacked the cognitive skills and abilities to synthesize a correct answer. For the items that did not require behavioral frequency or time estimates, item modifications reduced the error rates from 33 percent to 20 percent for fourth graders.*

The procedures allowed identification of unexpected problems with particular items. For example, there was a 25 percent error rate to an item which asked, “Does either your father or your stepfather live at home with you?” Furthermore, all of the errors were in the same direction.

The reasons for these errors were:

- ▶ *Some children reported that their fathers didn’t really live at home with them since they work almost all of the time, and*
- ▶ *Confusion about how to interpret the conditional “or.” That is, since the child didn’t have a stepfather, the child responded “No.”*
- ▶ *After modifications to deal with these issues, the error rate for this item, for fourth graders, was reduced to 8 percent.*

Certain items failed because fourth graders lacked the knowledge to provide a correct answer. Even with modifications, error rates to some items could not be reduced to acceptable levels.

- ▶ *Fourth graders are not knowledgeable informants about their parents’ education levels.*
- ▶ *Eighth graders’ responses to the revised item about their father’s education were more accurate (17 percent error rate) than their responses to the initially presented item about their mother’s level of education (67 percent error rate).*

Items asking about the frequency with which regular and common events occur also are associated with high error rates. Children, particularly fourth graders, have difficulty estimating the frequencies of generic events.

- ▶ *Fourth graders had difficulties estimating how often their parents read (67 percent error rates), read for fun (58 percent error rates), and use mathematics (75 percent error rates).*

Children, particularly fourth graders, are very literal in their interpretation of survey items. Many errors were made for this reason.

- ▶ *Some children who knew their parents brought books into bed or into the bathroom would not consider these behaviors as examples of “seeing” their parents read.*
- ▶ *A child who talked about things he studied in school with his father on the ride to and from school did not include this behavior as an example of “talking about things ... studied in school with an adult at home.” This was because talking in the car was not “at home.”*
- ▶ *At least three children counted their pets as “family members.”*

Fourth and eighth grade students’ reports of the amount of time they spend doing homework are usually close to, but rarely identical with parental reports (58 percent error rate for fourth graders; 55 percent error rate for eighth graders).

- ▶ *Fourth graders have difficulty estimating unstructured time. Some fourth graders also include total time; breaks and other activities engaged in during “homework time” are included in their estimates.*

- ▶ *Five out of six eighth graders whose reported amount of homework differed from a parent's estimate overestimated the amount of homework time. One of these eighth graders explained that it was "funner to say you spend more time doing homework than you actually do."*

Although there is no item asking about parental marital status, an item was drafted to see if fourth and eighth graders could answer the question, "Are your parents divorced or separated?"

- ▶ *Both fourth and eighth graders answered this item correctly. There was a zero percent error rate.*

Fourth and eighth grade students' responses to two items asking about their race/ethnicity were investigated. Both items listed the standard five racial/ethnic categories; a sixth category ("multiracial") was included in one of the versions.

- ▶ *Using the standard five categories, 87 percent of the fourth and eighth graders were able to describe their own race/ethnicity accurately. When a multiracial option was provided, the accuracy of self-identification was 65 percent.*
- ▶ *Only 57 percent of the students could correctly define multiracial.*
- ▶ *Five out of 12 eighth grade students misread "multiracial" as multicultural.*
- ▶ *An eighth grader described himself as multiracial "because my mother is Irish and my father is Italian."*

Survey items were also evaluated by parents with respect to their intrusiveness. Parents were asked how uneasy they would feel about having children (or having their child) answer each item. They were also asked about the reasons for their feelings.

- ▶ *Nearly half (49 percent) would feel "moderately" or "very uneasy" about asking children a family income question.*
- ▶ *About 21 percent of the parents would feel "moderately" or "very uneasy" about asking children questions about the child's race/ethnicity.*
- ▶ *For the rest of the items, at least 66 percent of the parents were "not at all uneasy" about having children respond.*
- ▶ *Seventy-one percent of the parents were "not at all uneasy" about a question dealing with divorce; only 11 percent were "moderately" or "very uneasy" about this question.*
- ▶ *Only one percent of the parents interviewed were "moderately" or "very uneasy" about asking children questions dealing with:*
 - S number of books in the home*
 - S frequency with which mother reads for fun*
 - S language spoken at home*
 - S time child spends reading for fun*
 - S whether a newspaper is received regularly*
 - S amount of time spent on homework*

Further insights into parental feelings about the intrusiveness of these items were gained through use of a Parental Item Sensitivity Review Panel (focus group).

- ▶ *This panel unanimously disapproved asking children about:*
 - S marital status of parents*
 - S annual family income*
- ▶ *There was also a strong disapproval of asking children:*
 - S the mother's wishes about her child's education attainment*
 - S the number of adults in the home*
 - S their race/ethnicity*
 - S the father's educational attainment*
- ▶ *General areas of concern about items included beliefs that the child either would not understand the item or would not be able to answer it accurately and the lack of relevancy of the item.*
- ▶ *Student survey items dealing with the following topics received unanimous approval from parents:*
 - S frequency of talking with adults about school*
 - S receiving newspaper regularly*
 - S parent limits on TV watching*
 - S talk with adult about grades, safety, and other school-related areas*
- ▶ *Student survey items dealing with the following topics received near unanimous (six out of seven panel group members) approval from parents:*
 - S time spent on homework*
 - S child's expectations about educational attainment*
 - S amount of TV watching*
 - S number of books in home*
 - S use of home computer*
 - S having own desk or table for study at home*

Parents were more positive about asking these items as part of a parent survey. Certain items were seen as less relevant. A majority of the parents was opposed to having the following items asked as part of a parent survey:

- ▶ *father's wishes for child's educational attainment*
- ▶ *race/ethnicity of child*
- ▶ *annual family income*
- ▶ *presence of household items (car, VCR, musical instruments)*

In summary, the procedures that were developed enabled detection of survey item problems, provided an understanding of why these problems were occurring, and thereby lead to minor item modifications which substantially reduced error rates (from 43 percent to 32 percent). Although the reduced error rate (32 percent) seems high, it was found that certain types of problems could not be corrected through minor item modifications. For example, many fourth graders simply do not know how much education their parents have attained. Rewording questions about parental levels of education cannot overcome this lack of knowledge.

High error rates were characteristic of “behavioral frequency” items -- that is, items asking students how often they or their parents engage in certain activities. Many fourth graders lack the cognitive abilities and skills required to produce the finely grained behavioral frequency estimates that were requested by these items. Minor item modifications also could not overcome these problems; major item modifications (such as substantial changes of the time period of concern, of the scale categories, or the development of a different indicator of the construct of interest) might be capable of reducing the error rates for these types of items.

Alternatively, parents could provide data for items for which students are poor respondents. The parents of children participating in this research felt that these were appropriate things to ask children about. In addition, a Parent Item Sensitivity Review Panel indicated that they felt the provision of information by a parent in many of these areas was reasonable, in the context of an education research study.

1 . INTRODUCTION

Background

The National Assessment of Educational Progress (NAEP) has a need for socioeconomic status (SES) measures, measures of education capital, measures of social capital, and measures of other home background factors, due to their perceived importance as predictor variables of student achievement. Attempts are made to collect data on these measures through surveys of students participating in the assessment. However, there has been concern about the quality of these measures. Data from fourth graders on certain variables, such as levels of parental education, are of questionable reliability, due to high rates of omission. For similar reasons, the quality of data from eighth grade students, especially from minority students, is also suspect.

This project was undertaken to investigate existing NAEP and other student background survey items used by the National Center for Education Statistics (NCES) to provide feedback to improve the current NAEP student background questionnaires. Since it was anticipated that fourth graders would have more difficulties in responding to home background indicator items than eighth graders, a greater proportion of project resources was devoted to investigation of how fourth graders (in contrast to eighth graders) respond to survey items. To support this investigation, a protocol, based on cognitive survey research techniques, was developed. This protocol included a validation component. To the best of our knowledge, it represents the first systematic cognitive investigations of the questionnaire response process in fourth and eighth grade children.

After the initial round of data collection and the presentation of preliminary findings, it was decided to use these procedures to investigate how children respond to items asking about racial/ethnic identification. Accordingly, during the second round of data collection, student recruitment procedures were modified to enable investigation of current and proposed race/ethnicity questionnaire items.

During this project, we also investigated parent concerns about the appropriateness of the Department of Education's collection of information about home and background factors. To address these concerns, parents were asked how they felt about having their child respond to each of the survey items. Parental concerns were also addressed through the creation of a Parent Item Sensitivity Review Panel. This panel, meeting in a focus group format, discussed the appropriateness of having children answer each of the items studied. The panel also evaluated the appropriateness of having parents answer each of the items studied and provided information about what parents do to help their children do well in school.

Overview of the Report

This report is divided into five chapters. This first chapter discusses the procedures employed in choosing items for cognitive investigations, issue of subject recruitment, and the basic protocol used to investigate the questionnaire response process in fourth and eighth graders. The second chapter discusses the results of the cognitive investigations. Survey items dealing with race/ethnicity are discussed in the third chapter. The fourth chapter summarizes parental responses to items asking how they felt about their children answering home background items. The final chapter discusses focus group results from the Parental Item Sensitivity Review Panel.

Identification of items for assessment in the Cognitive Survey Laboratory

To identify candidate items for assessment, the following steps were taken:

- (1) Surveys were reviewed to prepare a master list of candidate items. The surveys included:

- NAEP Student Questionnaires
- NAEP 1991-92 Grade 4 School Characteristics and Policies Questionnaire
- NAEP Draft Parent's Survey
- NELS:88 Baseline Year Student Survey
- NELS:88 First Follow-Up Survey
- NELS:88 Second Follow-Up Survey

All items in these surveys that asked about home background factors were abstracted and classified according to the domain of the indicator (i.e., SES, Educational Capital, Social Capital, or Parental Involvement). This process produced a master listing of 263 potential candidate items for assessment. Potential problems with the administration of each of these items were noted, along with suggested modifications.

- (2) An initial set of 24 candidate items was selected for assessment from the master list. This set was sent to NCES (along with the master list of items) for review and comment.
- (3) NCES selected 25 items for assessment. Some new items were added to the preliminary set: a few items were deleted. Several items were modified to eliminate obvious problems and to correspond to the way in which they probably would be administered in the future.

Development of protocol for pilot testing in the Cognitive Survey Laboratory

A draft protocol for administering these items to fourth graders and their parents was developed and reviewed both internally and by two project consultants: Dr. Robert Belli, a cognitive survey researcher at the University of Michigan's Institute for Survey Research and Dr. Catherine O'Connor, a professor of education at Boston University who has used think-aloud protocols to investigate how third and fifth grade students read text and answer test questions. Their excellent suggestions were used to further revise and improve the pilot test protocols.

Pilot test

Five fourth graders and their parents were recruited as subjects for the pilot test, which was conducted from 25 April to 28 April 1996. Dr. Belli arrived in Palo Alto on Thursday, 25 April, and helped train AIR staff in the administration of these protocols. The first session was conducted that evening. Results were reviewed by AIR staff and Dr. Belli immediately after the session and the following morning. Minor procedural modifications were implemented, and two additional participants were administered the revised protocol on Friday, 26 April. Results were again reviewed, minor procedural modifications were implemented, and an additional participant was administered the protocol on Saturday, 27 April. After a fifth pilot test subject was run, procedures were reviewed and slightly modified in a conference call between participating AIR staff and Dr. Belli. The protocol, discussed later in this section, was then finalized.

Prior to the pilot test, there were two major concerns:

- (1) Would fourth graders be able to "think aloud?"
- (2) Would the protocol produce useful data?

After the pilot test, it was apparent that the practice exercises and probes were quite successful in getting fourth graders to think aloud. Dr. Belli commented that these fourth graders were better than many adult cognitive survey lab participants. In fact, the pilot test was so successful that there was some concern that the pilot test participants might be atypical since they all seemed so verbal and bright. They were exceedingly open and forthright and not at all hesitant to share what they were thinking.

Subject recruitment

Local schools were contacted to recruit a heterogeneous group of participants. Informational materials about the study were prepared and distributed. These materials (see Appendix A¹) included both a form for interested parents to complete and return to AIR (with a post-paid envelope attached) and our telephone numbers. The materials were distributed to approximately ten different elementary schools in four different school districts in the San Francisco Bay Area. In addition, AIR staff with children were invited to participate in the research.

Spanish versions of the informational materials were also prepared and distributed. AIR staff fluent in Spanish conducted interviews with Spanish speaking parents and their children.

Potential subjects were screened to permit selection of a heterogeneous population. All potential participants provided a telephone number at which they could be contacted. During the initial contacts, questions about the study were answered and demographic information about the family was collected. Appointments were scheduled with participants who met our screening criteria (to ensure diversity with respect to SES and race/ethnicity). A follow-up letter was sent, confirming the appointment and providing directions to AIR. A reminder phone call was made the night before each appointment.

PROTOCOL

Description of protocol

Interviewers were trained in administration of these protocols during a day-long training session. A copy of the protocols and support materials used in the first phase of the study is provided as Appendix B. Since only about a dozen items could be administered in a test session, the 25 items were divided into two sets of about a dozen items each (Forms A and B). Separate protocols were prepared for each form. Figure 1-1 provides an overview of the protocol. The protocol used in the second phase of the study is provided as Appendix C. A brief description of how these materials were implemented is provided below.

¹ The materials in Appendix A are those used for recruiting fourth grade students and their parents. For recruiting eighth grade students and their parents, the expression “fourth grade” was replaced by the expression “eighth grade” in these materials.

Informed consent

Upon arrival at the Cognitive Laboratory, participants were greeted by a member of the research team. A consent form was presented. The student was encouraged to read this form out loud. Any questions that the student or parent had were answered at this time. We explained what was meant by confidential to insure an understanding on both the part of the child and parent. The fact that the session was going to be videotaped was also repeated. The student was reminded that his or her parent would be seeing the videotape afterwards. The consent form was then signed by both the child and parent.

Spanish versions of the consent forms were prepared and administered to parents for whom Spanish was their primary language.

Video release forms

After the end of the session, and after participants received their honoraria, both the parent and child were asked to sign a video release form. This form gave AIR permission to edit the videotape and to prepare and present videotapes for informational and instructional purposes. All participants agreed to this request and signed the forms. Spanish language versions of these forms were prepared and administered when appropriate.

Participation was positively evaluated by both children and parents. One parent indicated that she felt guilty about accepting the participant fee. Another parent sent back a note saying: “We both had a fun and educational experience participating in your study. (CHILD) has proudly explained to friends and family about his part in the program. We have both had fun telling Grandma about some of the surprising responses (CHILD) had on some questions! Hope everything is progressing well.”

Figure 1-1. Research Protocol

Part 1 (35–45 minutes)

Child

- 1) Practice think-aloud exercises
- 2) Child answers survey items that require problem solving
 - Probes administered, as appropriate
- 3) Child answers survey items that primarily require recall of information
 - Probes administered, as appropriate

Parent

- 1) Parent is interviewed about the invasiveness of each survey item
- 2) Parent provides the following information about each item administered to his/her child:
 - Right answer
 - Expected answer
 - Reason for discrepancy, if any

Part 2 (35–45 minutes)

- 1) Watch videotape of Part 1 (with researcher who had interviewed parent)
- 2) Probing of responses which differ from those the parent indicated were correct

- 1) Watch video of Part 1 (in observation room, with researcher who had interviewed child)
- 2) Probing of parental responses which differ from those provided by child

Part 1: Child interview

The child and one of the interviewers went to the study/observation room. Prior to entering, the child was again reminded that everything was going to be videotaped. The child was then trained in the production of think-alouds through use of two practice exercises and modeling on the part of the researcher. Different, age-appropriate practice exercises were used for fourth and eighth graders. These exercises were followed by presentation of the survey items.

The survey items were printed on sheets of paper, with one question per page. The initial presentation of the item contained only the question, without response options. Accordingly, the child was asked to read the item out loud, and then asked to answer the question, telling what (s)he was thinking and how (s)he came up with the answer. A set of general probes was prepared and employed to encourage verbalization, as needed. For each item, there also were specific, directed probes.

After the child responded to the initial presentation of the question, (s)he would turn the page and read the next question aloud -- in this case, the same stimulus question, with response options. Again, the child was asked to verbalize his/her thought processes and indicate how he/she would respond and the reasons for so responding. The same process

was repeated for the dozen items being investigated. (It should be noted that the stimulus question was presented without response options for about half the items.)

After all the items were answered, the child was given a few minutes of break time. Refreshments were provided. The videotape was rewound, and a new videotape set up to record the second part of the session.

Part 1: Parent interview

While the child was answering the survey questions, parents were interviewed in a different room. During this interview, parents were presented with a listing of all 25 questions being evaluated (plus an item asking about household income). For each of these items, they were asked, “Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy?” They were then asked the reasons for their response. After the first round of data collection, the evaluation question was modified to ask, “Do you think having your child answer this question would make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy?”

After all 25 items were presented, parents were asked about the dozen items their child was answering. They were asked how they thought their child would respond to each item, what the correct answer was, and, if these responses were different, why there was a discrepancy. Specific questions about each item were also asked, to provide essential contextual information.

After all the items were answered, the parent was given a few minutes of break time, with optional refreshments. The researcher photocopied a copy of the parent’s responses and provided them to the other interviewer for Part 2.

Part 2: Child interview

The child was brought back to the observation room by the member of the research team who had interviewed the parent. The initial videotape was played back for viewing. During this playback, the researcher (who previously interviewed the parent) was aware of the “correct” response. Whenever the child’s responses were discrepant from the parent’s report, the tape was stopped and the reasons for these discrepancies were probed.

Part 2: Parent interview

Concurrently, the parent (in an adjacent room, behind a one-way mirror) was observing the child-researcher interaction. When the child’s responses were discrepant, the parent was asked for possible explanations. Parents could (and did) inform about the veracity of the child’s responses thereby permitting the detection of confabulation.

After the videotape was played and reviewed, the child was reunited with his or her parent. Any questions about the research were answered. Parents and children were thanked for their help. They received their participation honorarium (\$50.00) and signed a receipt form. After this, they were asked to sign a video release form, to allow portions of their child's interview to be used in videotapes that could be shared with the sponsor and with other interested researchers.

Assessment of a "correct response"

In order to summarize results, each child's response to each completed item had to be compared with the "correct" response. For most items, the parent's response to the question "What is the right answer?" was considered to be the correct response. However, as part of the process of probing responses, situations would arise which unequivocally indicated that the parent had misunderstood the question. The question would be rephrased to allow the parent to provide a response consistent with the intent of the item. This response would be treated as the correct response.

In other situations, upon reviewing the videotape, the parent would indicate that the child's response was probably more accurate. In these cases, the child's response would be considered as a "correct response."

2 . ANALYSES OF QUESTIONNAIRE ITEMS

Overview

In the first phase of the project, items were administered to fourth grade students. After responses were analyzed, most of the items were revised and readministered to a different group of fourth graders and to a group of eighth graders. This was the second phase of the project.

In this section, results are presented for both phases. The results of the initial administrations of the items in phase 1 are labeled as “**Fourth graders (1).**” For each item, results begin with the error rates and the direction and average magnitude of the errors. A table classifying each response with respect to its “correctness” is then presented. (A “correct” response is defined below.) This is followed by a discussion of the errors and suggested changes in the item, if necessary.

Results of administration of the revised items to the second group of fourth graders are presented and labeled as “**Fourth graders (2).**” They are summarized in the same way as “**Fourth graders (1).**” Results of item administrations to eighth graders are similarly summarized. They are labeled “**Eighth graders.**” After these results are presented, results for the item are summarized with respect to the impact of the revision on the accuracy of fourth graders’ responses (“Revision effects”) and differences in the performance of fourth and eighth graders on the item (“Age effects”). This is followed by recommendations for further revisions or further actions to be taken, if necessary.

Form A and Form B

The items in each form were numbered consecutively, beginning with the number 1. Results are presented for Form A items and then for Form B items. Each item is prefaced with a grade level and a parenthetical number. A parenthetical 1 indicates the item, as originally administered; a parenthetical 2, the revised item.

Summary statistics calculation

Error rates were calculated for each item administration. Discrepancies were also summarized with respect to direction (i.e., underreporting and overreporting). The magnitude of discrepancies for ordinal items was quantified in terms of the number of category (scale) units.

Overall results of revisions

Error rates prior to revisions and after revisions were made are presented and discussed after Form B results.

Survey A Items

Form A Items

Fourth graders (1)

1. How often do you talk about things you have studied in school with an adult at home?

Almost every day	G	
Once or twice a week		G
Once or twice a month		G
Never or hardly ever		G

Error rate	38% (5 out of 13 responses)
Number of children reporting more frequently	0
Average amount of overreporting	n/a
Number of children reporting less frequently	5
Average amount of underreporting	1.6 scale units

"Correct" responses	Student responses			
	never or hardly ever	1-2 times/month	1-2 times/week	almost every day
never or hardly ever	-	-	-	-
1-2 times/ month	-	-	-	-
1-2 times/ week	-	-	1	-
almost every day	1	1	3	7

Discussion

There were some problems with this item. Besides a substantial error rate, all of the errors were in the same direction: children underreporting the frequency with which they talked to an adult about things they had studied in school.

One reason for this outcome was that some children (two) responded to the question in a very literal sense. That is, one child did not include talking *in the car* since it was not "at home." Another child did not include *homework* as part of "things studied at school," whereas the child's parent did.

Revision

How often do you talk about things you have studied in school with *an adult member of your family*?

Almost every day	G	
Once or twice a week		G
Once or twice a month		G
Never or hardly ever		G

Fourth graders (2)

1. How often do you talk about things you have studied in school with an adult member of your family?

Almost every day	G	
Once or twice a week		G
Once or twice a month		G
Never or hardly ever		G

Error rate	42% (5 out of 12 responses)
Number of children reporting more frequently	0
Average amount of overreporting	n/a
Number of children reporting less frequently	5
Average amount of underreporting	1.4 scale units

"Correct" responses	Student responses			
	never or hardly ever	1-2 times/ month	1-2 times/ week	almost every day
never or hardly ever	-	-	-	-
1-2 times/ month	-	-	-	-
1-2 times/ week	-	-	-	-
almost every day	1	-	4	7

Discussion

Once again, all of the discrepancies resulted from children reporting talking to adult family members about school work *less* frequently than their parents reported. For all five discrepancies, parents reported that they talked to their children about school "almost every day." Four of these five children gave the response of "once or twice a week." The "once or twice a week" only is a single scale unit different from "almost every day." Again, children seemed to be interpreting the item more literally than their parents. For example, one child interpreted "talking about school" as discussions about specific topics such as homework and

school projects while the parent was thinking of more general questions like “how was your day at school?”

The phrase “you talk about” has an implied directional component. In other words, responding to a direct question is not the same as “talking about.” For some people, there is a self-initiated component that is implied. Specifically, one child only thought of conversations that were self-initiated while the parent reported about all conversations.

Eighth graders

1. How often do you talk about things you have studied in school with an adult member of your family?

Almost every day	G
Once or twice a week	G
Once or twice a month	G
Never or hardly ever	G

Error rate	27% (3 out of 11 responses)
Number of children reporting more frequently	0
Average amount of overreporting	n/a
Number of children reporting less frequently	3
Average amount of underreporting	1.7 scale units

“Correct” responses	Student responses			
	never or hardly ever	1-2 times/ month	1-2 times/ week	almost every day
never or hardly ever	-	-	-	-
1-2 times/ month	-	-	-	-
1-2 times/ week	-	-	-	-
almost every day	-	2	1	8

Discussion

There was one child who apparently overreported. However, on probing, it was determined that the parent stated that she asks her child about school every day, but her daughter does not always respond. However, this was included by the child, who also based her response on her conversations with both parents. (The mother only answered for herself.) Accordingly, the child's response was considered to be correct for summary purposes. For the remaining three cases, the children and parents had different interpretations of the concept "talking about things you have studied in school." The children were much less inclusive and, for this reason, probably more accurate.

Summary of Question 1

Revision effects

The revision did not change the error rate much for fourth graders (38 percent versus 42 percent). However, it did seem to solve the problem of avoiding children's literal interpretation of "at home" (e.g., children not including talking in the car as part of "at home").

Age effects

The item seems to be working fairly well for fourth graders. Although there were some discrepancies, it appears that the children are interpreting the item correctly and are reporting about school topics of a more specific nature than their parents. For eighth graders, it is quite possible that the children, and not their parents, are interpreting the item correctly (e.g., social questions should not be counted). It is noteworthy that 35 of the 36 parents reported that this was something that their child did almost every day. This most likely reflects the social desirability of the behavior.

The eighth graders had a slightly lower error rate (27 percent). Overall, the revised item seems to be working fairly well for both fourth and eighth graders.

Recommendations

To avoid children interpreting the item as only including self-initiated conversation, the item can be changed as follows:

How often do you *and an adult member of your family* talk about things you have studied in school?

Almost every day	G
Once or twice a week	G
Once or twice a month	G
Never or hardly ever	G

Fourth graders (1)

2. How often do you see your mother reading books, magazines, or newspapers?

- Every day G
- A few times a week G
- Once a week G
- Once a month G
- Less than once a month G
- Never G

Error rate 67% (8 out of 12 responses; 1 response had incomplete information)

Number of children reporting more frequently 1

Average amount of overreporting 2 scale units

Number of children reporting less frequently 7

Average amount of underreporting 1.1 scale units

"Correct" responses	Student responses					
	never	less than once/week	once a month	once a week	a few times a week	every day
never	-	-	-	-	-	-
less than once/week	-	-	-	-	-	-
once a month	-	-	-	-	-	-
once a week	-	-	-	-	-	1
a few times a week	-	-	-	-	-	-
every day	-	-	-	1	6	4

Discussion

This item is in need of revision. Similar to Question 1, children tended to underreport the frequency with which they saw their mother reading. Again, this appears to be associated with children's literal interpretations of words, in this case “*see* your mother reading.” Students would know that their mother brought reading material to bed but would not report this as reading since they did not see their mother reading. Certain types of regularly occurring reading events, such as reading the newspaper at breakfast, were not attended to by some children. They could not spontaneously recall such reading episodes.

Revision

How often *does* your mother read *for fun*?

Every day	G
<i>Almost every day</i>	G
A few times a week	G
Once a week	G
<i>Less than once a week</i>	G
My mother doesn't read for fun	G

NOTE: In suggesting this revision, we assumed that the construct this item was attempting to assess was the parent serving as a reading role model at home. Parents who work at home, or children who see their parents working frequently would be more likely to respond affirmatively to the former item. By shifting from seeing mother/father read to asking how much the child believes they read for pleasure, issues of job-related reading and home offices could be minimized.

We recognize that a child will not know how much a parent reads for fun. However, from the perspective of a role model, the actual amount of reading is less important than the perceived (or believed) amount of reading.

Due to underreporting, the response options were slightly changed to create more item variance.

Fourth graders (2)

2. How often does your mother read for fun?

Every day	G
Almost every day	G
A few times a week	G
Once a week	G
Less than once a week	G
My mother doesn't read for fun	G

Error rate	58% (7 out of 12 responses)
Number of children reporting more frequently	5
Average amount of overreporting	2.2 scale units
Number of children reporting less frequently	2
Average amount of underreporting	1.5 scale units

"Correct" responses	Student responses					
	doesn't read	less than once/week	once a week	a few times a week	almost every day	every day
doesn't read	-	-	-	-	-	-
less than once/week	-	-	1	1	2	-
once a week	-	-	1	-	-	-
a few times a week	-	-	-	1	-	1
almost every day	-	-	-	1	2	-
every day	-	-	-	1	-	1

Discussion

One potential discrepancy was resolved because a parent acknowledged that her child provided a more accurate response. Upon hearing the child's answer and explanation, the mother realized that she had not correctly estimated the amount of time she spends reading for fun.

Three discrepancies occurred because children and their mothers interpreted "reading for fun" differently, or included different experiences when they came up with their answer. In two of these cases there was disagreement between the child and parent about whether or not the time spent reading alone should be counted as "reading for fun." In the third case,

the child included the time the mother spent reading to the sister but the mother did not. In the remaining four cases, children’s estimates were simply inaccurate, due to lack of knowledge or estimation difficulties.

Eighth graders

2. How often does your mother read for fun?

- Every day G
- Almost every day G
- A few times a week G
- Once a week G
- Less than once a week G
- My mother doesn’t read for fun G

Error rate 36% (4 out of 11 responses)
 Number of children reporting more frequently 1
 Average amount of overreporting 1 scale unit
 Number of children reporting less frequently 3
 Average amount of underreporting 1.7 scale units

“Correct” responses	Student responses					
	doesn’t read	less than once/week	once a week	a few times a week	almost every day	every day
doesn’t read	-	-	-	-	-	-
less than once/week	1	-	-	-	-	-
once a week	-	-	-	-	-	-
a few times a week	-	-	-	1	-	-
almost every day	-	-	-	-	-	1
every day	-	-	-	2	-	6

Discussion

One potential discrepancy was resolved because the child provided more accurate information than the parent. The child counted time the parent spends reading the bible and other inspirational readings but the parent failed to include these materials.

For the three cases in which children underreported, the discrepancies occurred because the children only took into account instances in which they *saw* their mother reading. They might not have been aware of their mothers' reading habits, or hesitant to guess. In the case where the child overestimated, the mother thought her child guessed incorrectly.

Summary of Question 2

Revision effects

The revision of the item did not appear to substantially improve the item for fourth graders. However, instead of an underreporting bias (seven out of eight errors), it produced a bias in the other direction, where five out of seven fourth graders making errors overreported.

Age effects

This item does not appear to be working very well for fourth graders. They know whether or not their parents read for fun, but cannot provide good estimates of how much time they spend on this activity. Fourth graders may not be appropriate informants for this type of item.

The item works better for eighth graders but still seems to be problematic because some children tend to construct their responses based on direct observation rather than drawing inferences about probable behavior (e.g., they only report what they actually *see* their parents doing). Some children may not be good informants about the frequency of these types of behaviors, regardless of how the question is phrased.

Recommendations

This question should not be asked of fourth graders, since they are not knowledgeable informants about parents' reading behaviors. If the item is used with eighth graders it should be restructured in the following way:

How often *do you think your mother reads books, magazines, or newspapers?*

Every day	G
A few times a week	G
Once a week	G
Less than once a week	G
My mother doesn't read books, magazines, or newspapers	G

The removal of the “Almost every day” category did not appear to improve item variance—no eighth graders selected this response for their mother’s reading. This removal should improve agreement.

Fourth graders (1)

3. How often do you see your father reading books, magazines, or newspapers?

- Every day G
- A few times a week G
- Once a week G
- Once a month G
- Less than once a month G
- Never G

Error rate 67% (8 out of 12 responses; 1 response had incomplete information)

Number of children reporting more frequently 2

Average amount of overreporting 2.5 scale units

Number of children reporting less frequently 6

Average amount of underreporting 1.7 scale units

“Correct” responses	Student responses					
	never	less than once/week	once a month	once a week	a few times a week	every day
never	-	-	-	-	-	-
less than once/week	-	-	-	-	1	-
once a month	-	-	-	-	-	-
once a week	-	-	-	-	-	1
a few times a week	-	-	-	-	-	-
every day	-	-	1	2	3	4

Discussion

Similar to Question 2, children tended to underestimate the frequency with which they saw their father reading. Again, this has to do with children's literal interpretations of words, in this case "see father reading." For example, even though a child knew that his father would bring reading material into the bathroom, the child did not count this as reading since he did not see his father read. Parents of four of the six children felt this literal interpretation was the reason for the underestimation of reading frequency.

Revision

How often *does* your father read *for fun*?

My father doesn't read for fun	G
Less than half an hour a day	G
Between half an hour and one hour a day	G
More than one hour but less than three hours a day	G
Three hours or more a day	G

NOTE: See comments for Fourth graders (1) in the previous item.

Fourth graders (2)

3. How often does your father read for fun?

Every day	G
Almost every day	G
A few times a week	G
Once a week	G
Less than once a week	G
My father doesn't read for fun	G

Error rate	58% (7 out of 12 responses)
Number of children reporting more frequently	2
Average amount of overreporting	3 scale units
Number of children reporting less frequently	5
Average amount of underreporting	2.6 scale units

“Correct” responses	Student responses					
	doesn’t read	less than once/week	once a week	a few times a week	almost every day	every day
doesn’t read	1	-	1	-	1	-
less than once/week	-	2	-	-	-	-
once a week	-	-	-	-	-	-
a few times a week	2	-	-	-	-	-
almost every day	-	-	1	-	1	-
every day	-	1	-	-	1	1

Discussion

One potential discrepancy was resolved for this question. A parent did not count the father’s reading of the newspaper as reading for fun while the child did count it. For this reason, the child provided a more accurate response.

Three children underreported the amount of time their father reads for fun because they only considered instances in which they *saw* their father reading. In two other cases, children and their parents interpreted “reading for fun” differently. One child did not count instances when the father read to himself and another did not count instances when his father reads magazines.

Eighth graders

3. How often does your father read for fun?

- Every day G
- Almost every day G
- A few times a week G
- Once a week G
- Less than once a week G
- My father doesn't read for fun G

Error rate 45% (5 out of 11 responses)
 Number of children reporting more frequently 4
 Average amount of overreporting 1.5 scale units
 Number of children reporting less frequently 1
 Average amount of underreporting 1 scale unit

"Correct" responses	Student responses					
	doesn't read	less than once/week	once a week	a few times a week	almost every day	every day
doesn't read	-	1	-	-	-	-
less than once/week	-	1	-	-	-	-
once a week	-	-	-	-	-	1
a few times a week	-	-	-	-	1	-
almost every day	-	-	-	1	2	1
every day	-	-	-	-	-	3

Discussion

One potential discrepancy was resolved because the child provided more accurate information than the parent. The child counted time the parent spends reading the bible and other inspirational readings but the parent failed to include these materials.

For one of the discrepancies, a child counted books that the father actually reads for work as reading for fun. In another case, the mother thought her son might be embarrassed by the fact that his father doesn't read and as a result, provided a socially desirable response. For the remaining three discrepancies, the children were simply not knowledgeable informants.

Summary of Question 3

Revision effects

The revision of the item did not appear to improve the item for fourth graders. Instead of an underreporting bias (six out of eight errors), it produced a bias in the other direction, where five out of seven fourth graders overreported.

Age effects

As stated in the Discussion for Question 2, this item does not appear to be working very well for fourth graders. More than half of the fourth graders were unable to provide accurate estimates of how much time their parents spend reading for fun, and the discrepancies tend to be relatively large (approximately three scale units). One can hypothesize that the problem is associated with retrieval and judgment formation: Much reading is not attended to by the child, and is therefore not encoded into memory. Accordingly, frequency judgments are based on the difficulty the child has in retrieving this information, leading to underestimates of the behavior's frequency. This item works better for eighth graders than it does for fourth graders; however, older children also seem to have trouble providing accurate responses to this question.

Recommendations

This question should not be asked of fourth graders, since they are not knowledgeable informants about parents' reading behaviors. If the item is used with eighth graders, it should be restructured in the following way:

How often *do you think your father reads books, magazines, or newspapers?*

- | | |
|---|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Less than once a week | G |
| My mother doesn't read books,
magazines, or newspapers | G |

The additional “Almost every day” category was used by some eighth graders and their parents, but may be forcing finer discriminations than it is reasonable for eighth graders to make.

Fourth graders (1)

4. How much time do you spend on homework each school day?

_____ or

I don't usually have homework assigned G
I have homework but I don't usually do it G

Error rate	31% (+/- 30 minutes; 4 out of 13 responses)
Number of children overestimating	2
Average amount of overestimation	+ 68 minutes
Number of children underestimating	2
Average amount of underestimation	- 80 minutes

Discussion

Errors were defined as discrepancies in excess of 30 minutes. Using this criterion, there was an error rate of 31 percent. Since there was no evidence of systematic bias, the item seems marginally acceptable. However, the open-ended nature of the item is difficult for some fourth graders. Response categories would probably alleviate some of these problems (see below).

Revision

How much time do you spend on homework each school day?

I don't usually have homework assigned G
I have homework but I don't usually do it G
About 30 minutes G
About an hour G
About an hour and a half G
About 2 hours G
More than two hours G

Fourth graders (2)

4. How much time do you spend on homework each school day?

I don't usually have homework assigned	G
I have homework but I don't usually do it	G
About 30 minutes	G
About an hour	G
About an hour and a half	G
About 2 hours	G
More than two hours	G

Error rate	58% (7 out of 12 responses)
Number of children overestimating	2
Average amount of overestimation	1 scale unit
Number of children underestimating	5
Average amount of underestimation	1.8 scale units

"Correct" responses	Student responses						
	no homework	don't do homework	about 30 minutes	about an hour	about an hour & ½	about 2 hours	more than 2 hours
no homework	-	-	-	-	-	-	-
don't do homework	-	-	1	-	-	-	-
about 30 minutes	-	-	2	1	-	-	-
about an hour	-	-	2	2	-	-	-
about an hour & ½	-	-	-	-	-	-	-
about 2 hours	-	-	-	1	-	-	-
more than 2 hours	-	-	1	-	-	1	1

Discussion

Two potential discrepancies were resolved because parents acknowledged that their children provided more accurate information. One child completes her homework at her grandmother's house so her mother thought her daughter was more accurate. The father of the other child reported that he is not present when his daughter completes her homework and admitted that she would have a better estimate.

The primary reason for the seven discrepancies is that fourth grade students do not seem to have a good sense of time, or cannot keep track of it very well. Some parents reported that their children are frequently distracted and do not stay on task so the amount of time may feel longer than reality.

Eighth graders

4. How much time do you spend on homework each school day?

I don't usually have homework assigned	G
I have homework but I don't usually do it	G
About 30 minutes	G
About an hour	G
About an hour and a half	G
About 2 hours	G
More than two hours	G

Error rate	55% (6 out of 11 responses)
Number of children overestimating	5
Average amount of overestimation	1.8 scale units
Number of children underestimating	1
Average amount of underestimation	1 scale unit

"Correct" responses	Student responses						
	no homework	don't do homework	about 30 minutes	about an hour	about an hour & ½	about 2 hours	more than 2 hours
no homework	-	-	-	-	-	-	-
don't do homework	-	-	-	-	-	-	-
about 30 minutes	-	-	1	-	-	1	-
about an hour	-	-	-	1	1	1	-
about an hour & ½	-	-	-	-	1	1	1
about 2 hours	-	-	-	-	1	-	-
more than 2 hours	-	-	-	-	-	-	2

Discussion

One potential discrepancy was resolved because a parent explained that her child provided more accurate information. The child included time spent practicing to play the saxophone (music homework) but the mother did not.

The reasons for the discrepancies varied. One child edited his verbal response (1-2 hours) into the options differently than his mother's verbal response (30 minutes to 2 hours)—he chose “about an hour and a half” for his close-ended response while she chose “about an hour.” Another child overestimated, according to the parent, and chose a more socially desirable response. The third discrepancy resulted because a child counted homework completed at school while the parent did not. Two children overestimated and their parents thought they may have felt that their homework took longer than it actually did.

Summary of Question 4

Revision effects

In spite of a higher fourth grade error rate after the question was revised (55 percent versus 31 percent before revision), these error rates are misleading because of the nature of the item changes. The item originally was open-ended, where children had to provide an amount of time and where errors were defined as discrepancies in excess of 30 minutes. The revised item, on the other hand, has closed-ended half-hour categories. Thus, in order to compare the error rates one can look at errors that are two or more scale units off in the revised item, which is equivalent to errors in excess of 30 minutes. Taking this perspective, the revised item has an error rate of 17 percent (two out of 12 responses), which is an improvement from the old item.

Age effects

It seems as though many fourth graders simply do not have a good enough sense of time to answer this question accurately. Furthermore, the item does not seem to work much better for eighth graders. Where fourth graders tend to underestimate the amount of time they spend on homework, eighth graders tend to overestimate their homework time.

Recommendations

There was some evidence that children had a hard time fitting their answers into “the about half hour categories.” For example, does 45 minutes belong in the “about 30 minutes” or “about an hour” category?) Therefore, it might be beneficial to make the response options more precise:

How much time do you spend on homework each school day?

I don't usually have homework assigned	G
I have homework but I don't usually do it	G
30 minutes or less	G
More than 30 minutes but less than 1 hour	G
1-2 hours	G
More than 2 hours	G

Fourth graders (1)

5. How many hours per week do you read for fun?

_____ hours per week or

I don't read for fun G

Error rate	69% (+/- 60 minutes; 9 out of 13 responses)
Number of children overestimating	4
Average amount of overestimation	+ 476 minutes
Number of children underestimating	5
Average amount of underestimation	- 180 minutes

Discussion

There were no cases of exact agreement. Using a criterion of plus or minus one hour, there was an error rate of 69 percent. There seem to be two problems with this item:

- 1) similar to Question 4, the open-endedness of the item creates problems for some children;
- 2) there was some confusion as to whether to include assigned reading—children tended to include assigned reading more often than their parents.

Revision

On weekends, how much time do you read for fun?

I don't read for fun	G
About an hour	G
About an hour and a half	G
About 2 hours	G
More than two hours	G

One way to try to reduce the error rate is by limiting the time period asked about—from a week to just the weekend. Although, for some children, weekend reading can be very different from overall reading, we believe there probably is a strong association between the amount of pleasure reading on weekends with the total amount of pleasure reading during the week.

Fourth graders (2)

5. On weekends, how much time do you read for fun?

- I don't read for fun G
- About an hour G
- About an hour and a half G
- About 2 hours G
- More than two hours G

Error rate	33% (4 out of 12 responses)
Number of children overestimating	3
Average amount of overestimation	1 scale unit
Number of children underestimating	1
Average amount of underestimation	3 scale units

"Correct" responses	Student responses				
	don't read for fun	about an hour	about an hour & ½	about 2 hours	more than 2 hours
don't read for fun	2	3	-	-	-
about an hour	-	6	-	-	-
about an hour & ½	-	-	-	-	-
about 2 hours	-	-	-	-	-
more than 2 hours	-	1	-	-	-

Discussion

Three potential discrepancies were resolved because parents conceded that their children provided more accurate responses. Two parents made an error by counting assigned reading and one mother's work schedule prevents her from actually seeing her child read on weekends. She admitted that her daughter would know better in this case.

The four discrepancies occurred for the following reasons: One child counted assigned reading; one child referred to recent activities which were atypical; one child provided a socially desirable response; and one child either does not keep track of time or did not consider both days of the weekend.

Eighth graders

5. On weekends, how much time do you read for fun?

I don't read for fun	G
About an hour	G
About an hour and a half	G
About 2 hours	G
More than two hours	G

Error rate	55% (6 out of 11 responses)
Number of children overestimating	2
Average amount of overestimation	1.5 scale units
Number of children underestimating	4
Average amount of underestimation	1 scale unit

"Correct" responses	Student responses				
	don't read for fun	about an hour	about an hour & ½	about 2 hours	more than 2 hours
don't read for fun	2	1	-	-	-
about an hour	3	2	-	1	-
about an hour & ½	-	-	-	-	-
about 2 hours	-	-	-	-	-
more than 2 hours	-	-	-	1	1

Discussion

For three of the discrepancies, parents and children had different interpretations of what counts as “reading for fun.” For example, parents counted coffee table books, magazines, and Garfield books but their 8th grade children did not. One child mistakenly included assigned reading. Another child counted the amount of time it takes him to read one book as opposed to how long he reads during the entire weekend. The sixth discrepancy resulted because a child referred to recent activities which were atypical.

Summary of Question 5

Revision effects

This item was significantly improved for fourth graders: from a 69 percent error rate before revision to an error rate of 33 percent after close-ended response options were added.

Age effects

The item is working better for fourth graders than eighth graders (33 percent versus 55 percent error rates). However, item variance for fourth graders was quite low: 10 out of 12 children responded “about an hour.” The item’s real power was in discriminating fourth graders who read for fun from those who did not read for fun. This problem might be alleviated by adding a category with a smaller amount of time. Also, the categories could be made parallel to the recommendations for Question 4 to make it easier for children who have problems estimating time.

By the eighth grade, most students have mastered basic reading skills. Activities that fourth graders include as reading, such as reading comics, cartoons, or coffee table books are less likely to be considered as reading by eighth graders. Assuming that these are valid types of pleasure reading, the item could also be improved by clarifying what counts as reading for fun (e.g., assigned reading does not count but magazines and other light reading materials do), and by asking about children’s typical reading habits with the addition of the word “usually.”

Recommendations

On weekends, how much time do you *usually* read *books, magazines, comics, or other things* for fun?

I don’t read for fun	G
<i>30 minutes or less</i>	G
<i>More than 30 minutes but less than 1 hour</i>	G
<i>1-2 hours</i>	G
More than 2 hours	G

Alternatively, the question can be posed as a simple dichotomous choice item:

On *most* weekends, do you read *books, magazines, comics, or other things* for fun?

- Yes, I read for fun on most weekends G
- No, I don't usually read for fun on weekends G

Fourth graders (1)

6. As things stand now, how far in school do you think you will get?

- Won't finish high school G
- Will graduate from high school, but won't go any further G
- Will go to vocational, trade, or business school after high school G
- Will attend college G
- Will graduate from college G
- Will attend a higher level of school after graduating from college G

Error rate 15% (2 out of 13 responses)
 Number of children overestimating 2
 Average amount of overestimation 1 scale unit
 Number of children underestimating 0
 Average amount of underestimation n/a

"Correct" responses	Student responses					
	won't finish HS	graduation from HS	school after HS	attend college	graduation from college	school after college
won't finish HS	-	-	-	-	-	-
graduation from HS	-	-	-	-	-	-
school after HS	-	-	-	-	-	-
attend college	-	-	-	-	1	-
graduation from college	-	-	-	-	8	1
school after college	-	-	-	-	-	3

Discussion

Children found the expression “as things stand now” awkward, and they did not know what “vocational” meant. Their definitions of vocational indicated a clear lack of understanding of this term (e.g., “it’s when you go to school on vacations”). Because of the response pattern and the confusion about “vocational,” we suggest changing the item into four sub-questions that have to be answered “yes” or “no.” We also believe very few children aspire to merely attend college rather than to graduate from college. In other words, a desire “to go to college” is a desire “to graduate from college.”

Revision

6. a. Do you think you will graduate from high school?

Yes G No G

6. b. Do you think you will go to school after high school?

Yes G No G

6. c. Do you think you will graduate from college?

Yes G No G

6. d. Do you think you will go to school after graduating from college?

Yes G No G

Fourth graders (2)

6. a. Do you think you will graduate from high school?

Yes G No G

Error rate 8% (1 out of 12 responses; error rate based on comparison with response parent expected child to make)

Expected responses	Student responses	
	Yes	No
Yes	11	1
No	-	-

Discussion

One child responded “no” because he “was not good in math.”

Eighth graders

6. a. Do you think you will graduate from high school?

Yes G No G

Error rate 0% (error rate based on comparison with response parent expected child to make)

Expected responses	Student responses	
	Yes	No
Yes	11	-
No	-	-

Fourth graders (2)

6. b. Do you think you will go to school after high school?

Yes G No G

Error rate 25% (3 out of 12 responses; error rate based on comparison with response parent expected child to make)

Expected responses	Student responses	
	Yes	No
Yes	9	2
No	1	-

Discussion

Two children did not understand the concept of “going to school after high school.” They thought this meant repeating grades they had already completed. One parent thought her son would not want to go to college. Initially, her son did not think that he would go to college either but when he thought about going to college, he thought about playing soccer. He figured he could learn to play soccer in college and therefore responded “yes” to the question. (This child had Attention Deficit Hyperactivity Disorder and was not currently taking medication because he was in the process of switching types of medication. As a result, he had great difficulty staying focused on the questions and this may have affected his responses.)

Eighth graders

6. b. Do you think you will go to school after high school?

Yes G No G

Error rate 0% (error rate based on comparison with response parent expected child to make)

Expected responses	Student responses	
	Yes	No
Yes	11	-
No	-	-

Fourth graders (2)

6. c. Do you think you will graduate from college?

Yes G No G

Error rate 17% (2 out of 12 responses; error rate based on comparison with response parent expected child to make)

Expected responses	Student responses	
	Yes	No
Yes	10	1
No	1	-

Discussion

As described in Question 6b, one child associated going to college with playing soccer. He responded “yes” to this question but again, his mother thought he would say “no” because he has so much difficulty with his current schoolwork. Another child responded “no” to this question and her mother speculated that she gave this answer because her daughter did not understand the meaning of the word “graduate.”

Eighth graders

6. c. Do you think you will graduate from college?

Yes G No G

Error rate 0% (error rate based on comparison with response parent expected child to make)

Expected responses	Student responses	
	Yes	No
Yes	11	-
No	-	-

Fourth graders (2)

6. d. Do you think you will go to school after graduating from college?

Yes G No G

Error rate 75% (9 out of 12 responses; error rate based on comparison with response parent expected child to make)

Expected responses	Student responses	
	Yes	No
Yes	-	4
No	4	3
Blank	1	-

Discussion

In five cases where there were discrepancies, the children clearly did not understand what was meant by “going to school after graduating from college.” Two additional discrepancies resulted because the parents did not *expect* their children to understand the concept. Since they felt their children would not understand what was being asked, they thought their child would say “no.” For the remaining two discrepancies, it appeared that the parents were not aware of the children’s thoughts about going to graduate school.

Eighth graders

6. d. Do you think you will go to school after graduating from college?

Yes G No G

Error rate 27% (3 out of 11 responses; error rate based on comparison with response parent expected child to make)

Expected responses	Student responses	
	Yes	No
Yes	3	2
No	1	5

Discussion

Two discrepancies occurred because the parents were not aware of their children's plans after college. The reason for the other discrepancy was that the child did not understand what was meant by the concept "go to school after graduating from college."

Summary of Questions 6a-6d

Revision effects

The decomposition of the original item into four yes/no questions made it easier for fourth graders to answer. However, fourth graders still had problems with the terms “go to school after high school” in Question 6b (25 percent error rate) and, in particular, “go to school after graduating from college” in Question 6d (75 percent error rate).

Age effects

Question 6a worked well for both fourth and eighth graders, but as mentioned above, some fourth graders had trouble with the concept of “going to school after high school” in Question 6b. All of the eighth graders we tested answered “yes” to Questions 6b and 6c, suggesting that these items may have minimal discriminating power. We recommend eliminating Question 6b (“Do you think you will go to school after high school”) and keep Question 6c (“Do you think you will graduate from college?”).

In addition, Question 6d should only be asked of eighth graders, because of fourth graders’ high error rate due to their lack of understanding what is meant by “going to school after graduating from college.”

Recommendations

Questions 6a and 6c should be asked of both fourth and eighth graders.

6. a. Do you think you will graduate from high school?

Yes G No G

6. c. Do you think you will graduate from college?

Yes G No G

Question 6d should only be asked of eighth graders.

6. d. Do you think you will go to school after graduating from college?

Yes G No G

Fourth graders (1)

7. How far in school do you think your father wants you to get?

- Less than high school graduation G
- Graduate from high school, but not go any further G
- Go to vocational, trade, or business school after high school G
- Attend college G
- Graduate from college G
- Attend a higher level of school after graduating from college G
- Don't know G

Error rate 31% (4 out of 13 responses)
 Number of children overestimating 3
 Average amount of overestimation 1 scale unit
 Number of children underestimating 1
 Average amount of underestimation 1 scale unit

"Correct" responses	Student responses					
	less than HS graduation	graduate from HS	school after HS	attend college	graduate from college	school after college
less than HS graduation	-	-	-	-	-	-
graduate from HS	-	-	-	-	-	-
school after HS	-	-	-	-	-	-
attend college	-	-	-	-	-	-
graduate from college	-	-	-	-	4	3
school after college	-	-	-	-	1	5

Discussion

As previously noted, fourth grade children did not know what "vocational" meant. Because of the response pattern and the confusion about "vocational," the item should be changed to correspond to the revisions suggested for Question 6.

Revision

7. a. Do you think your father wants you to graduate from high school?

Yes G No G

7. b. Do you think your father wants you to go to school after high school?

Yes G No G

7. c. Do you think your father wants you to graduate from college?

Yes G No G

7. d. Do you think your father wants you to go to school after graduating from college?

Yes G No G

Fourth graders (2)

7. a. Do you think your father wants you to graduate from high school?

Yes G No G

Error rate 8% (1 out of 12 responses)

Expected responses	Student responses	
	Yes	No
Yes	11	1
No	-	-

Discussion

Although one child was aware of the fact that her father wanted her to go to college, she answered “no” to this question. She did not realize that graduating from high school was an implicit prerequisite for going to college. She did, however, respond affirmatively to the item asking about whether her father wanted her to go to college, which was something explicitly stated by her father. This is an example of an error occurring during judgment formation. She retrieved the information about her father wanting her to go to college. However, she was not able to use this information to draw the appropriate inference about her father implicitly wanting her to graduate from high school.

Eighth graders

7. a. Do you think your father wants you to graduate from high school?

Yes G No G

Error rate 0%

Expected responses	Student responses	
	Yes	No
Yes	11	-
No	-	-

Fourth graders (2)

7. b. Do you think your father wants you to go to school after high school?

Yes G No G

Error rate 33% (4 out of 12 responses)

Expected responses	Student responses		
	Yes	No	Blank
Yes	8	3	1
No	-	-	-

Discussion

Three discrepancies occurred because the children did not understand what was meant by “going to school after high school.” As explained in Question 7a, one child did not make a connection between her father’s desire for her to attend college and “going to school after high school.”

Eighth graders

7. b. Do you think your father wants you to go to school after high school?

Yes G No G

Error rate 9% (1 out of 11 responses)

Expected responses	Student responses	
	Yes	No
Yes	10	-
No	1	-

Discussion

In the case of the discrepancy, the mother thought her child’s response could be accurate, but noted that the child does not communicate with her father.

Fourth graders (2)

7. c. Do you think your father wants you to graduate from college?

Yes G No G

Error rate 0%

Expected responses	Student responses	
	Yes	No
Yes	12	-
No	-	-

Eighth graders

7. c. Do you think your father wants you to graduate from college?

Yes G No G

Error rate 9% (1 out of 11 responses)

Expected responses	Student responses	
	Yes	No
Yes	10	-
No	1	-

Discussion

As explained in Question 7b, one mother thought her child's response might be accurate, but it was difficult to say since the daughter and father do not communicate.

Fourth graders (2)

7. d. Do you think your father wants you to go to school after graduating from college?

Yes G No G

Error rate 64% (7 out of 11 responses; 1 parent reported that she did not know how the father would respond to this question)

We should note that in two of the eleven cases, the father attended the session, so that the child's responses matched the parent's *actual* responses.

Expected responses	Student responses	
	Yes	No
Yes	4	3
No	4	-
Blank	-	1

Discussion

For five of the discrepancies, the children did not understand the concept of “going to school after graduating from college.” In another case, a parent *thought* that her daughter would not understand the concept and would respond “no.” To her surprise, her daughter answered “yes.” As described in Questions 7a and 7b, the female whose father explicitly told her that he wanted her to go to college answered “no” to this question, because that’s what she knew about his expectations for her education.

Eighth graders

7. d. Do you think your father wants you to go to school after graduating from college?

Yes G No G

Error rate 45% (5 out of 11 responses)

Expected responses	Student responses		
	Yes	No	Blank
Yes	5	1	1
No	3	1	-

Discussion

Two eighth graders did not understand the concept of “go to school after graduating from college” and one of these children said he would leave the question blank for that reason. Three discrepancies occurred because children apparently had not discussed with their parents the possibility of wanting to go to graduate school. All three children in these cases responded “yes” to the question while their parents responded “no.” These children assumed that their fathers would know of their aspirations and would want them to do this.

Summary of Questions 7a-7d

Revision effects

Unlike Question 6, the decomposition of the original item into four yes/no questions did not make the item(s) easier for fourth graders to answer. Decomposition did not help children understand what was meant by the terms “go to school after high school” in Question 7b (33 percent error rate) and “go to school after graduating from college” in Question 7d (64 percent error rate).

Age effects

Question 7a worked well for both fourth and eighth graders. As mentioned above, many fourth graders did not understand what was intended by the phrase “going to school after high school” in Question 7b. This point is well illustrated in the fourth graders’ dissociated responses to Questions 7b and 7c: all 12 students thought their fathers wanted them to graduate from college (Question 7c), but three students did not think their fathers wanted them to go to school after high school (Question 7b).

All eighth graders answered “yes” to Questions 7b and 7c. We therefore suggest eliminating Question 7b. Question 7d is not working very well for either fourth or eighth graders. Fourth graders do not understand the concept of “going to school after graduating from college.” Eighth graders seem to understand the item but some have not discussed the topic of graduate school with their parents. These students, therefore, are not aware of their parents’ educational expectations. For these reasons, Question 7d might be a candidate for deletion. It seems appropriate to ask Question 7d in terms of the eighth grade student’s educational aspirations (i.e., Question 6d); it appears less advisable to do so in terms of parental expectations for post-college education since these aspirations are not widely discussed with parents by eighth graders.

Recommendations

Children should only be asked about their father's expectations vis-a-vis graduation from high school and college.

7. a. Do you think your father wants you to graduate from high school?

Yes G No G

7. c. Do you think your father wants you to graduate from college?

Yes G No G

Fourth graders (1)

8. How far in school do you think your mother wants you to get?

- Less than high school graduation G
- Graduate from high school, but not go any further G
- Go to vocational, trade, or business school after high school G
- Attend college G
- Graduate from college G
- Attend a higher level of school after graduating from college G
- Don't know G

Error rate 23% (3 out of 13 responses)
 Number of children overestimating 3
 Average amount of overestimation 1.3 scale units
 Number of children underestimating 0
 Average amount of underestimation N/A

"Correct" responses	Student responses					
	less than HS graduation	graduate from HS	school after HS	attend college	graduate from college	school after college
less than HS graduation	-	-	-	-	-	-
graduate from HS	-	-	-	-	-	-
school after HS	-	-	-	-	-	-
attend college	-	-	-	-	-	1
graduate from college	-	-	-	-	6	2
school after college	-	-	-	-	-	4

Discussion

Fourth grade children did not know what "vocational" meant. Because of the response pattern and the confusion about "vocational," the item should be changed to match the revision to Questions 6 and 7.

Revision

8. a. Do you think your mother wants you to graduate from high school?

Yes G No G

8. b. Do you think your mother wants you to go to school after high school?

Yes G No G

8. c. Do you think your mother wants you to graduate from college?

Yes G No G

8. d. Do you think your mother wants you to go to school after graduating from college?

Yes G No G

Fourth graders (2)

8. a. Do you think your mother wants you to graduate from high school?

Yes G No G

Error rate 0%

Expected responses	Student responses	
	Yes	No
Yes	12	-
No	-	-

Eighth graders

8. a. Do you think your mother wants you to graduate from high school?

Yes G No G

Error rate 0%

Expected responses	Student responses	
	Yes	No
Yes	11	-
No	-	-

Fourth graders (2)

8. b. Do you think your mother wants you to go to school after high school?

Yes G No G

Error rate 17% (2 out of 12 responses)

Expected responses	Student responses	
	Yes	No
Yes	10	2
No	-	-

Discussion

As with the previous items, errors were attributable to the fact that two children did not understand the meaning of the phrase “go to school after high school.”

Eighth graders

8. b. Do you think your mother wants you to go to school after high school?

Yes G No G

Error rate 0%

Expected responses	Student responses	
	Yes	No
Yes	11	-
No	-	-

Fourth graders (2)

8. c. Do you think your mother wants you to graduate from college?

Yes G No G

Error rate 0%

Expected responses	Student responses	
	Yes	No
Yes	12	-
No	-	-

Eighth graders

8. c. Do you think your mother wants you to graduate from college?

Yes G No G

Error rate 0%

Expected responses	Student responses	
	Yes	No
Yes	11	-
No	-	-

Fourth graders (2)

8. d. Do you think your mother wants you to go to school after graduating from college?

Yes G No G

Error rate 33% (4 out of 12 responses)

Expected responses	Student responses	
	Yes	No
Yes	8	2
No	2	-

Discussion

Three of the errors were due to the fact that the fourth graders did not understand the concept “go to school after graduating from college.” The other error resulted from one parent who did not expect her child to understand the concept and therefore thought her daughter would say “no.” In fact, her daughter responded “yes.”

Eighth graders

8. d. Do you think your mother wants you to go to school after graduating from college?

Yes G No G

Error rate 36% (4 out of 11 responses)

Expected responses	Student responses		
	Yes	No	Blank
Yes	7	1	1
No	2	-	-

Discussion

Two errors were produced by eighth graders who did not understand the concept “go to school after graduating from college” and one of these children said that he would skip the question for that reason. The other two discrepancies occurred because children apparently had not discussed with their parents the possibility of wanting to go to graduate school. The two children in these cases responded “yes” to this question while their parents responded “no.”

Summary of Questions 8a–8d

Revision effects

As with Question 6, the decomposition of the original item into four yes/no questions made it easier for fourth graders to answer. Interestingly, the error rates for Questions 8b “go to school after high school” (17 percent error rate) and 8d “go to school after graduating from college” (33 percent error rate) were lower than for the analogous Questions 7b (33 percent) and 7d (64 percent). This might reflect greater amounts of communication between mothers and their children than between fathers and their children.

Age effects

As with Question 7a, Question 8a worked well for both fourth and eighth graders, but fourth graders had some trouble understanding what was meant by “going to school after high school” in Question 8b.

As with Questions 7b and 7c, all eighth graders answered “yes” to Questions 8b and 8c. So, as with Question 7b, we suggest eliminating Question 8b. And, as with Question 7d, Question 8d is not working very well for either fourth or eighth graders. Fourth graders do not understand the concept of “going to school after graduating from college.” Eighth graders seem to understand the item but some have not discussed the topic of graduate school with their parents. These students, therefore, are not aware of their parents' educational expectations. For these reasons, Question 8d might be a candidate for deletion. It seems appropriate to ask Question 8d in terms of the eighth grade student's educational aspirations (i.e., Question 6d); it appears less advisable to do so in terms of parental expectations for post-college education since these aspirations are not widely discussed with parents by eighth graders

Recommendations

Children should only be asked about their mother's expectations vis-a-vis graduation from high school and college.

8. a. Do you think your mother wants you to graduate from high school?

Yes G No G

8. c. Do you think your mother wants you to graduate from college?

Yes G No G

Fourth graders (1)

9. Does your family get a newspaper regularly?

Yes G
No G
I don't know G

Error rate

8% (1 out of 13 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	12	-
No	1	-

Discussion

One child counted a weekly paper that was distributed to all neighborhood homes free of charge (Palo Alto Weekly) as getting a paper regularly. It also is interesting to note that none of the children answered "Don't know."

Revision

Delete the "I don't know" option.

Fourth graders (2)

9. Does your family get a newspaper regularly?

Yes G
No G

Error rate

25% (3 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	3	-
No	3	6

Discussion

For three discrepancies, children counted free local newspapers and/or mailings that come to their home. Their parents did not. In two other cases, which did *not* result in discrepancies, both the child and parent considered getting a Sunday paper and the Palo Alto Weekly as getting a newspaper regularly. Although this is different from getting a daily newspaper, arguments can be made that getting two different newspapers each week (on different days) is getting "a newspaper regularly" and is qualitatively different from getting a free newspaper that is distributed irrespective of the recipient's desires only once a week.

Eighth graders

9. Does your family get a newspaper regularly?

Yes G
No G

Error rate 27% (3 out of 11 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	4	1
No	2	4

Discussion

For two of these discrepancies, the parents and their eighth grade children interpreted the question differently. The children counted newspapers the parents purchase at newsstands while the parents did not count them. These parents would usually, but not always, buy these papers and bring them home. Although they were counted as "errors," they are arguably correct responses. In another case, the mother counted free local newspapers and/or mailings that come to their home but the child did not. We considered the mother's response to be in error and changed the "real response" to "no" for this case. The remaining discrepancy occurred because the child was not aware that the family had just started receiving a daily newspaper about two weeks earlier.

Summary of Question 9

Revision effects

Deleting the “I don’t know” option from the original item appeared to be an improvement, since all students were able to answer the item.

Age effects

The item is working pretty well for both fourth and eighth graders. It might be improved by adding some clarification about the type of paper which should count (e.g., do local weekly newspapers count?) and how often it should be received to be considered “regularly.” However, we are loathe to recommend the addition of long explanatory clauses (e.g., “Only include newspapers which are not free and which your family receives at least twice a week.”)

Recommendations

There are some issues associated with this item. In many areas, free newspapers are delivered several times weekly to all homes. The item might not have any discriminating power in these areas. If the issue is *paying* for a newspaper, difficulties may arise because children may not realize that the newspaper is paid for. One alternative might be:

Does your family get a newspaper *at least three times a week?*

Yes	G
No	G

Introduction to Questions 10 through 11f

The remainder of the Survey A Questions (10 through 11f) are presented slightly differently from the rest of the questions in this section. This is due to the fact that these items were revised by combining items 10–12 into a longer series of items (as well as renumbering these items). Additionally, a new item (new Question 10) was drafted and administered in the second phase of the research.

We begin by presenting the questions administered in spring, 1996 (10–12). These are followed with their revised versions (Questions 10–11f; Question 12 was renumbered to become 11f). We then present the analysis of responses to these questions. Summaries of results are presented after revised Question 11b, after revised Question 11d, and after revised Question 11f. Finally, responses to the new question (called “new Question 10”) are presented and summarized.

Fourth graders (1)

10. Does either your mother or your stepmother live at home with you?

Yes G
No G

Error rate

17% (2 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	10	2
No	-	-

Discussion

The fact that a few children incorrectly answered this item came as an initial surprise to us. One child was confused by the conditional "or" in the question and answered "no" because "Stepmother means that your parents are divorced and my parents are not divorced." Another child interpreted "living with you" as "not working full time."

Another child, in a shared custody situation, answered "yes" to both Questions 10 and 11 (i.e., answering that both her mother and father live at home with her because she lives 50 percent at each place). This case was neither considered an error nor a correct response, since we did not know what was "correct."

Fourth graders (1)

12. How many people in your family live at home with you?

Error rate 62% (8 out of 13 responses)
 Number of children overestimation 8
 Average amount of overestimation 1.1 people
 Number of children underestimating 0
 Average amount of underestimation n/a

"Correct" responses	Student responses			
	3	4	5	6
3	4	4	1	-
4	-	1	2	-
5	-	-	-	1
6	-	-	-	-

Discussion

Seven out of the 13 fourth graders answering this item included themselves in the family count. Another fourth grader, a child in a shared custody situation, counted the members in both households. The error rate underestimates the number of mistakes made. That is, another child counted himself but forgot to include his father. These compensating errors produced a "correct" response.

Revision

Combine Questions 10, 11, and 12 into a series of questions. Add the following instruction before these items:

The next questions ask about the people you live with. If you live at more than one place, please answer the following questions about the place that is your home most of the time.

a. Does your mother live at home with you?

Yes G
 No G

b. Does your stepmother live at home with you?

Yes G
 No G

c. Does your father live at home with you?

Yes G
No G

d. Does your stepfather live at home with you?

Yes G
No G

e. How many brothers and sisters live at home with you?

_____ brothers and sisters

f. How many OTHER family members live at home with you?

_____ other family members

Fourth graders (2)

The next questions ask about the people you live with. If you live at more than one place, please answer the following questions about the place that is your home most of the time.

11. a. Does your mother live at home with you?

Yes G
No G

Error rate 0%

"Correct" responses	Student responses	
	Yes	No
Yes	12	-
No	-	-

Eighth graders

The next questions ask about the people you live with. If you live at more than one place, please answer the following questions about the place that is your home most of the time.

11. a. Does your mother live at home with you?

Yes G
No G

Error rate 0%

"Correct" responses	Student responses	
	Yes	No
Yes	11	-
No	-	-

Fourth graders (2)

11. b. Does your stepmother live at home with you?

Yes G
No G

Error rate 8% (1 out of 12 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	-	-	-
No	-	11	1

Discussion

One child did not understand the meaning of "stepmother" and decided to skip the question.

Eighth graders

11. b. Does your stepmother live at home with you?

Yes G
No G

Error rate 9% (1 out of 11 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	-	-	-
No	-	10	1

Discussion

One child thought this question was not applicable to her since she did not have a stepmother. She said she would skip the question.

Summary of Questions 11a and 11b (old question 10)

Revision effects

The decomposition of the original item into two questions seemed to make it easier for fourth graders to answer, in particular for children whose parents are not divorced. Only one fourth grader made an error—she chose to skip Question 11b because she did not understand the meaning of “stepmother.”

Age effects

These items work well for both fourth and eighth graders. Only one fourth grader and one eighth grader made an error in Question 11b. They would both skip the question, but for different reasons. The fourth grader would skip because she did not understand the meaning of “stepmother,” as mentioned above, and the eighth grader would skip because the question did not apply to her since she did not have a stepmother.

Recommendations

To avoid having children omit a response to the question if they do not have a stepmother, the following can be added to 11b:

Does your stepmother live at home with you?

Yes	G
No	G
<i>I don't have a stepmother</i>	G

Fourth graders (2)

11. c. Does your father live at home with you?

Yes G
No G

Error rate 0%

"Correct" responses	Student responses	
	Yes	No
Yes	9	-
No	-	3

Eighth graders

11. c. Does your father live at home with you?

Yes G
No G

Error rate 0% (0 out of 11 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	7	-
No	-	4

Discussion

One child lives with her mother half of the time and with her father the other half. She had trouble deciding how to answer this question and wanted to answer "yes." She had already indicated that she lives with her mother (the directions instruct the respondent to answer for the home where they live *most* of the time if they live in more than one place). So, after some probing, she said "no" because she came to the interview with her mother. Her mother disregarded the instructions and said "yes"; hence, there was a discrepancy. We did not treat this discrepancy as an error and considered the child's response to be correct.

Fourth graders (2)

11. d. Does your stepfather live at home with you?

Yes G
No G

Error rate 8% (1 out of 12 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	1	-	-
No	-	10	1

Discussion

One child did not understand the meaning of "stepfather" and decided to skip the question.

Eighth graders

11. d. Does your stepfather live at home with you?

Yes G
No G

Error rate 9% (1 out of 11 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	1	-	-
No	-	9	1

Discussion

One child thought this question was not applicable to her since she did not have a stepfather. She said she would skip the question.

Summary of Questions 11c and 11d (old Question 11)

Revision effects

As with Questions 11a and 11b, the decomposition of the original item into two questions seemed to make it easier for fourth graders to answer, in particular for children whose parents are not divorced. Two fourth graders had problems. One child in a 50/50 custody situation answered “no” to Question 11c, which appeared to be a better response than her mother’s response. (Even though it was a 50/50 custody situation, the child apparently spent more time with her mother.) Another child chose to skip Question 11d because she did not understand the meaning of “stepfather.”

Age effects

These items work well for both fourth and eighth graders. One fourth grader and one eighth grader made errors. The eighth grader would skip Question 11d because she did not have a stepfather.

The instruction in the beginning of the question series 11a-11f (“answer the questions about the place that is your home most of the time”) does not solve the issue of children living in true 50/50 custody situations. However, there probably is only slight harm done if the child chooses one household to respond about.

Recommendations

To avoid having children skip the question if they do not have a stepfather, add the following to 11d:

Does your stepfather live at home with you?

Yes	G
No	G
<i>I don't have a stepfather</i>	G

Fourth graders (2)

11. e. How many brothers and sisters live at home with you?

_____ brothers and sisters

Error rate 0%
Number of children overestimating 0
Average amount of overestimation n/a
Number of children underestimating 0
Average amount of underestimation n/a

"Correct" responses	Student responses		
	0	1	2
0	3	-	-
1	-	8	-
2	-	-	1

Eighth graders

11. e. How many brothers and sisters live at home with you?

_____ brothers and sisters

Error rate	9% (1 out of 11 responses)
Number of children overestimating	1
Average amount of overestimation	1 person
Number of children underestimating	0
Average amount of underestimation	n/a

"Correct" responses	Student responses	
	0	1
0	3	-
1	1	7

Discussion

One child had a more literal interpretation of the question than her mother. Her older sister had moved out of the home two days before the interview so she did not include her in her answer. We treated the parent's response as correct, since the process of "moving out" extends over a period of time—and short-term moves (which might have included this situation) should probably not be considered as "moving out." However, equally persuasive arguments can be made that the child was correct.

Fourth graders (2)

11. f. How many OTHER family members live at home with you?

_____ other family members

Error rate	17% (2 out of 12 responses)
Number of children overestimating	2
Average amount of overestimation	3 people
Number of children underestimating	0
Average amount of underestimation	n/a

"Correct" responses	Student responses			
	0	1	2	5
0	9	-	1	-
1	-	1	-	1
2	-	-	-	-
5	-	-	-	-

Discussion

Two children counted all of the family members (mom, dad, brothers/sisters) and one of these included the family dog.

Eighth graders

11. f. How many OTHER family members live at home with you?

_____ other family members

Error rate	27% (3 out of 11 responses)
Number of children overestimating	3
Average amount of overestimation	1.7 people
Number of children underestimating	0
Average amount of underestimation	n/a

"Correct" responses	Student responses		
	0	1	2
0	8	1	2
1	-	-	-
2	-	-	0

Discussion

Two children counted their family cats. In addition, one child and parent counted all family members, so both made an error.

Summary of Questions 11e and 11f (old Question 12)

Revision effects

This item improved significantly by being decomposed into two questions. The original item (“How many people in your family live at home with you?”) had a 62 percent error rate, whereas the new questions (“How many brothers and sisters live at home with you?” and “How many OTHER family members live at home with you?”), had 0 percent and 17 percent error rates for fourth graders, respectively.

Age effects

The questions are working well for both fourth and eighth graders. However, a few children (one fourth grader and two eighth graders) included family pets in Question 11f. This problem might be alleviated by changing “family members” to “people in your family” (see below).

Recommendations

Change question 11f in the following way:

How many OTHER *people in your family* live at home with you?

New Question 10

In response to the prevalence of shared custody situations, we felt that the following item should be investigated. We are very aware of the sensitivity of an item about divorced/separated parents. Arguments for its inclusion are:

- (a) the prevalence of divorce/separation,
- (b) its critical importance in determining family size (for children with divorced or separated parents, and
- (c) many believe this to be associated with performance on achievement tests.

We empirically determined the sensitivity of this item, through both our Parental Item Sensitivity Review Panel and by asking participants directly about how sensitive it is. (See Chapters 4 and 5.)

Fourth graders (2)

10. Are your parents divorced or separated?

Yes G
No G

Error rate 0%

"Correct" responses	Student responses	
	Yes	No
Yes	5	-
No	-	7

Eighth graders

10. Are your parents divorced or separated?

Yes G
No G

Error rate 0%

"Correct" responses	Student responses	
	Yes	No
Yes	4	-
No	-	8

Summary of New Question 10

Age effects

The item is working excellently for both fourth and eighth graders. Both age groups knew the concepts of “divorced” or “separated.”

Recommendations

Several parents had strong reservations about asking an item like this. Nonetheless, it appears to provide a valid measure of an important construct. Decisions about its inclusion must reflect both political and scientific considerations.

A reason that an item like this should not be asked is that it might embarrass a child and create a negative affect that would negatively influence his or her motivation to complete the rest of the questionnaire. However, in our research, the students we investigated did not seem embarrassed by the question. They did not respond negatively to subsequent items nor did they volunteer any criticisms of the item.

If fourth and eighth graders are asked about their parents’ marital status, the item should be administered as written above. It should be placed at or near the end of the questionnaire.

Survey B Items

Fourth graders (1)

1. How much TV do you usually watch each school day?

Error rate	25% (± 30 minutes; 3 out of 12 responses)
Number overestimated	2
Average amount of overestimation	1 hour
Number underestimated	1
Average amount of underestimation	4 hours

Discussion

An error was defined as a discrepancy of at least 30 minutes. For the most part, this item worked well. Based on the children's responses, we would recommend that response categories be provided, as described below.

Revision

How much TV do you usually watch each school day?

<i>I don't watch TV on school days</i>	G
<i>One hour or less</i>	G
<i>More than 1 hour but less than 2 hours</i>	G
<i>Between 2 and 3 hours</i>	G
<i>More than 3 hours</i>	G

Fourth graders (2)

1. How much TV do you usually watch each school day?

- I don't watch TV on school days G
- One hour or less G
- More than 1 hour but less than 2 hours G
- Between 2 and 3 hours G
- More than 3 hours G

Error rate 36% (4 out of 11 responses)
 Number of children overestimating 3
 Average amount of overestimation 2 scale units
 Number of children underestimating 1
 Average amount of underestimation 2 scale units

"Correct" responses	Student responses				
	don't watch TV	one hour or less	between one and two hours	between two and three hours	more than three hours
don't watch TV	-	-	-	1	-
one hour or less	-	4	-	-	-
between one and two hours	1	-	1	1	1
between two and three hours	-	-	-	1	-
more than three hours	-	-	-	-	1

Discussion

Three potential discrepancies between children and parents' responses were resolved because the parents acknowledged that the children's responses were more accurate:

- (1) A mother forgot about her daughter watching TV when she comes home from school while the mother is cooking;
- (2) A father acknowledged that the mother monitors his son's TV watching so the father is not aware of the exact amount of TV the son watches;
- (3) A mother acknowledged that her daughter watches less TV than the mother initially reported, since the daughter does her homework in the kitchen while the TV is on for the sister.

The reasons for the four actual discrepancies varied:

- (1) One child had trouble averaging since his TV viewing varies from day to day;
- (2) One child overreported TV watching in the morning;
- (3) One child counted Friday night as part of a school day and the parent did not;
- (4) One child underestimated, giving a socially appropriate response.

Eighth graders

1. How much TV do you usually watch each school day?

I don't watch TV on school days	G
One hour or less	G
More than 1 hour but less than 2 hours	G
Between 2 and 3 hours	G
More than 3 hours	G

Error rate	17% (2 out of 12 responses)
Number of children overestimating	1
Average amount of overestimation	1 scale unit
Number of children underestimating	1
Average amount of underestimation	2 scale units

"Correct" responses	Student responses				
	don't watch TV	one hour or less	between one and two hours	between two and three hours	more than three hours
don't watch TV	-	1	-	-	-
one hour or less	-	2	-	-	-
between one and two hours	-	-	4	-	-
between two and three hours	-	-	-	3	-
more than three hours	-	-	1	-	1

Discussion

Four potential discrepancies between children and parents' responses were resolved because the parents acknowledged that the children's responses were more accurate:

- (1) A mother admitted that she is not able to monitor her son's TV watching because she works two jobs;
- (2) A mother acknowledged that her son watches more TV than he is supposed to, and therefore his answer was closer to reality;
- (3) A mother was not completely aware of her daughter's TV habits;

(4) A mother stated that her son's response was more accurate.

The reason for the two actual discrepancies were:

- (1) One child included TV watching at school after a probe, whereas the parent did not;
- (2) One child underestimated, giving a socially appropriate response.

Finally, in one case, even though there was agreement between the child's and the parent's responses, the child did not include watching videotapes whereas the parent did. In this case, compensating errors produced a correct response.

Summary of Question 1

Revision effects

Error rates were comparable with and without response categories for fourth graders (25 percent versus 36 percent with response categories).

Age effects

The item seems to work slightly better for eighth graders than fourth graders (17 percent versus 36 percent error rates). This probably reflects the eighth graders' superior abilities at estimating time.

There are a few technical issues associated with this item:

- whether Friday night counts as part of the school day or part of the weekend,
- whether TV watching at school should be included, and
- whether videotape watching should be counted as part of watching TV.

However, these are relatively minor issues that only affected a few students. Among our students, most videotape watching occurred on weekends and there wasn't very much television watching at school.

Recommendations

The production of a "correct" response requires that an individual be able to estimate the amount of time spent in an activity. If the amount of time spent in the activity varies over the period of interest, the individual must be able to average these times to produce a result that is typical of the activity. Many fourth graders are poor at estimating time, watch different amounts of television on different nights, and have difficulties producing averages. To reduce the cognitive burden imposed by the task, one might ask fourth graders:

About how much TV will you watch today?

- | | |
|--|---|
| I don't watch TV on school days | G |
| One hour or less | G |
| More than 1 hour but less than 2 hours | G |
| Between 2 and 3 hours | G |
| More than 3 hours | G |

Fourth graders (1)

2. How many books are there in your home?

- Less than a full bookshelf (0 to 25 books) G
 - One or several bookshelves (26 to 100 books) G
 - One or more bookcases full (over 100 books) G
-

Error rate 25% (3 out of 12 responses)
Number overestimated 1
Average amount of overestimation 1 scale unit
Number underestimated 2
Average amount of underestimation 1 scale unit

"Correct" responses	Student responses		
	0 - 25 books	26 - 100 books	over 100 books
0 - 25 books	-	-	-
26 - 100 books	-	2	1
over 100 books	-	2	7

Discussion

This item worked reasonably well. The definitions of how many books may be on a bookshelf or bookcase clearly helped the children provide a correct response.

Revision

Revision is not recommended.

Fourth graders (2)

2. How many books are there in your home?

Less than a full bookshelf (0 to 25 books)	G
One or several bookshelves (26 to 100 books)	G
One or more bookcases full (over 100 books)	G

Error rate	36% (4 out of 11 responses)
Number of children overestimating	0
Average amount of overestimation	n/a
Number of children underestimating	4
Average amount of underestimation	1 scale unit

"Correct" responses	Student responses		
	0 - 25 books	26 - 100 books	over 100 books
0 - 25 books	2	-	-
26 - 100books	1	2	-
over 100 books	-	3	3

Discussion

Upon readministration of this item to a second group of fourth graders, certain problems arose. Two of these errors were related to the issue of which books to include. The reasons for underestimation were:

- (1) One child only counted his own books
- (2) One child did not include books in boxes

It can be argued that books stored in boxes in a garage are very different from books which are accessible to the child. This "error" may be a better indicator of the construct that is being measured than a correct response.

In addition, one child did not recall books on built-in bookshelves and another child simply underestimated according to the mother.

Eighth graders

2. How many books are there in your home?

Less than a full bookshelf (0 to 25 books)	G
One or several bookshelves (26 to 100 books)	G
One or more bookcases full (over 100 books)	G

Error rate	17% (2 out of 12 responses)
Number of children overestimating	1
Average amount of overestimation	1 scale unit
Number of children underestimating	1
Average amount of underestimation	1 scale unit

"Correct" responses	Student responses		
	0 - 25 books	26 - 100 books	over 100 books
0 - 25 books	-	-	-
26 - 100 books	-	-	1
over 100 books	-	1	10

Discussion

The main problem that eighth graders and their parents had with this item was deciding which books to include. In two cases, parents initially underreported the number of books. That is, one child included books in a cabinet, whereas the parent did not and one child counted all books in an encyclopedia set of 30-35 books, whereas the parent counted it as one book. In these cases, the children's responses were considered as correct.

Conversely, one child appeared to have counted an encyclopedia set of 26 books as one book. This eighth grader only considered certain rooms in the house in estimating the number of books. The other error occurred because the word "bookshelves" appears to have confused one eighth grader.

Summary of Question 2

Revision effects

The fourth graders in the second round of data collection had a slightly higher error rate than the fourth graders in the first round (36 percent versus 25 percent, respectively). This might be due to a more diverse sample of fourth graders in the second round.

Age effects

The item seems to work, but there is a tendency for fourth graders to underestimate and for eighth graders to overestimate the number of books in their home. Minor misunderstandings arise over the issues of which books to include or not to include (e.g., books in boxes, cabinets, the garage) and how to count an encyclopedia set.

Recommendations

The production of a “correct” response requires that a fourth grader be able to estimate the number of books in his or her house. This estimation task is beyond the limits of some fourth graders. We are unable to propose any revisions that will simplify this task for these fourth graders.

Fourth graders (1)

3. How often do you use a computer at home for schoolwork?

- Almost every day G
- Once or twice a week G
- Once or twice month G
- Never or hardly ever G
- There is no computer at home G

Error rate 67% (8 out of 12 responses)
 Number reporting more frequently 3
 Average amount of overestimation 2 scale units
 Number reporting less frequently 5
 Average amount of underestimation 1.4 scale units

"Correct" responses	Student responses				
	no computer	never or hardly ever	once or twice a month	once or twice a week	almost every day
no computer	-	1	-	-	1
never or hardly ever	-	1	-	-	-
once or twice a month	-	1	1	1	-
once or twice a week	-	2	2	2	-
almost every day	-	-	-	-	-

Discussion

There are two different factors associated with the errors made by fourth graders. One factor pertains to children’s definition of “schoolwork.” Some parents indicated that their children did not include educational software use as part of their answer. As a result, children using such software tended to underestimate their frequency of computer usage for this purpose. If the intent of this question is to determine how often children do educationally relevant tasks on their computer, including schoolwork, the wording needs to be changed.

The second issue may be more idiosyncratic. Two children responded to the question by referring to “other machines” in their home (a word processor in one case and a “play” computer with spelling and math games.) If this item is intended to capture the use of home technology for educational purposes, the item is working. However, if it is intended to capture the presence and use of home computers for educational purposes, it still needs modification.

Revision

How often do you use a computer at home to do schoolwork *and to play educational games?*

- | | |
|------------------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice month | G |
| Never or hardly ever | G |
| There is no computer at home | G |

Fourth graders (2)

3. How often do you use a computer at home to do schoolwork and to play educational games?

- Almost every day G
- Once or twice a week G
- Once or twice a month G
- Never or hardly ever G
- There is no computer at home G

Error rate 27% (3 out of 11 responses)
 Number of children reporting more frequently 0
 Average amount of overreporting n/a
 Number of children reporting less frequently 3
 Average amount of underreporting 1.33 scale units

"Correct" responses	Student responses				
	no computer	never or hardly ever	once or twice a month	once or twice a week	almost every day
no computer	4	-	-	-	-
never or hardly ever	-	1	-	-	-
once or twice a month	-	-	1	-	-
once or twice a week	-	-	2	1	-
almost every day	-	-	1	-	1

Discussion

One potential discrepancy between a child's and a parent's responses was resolved because the parent acknowledged that the child's response "every other day" was closer to "almost every day" (the child's response) than to "once or twice a week" (the mother's response).

The reasons for underreporting were:

- (1) One parent included solitaire as an educational game whereas the child did not;
- (2) One child might have underestimated slightly, categorizing her use of a computer about three times a month as “once or twice a month” as opposed to “once or twice a week,” which was her mother’s response;
- (3) One parent thought her daughter changed her answer because she got nervous after a probe (however, the child’s response seemed closer to reality than the mother’s).

Labeling solitaire as an educational game is questionable. To be conservative, we accepted the parent’s decision and treated this as an incorrect response.

Eighth graders

3. How often do you use a computer at home to do schoolwork and to play educational games?

- Almost every day G
- Once or twice a week G
- Once or twice a month G
- Never or hardly ever G
- There is no computer at home G

Error rate 25% (3 out of 12 responses)
 Number of children reporting more frequently 2
 Average amount of overreporting 1 scale unit
 Number of children reporting less frequently 1
 Average amount of underreporting 1 scale unit

"Correct" responses	Student responses				
	no computer	never or hardly ever	once or twice a month	once or twice a week	almost every day
no computer	1	1	-	-	-
never or hardly ever	-	2	-	-	-
once or twice a month	-	-	-	-	-
once or twice a week	-	-	-	2	1
almost every day	-	-	-	1	4

Discussion

Two potential discrepancies between children and parents' responses were resolved when the parents acknowledged that the children's responses were more accurate:

- (1) A mother acknowledged that her daughter knew better, since she is not home when the daughter uses the computer (the mother works three jobs);
- (2) A mother admitted that she does not see her daughter use the computer because it is located in the garage.

Finally, a third potential discrepancy was resolved because a child accurately referred to his actual use of a new computer, whereas the father initially reported his expectations of his son's future use of the new computer.

The reason for the one instance of underreporting was that a parent included chess as an educational game whereas the child did not. This, too, is a very debatable classification. The reasons for overreporting were:

- (1) One child considered an IBM word processor a computer;
- (2) Another child overestimated slightly by categorizing his use of a computer about four times a week as "almost every day" as opposed to "once or twice a week," which was his mother's response. (Arguments can be made that the child's categorization is preferable. However, we chose the most conservative classification approach.)

Summary of Question 3

Revision effects

Adding "educational games" seemed to improve the question. The error rate decreased substantially after item revision -- from 67 percent to 27 percent for fourth graders.

Age effects

The item seems to work for both fourth and eighth graders, but there are issues of how to define an educational game (e.g., solitaire, chess, the Internet) and also how to define a computer (e.g., IBM word processor).

Recommendations

The addition of "educational games" is an improvement. And, if the real intent is to capture the use of technology at home for educational purposes, the item does not need further refinements.

Fourth graders (1)

4. How often do you see your mother using mathematics (that is, measuring things, writing checks, or doing arithmetic)?

Every day	G
A few times a week	G
Once a week	G
Once a month	G
Less than once a month	G
Never	G

Error rate	75% (9 out of 12)
Number reporting more frequently	4
Average amount of overestimation	1.75 scale units
Number reporting less frequently	5
Average amount of underestimation	1.8 scale units

"Correct" responses	Student responses					
	never	less than once a month	once a month	once a week	a few times a week	every day
never	-	1	-	-	-	-
less than once a month	-	-	-	-	-	-
once a month	-	-	-	-	2	-
once a week	-	-	-	-	-	1
a few times a week	-	-	1	1	1	-
every day	-	1	-	-	2	2

Discussion

Children experienced a great deal of difficulty trying to respond to this question. Several could not generalize beyond the specific examples provided (“measuring things, writing checks, or doing arithmetic”). Others interpreted “see” literally. Fourth graders may *know* that their parents use math every day, which seems to be what we would want to know, but they often report only what they *see* as the question asks. Also, mathematics seemed to be a hard word for fourth graders.

Revision

How often *does* your mother use *numbers*? *Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.*

<i>Several times a day</i>	G
Every day	G
A few times a week	G
Once a week	G
Once a month	G
Less than once a month	G
Never	G

Discussion

Fourth grade children tend to underreport the frequency with which their mother uses numbers. In several instances, this was due to fourth graders interpreting the item as asking for their direct experiential knowledge of seeing their mother using numbers (four children). In two other cases, they failed to generalize the concept of using numbers from the examples provided (e.g., only thinking of their mother helping them with homework or thinking of usage of numbers as they are used in math at school). Also, one child did not understand the concept of using numbers (causing a six scale-unit discrepancy). Another fourth grader just guessed and picked the middle response (resulting in a two scale-unit discrepancy).

Eighth graders

4. How often does your mother use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

Several times a day	G
Every day	G
A few times a week	G
Once a week	G
Once a month	G
Less than once a month	G
Never	G

Error rate	33% (4 out of 12 responses)
Number of children reporting more frequently	0
Average amount of overreporting	n/a
Number of children reporting less frequently	4
Average amount of underreporting	1 scale unit

"Correct" responses	Student responses						
	never	less than once a month	once a month	once a week	a few times a week	every day	several times a day
never	-	-	-	-	-	-	-
less than once a month	-	-	-	-	-	-	-
once a month	-	1	-	-	-	-	-
once a week	-	-	-	-	-	-	-
a few times a week	-	-	-	-	-	-	-
every day	-	-	-	-	-	-	-
several times a day	-	-	-	-	-	3	8

Discussion

Three potential discrepancies between children's and parents' responses were resolved because the parents acknowledged that the children's responses were more accurate. These parents were surprised that their children were so inclusive in their examples (e.g., shopping, cooking, and using numbers at work). A fourth potential discrepancy was resolved because the mother did not make a distinction between "every day" and "several times a day," whereas the child did. These cases were not considered as errors.

This item works better for eighth graders than fourth graders. But, underreporting still tends to occur: four eighth graders underreported. This was due to their interpreting the item as asking for their direct experiential knowledge of seeing their mother using numbers (two children) or not generalizing the concept of using numbers (e.g., not thinking of mother using numbers at work) (two children).

Summary of Question 4

Revision effects

The item was not improved by replacing "How often *do you see* your mother using mathematics" with "How often *does* your mother use numbers." Fourth graders still make errors at a high rate (75 percent versus 82 percent after item revision) either reporting on their direct experiential knowledge of "seeing" their mother use numbers or not generalizing the concept of "using numbers."

Age effects

This item does not work as intended. Fourth grade children tend to underreport either interpreting the item as asking for their direct experiential knowledge of seeing their mother using numbers (four children) or not generalizing the concept of using numbers (e.g., only thinking of their mother helping them with homework or thinking of usage of numbers as they are used in math at school) (two children). Also, one child did not understand the concept of using numbers and one just guessed and picked the middle response.

The item works better for eighth graders than fourth graders. But underreporting bias still occurs: four eighth graders underreported either interpreting the item as asking for their direct experiential knowledge of seeing their mother using numbers (two children) or not generalizing the concept of using numbers (e.g., not thinking of mother using numbers at work) (two children).

Recommendations

This question should not be asked of fourth graders. It is asking for information that fourth graders cannot accurately report. Many fourth graders are unaware of the frequency of their parents' use of mathematics. They have difficulties with the concept "use of mathematics" or "use of numbers." This concept does not lend itself to a short definition that can be used in a survey.

This item should probably be revised for eighth graders. There was a tendency for underreporting, suggesting that "using numbers" may have been interpreted too literally. Also mitigating against the use of this phrase is the fact, pointed out by one parent, that "using numbers" refers to smoking marijuana. Since eighth graders seem to be familiar with the concept of using math, the following revision should be considered:

How often does your mother use math? This includes measuring things as well as adding, subtracting, multiplying, and dividing.

Several times a day	G
Every day	G
A few times a week	G
Once a week	G
Once a month	G
Less than once a month	G
Never	G

Fourth graders (1)

5. How often do you see your father using mathematics (that is, measuring things, writing checks, or doing arithmetic)?

- Every day G
- A few times a week G
- Once a week G
- Once a month G
- Less than once a month G
- Never G

Error rate 75% (9 out of 12)
 Number reporting more frequently 0
 Average amount of overestimation n/a
 Number reporting less frequently 9
 Average amount of underestimation 1.8 scale units

"Correct" responses	Student responses					
	never	less than once a month	once a month	once a week	a few times a week	every day
never	1	-	-	-	-	-
less than once a month	-	-	-	-	-	-
once a month	-	1	-	-	-	-
once a week	-	-	-	1	-	-
a few times a week	-	-	1	1	1	-
every day	1	-	-	2	3	-

Discussion

In contrast with the item asking about mathematics usage by "your mother," all of the errors associated with this item were in the same direction: three-fourths (75 percent) of the children underreported how frequently they saw their father using mathematics. Children experienced a great deal of difficulty trying to respond to this question. The reasons for

underreporting were the same as in Question 4: Children interpreted “see” literally. Fourth graders may *know* that their parents use math every day, which seems to be what we would want to know, but they report only what they *see* as the question asks.

Revision

How often *does* your father *use numbers*? *Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.*

- | | |
|----------------------------|---|
| <i>Several times a day</i> | G |
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |

Fourth graders (2)

5. How often does your father use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

Several times a day	G
Every day	G
A few times a week	G
Once a week	G
Once a month	G
Less than once a month	G
Never	G

Error rate	50% (5 out of 10 responses—data were missing in one case due to an absent father)
Number of children reporting more frequently	0
Average amount of overreporting	n/a
Number of children reporting less frequently	5
Average amount of underreporting	3.6 scale units

"Correct" responses	Student responses						
	never	less than once a month	once a month	once a week	a few times a week	every day	several times a day
never	1	-	-	-	-	-	-
less than once a month	-	-	-	-	-	-	-
once a month	-	-	-	-	-	-	-
once a week	-	-	-	-	-	-	-
a few times a week	-	-	-	1	1	-	-
every day	-	-	-	-	-	1	-
several times a day	1	2	-	-	-	1	2

Discussion

One potential discrepancy between a child's and a parent's response was resolved because the parent acknowledged that the child's response was more accurate: the mother said that her daughter knows more about what her father does than the mother did.

As with the previous version, all of the errors were in the same direction. Half of the children underreported their fathers use of numbers. Two of the fourth graders interpreted the item as asking for their direct experiential knowledge of seeing their father using numbers; one child didn't generalize the concept (i.e., did not count father using numbers at work), and one just didn't understand the question (resulting in a discrepancy of six scale units). The final error resulted from a child being forced to guess. This child, who doesn't live with her father, indicated that she would have skipped the question, if that were possible.

Eighth graders

5. How often does your father use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

Several times a day	G
Every day	G
A few times a week	G
Once a week	G
Once a month	G
Less than once a month	G
Never	G

Error rate	30% (3 out of 10 responses—data were missing in two cases due to absent fathers)
Number of children reporting more frequently	0
Average amount of overreporting	n/a
Number of children reporting less frequently	3
Average amount of underreporting	1.33 scale units

"Correct" responses	Student responses						
	never	less than once a month	once a month	once a week	a few times a week	every day	several times a day
never	-	-	-	-	-	-	-
less than once a month	-	-	-	-	-	-	-
once a month	-	-	-	-	-	-	-
once a week	-	-	-	-	-	-	-
a few times a week	-	-	-	-	-	-	-
every day	-	-	-	-	1	1	-
several times a day	-	-	-	-	1	1	6

Discussion

Two potential discrepancies between children and parents' responses were resolved because the parents felt that their children's answer "several times a day" was more accurate than their own response of "every day." A third potential discrepancy was resolved because the mother did not make a distinction between "every day" and "several times a day," whereas the child did.

The errors that occurred were due to several different factors. One eighth grader interpreted the item as asking for his direct experiential knowledge of seeing his father using numbers. Another child didn't generalize the concept of using numbers from the examples given (i.e., he did not retrieve information about his father's every day practical use of numbers). Another child guessed since he doesn't live with his father.

Summary of Question 5

Revision effects

The error rate was slightly improved for fourth graders after item revision (75 percent versus 50 percent). However, it is unclear what this improvement is due to, since the error rate did not decrease for Question 4, which had the same revisions. However, in the Parent Item Sensitivity Review Panel, one respondent pointed out an additional problem with this item: “Using numbers” can be interpreted as smoking marijuana.

Age effects

Similar to Question 4, this item does not work as intended. Fourth graders tend to underreport their father’s use of numbers. The item works much better for eighth graders. However, they tend to underreport for similar reasons.

Recommendations

This question should not be asked of fourth graders. It is asking for information that fourth graders cannot accurately report. Many fourth graders are unaware of the frequency of their parents’ use of mathematics. They have difficulties with the concept “use of mathematics” or “use of numbers.” This concept does not lend itself to a short definition that can be used in a survey.

This item should probably be revised for eighth graders. There was a tendency for underreporting, suggesting that “using numbers” may have been interpreted too literally. Also mitigating against the use of this phrase is the fact, pointed out by one parent, that “using numbers” refers to smoking marijuana. Since eighth graders seem to be familiar with the concept of using math, the following revision should be considered:

How often does your father use math? This includes measuring things as well as adding, subtracting, multiplying, and dividing.

Several times a day	G
Every day	G
A few times a week	G
Once a week	G
Once a month	G
Less than once a month	G
Never	G

Fourth graders (1)

6. How far in school did your mother go?

- She did not finish high school G
- She did finish high school G
- She went to school after high school G
- She graduated from college G
- She also has a special college degree (doctor, lawyer, etc.) G

Error rate 58% (7 out of 12)
 Number overestimated 3
 Average amount of overestimation 1.3 scale units
 Number underestimated 4
 Average amount of underestimation 1 scale unit (excluding one child who didn't know mother)

"Correct" responses	Student responses				
	did not finish HS	graduated from HS	went to school after HS	graduated from college	special college degree
did not finish HS	-	-	-	-	-
graduated from HS	-	-	-	-	-
went to school after HS	-	-	1	2	1
graduated from college	-	-	-	1	-
special college degree	1	-	-	3	3

Discussion

Although errors were numerous, at least there was no obvious directional bias associated with the pattern of errors. One potential problem is represented by A.A./A.S. degrees. In situations where a parent earned an A.A./A.S., the parent (arguably) graduated from college. Conversely, the expected lifetime earnings of someone with an associate's degree are different from someone with a bachelor's degree. However, comprehending the distinction between these types of degrees seems to be well beyond the abilities of most fourth graders.

In the three cases where the child overestimated the mother's highest level of education, the mother "went to school after high school." These children had difficulty distinguishing between the category "went to school after high school" and "graduate from college."

In addition, many fourth graders did not understand what was meant by "special college degree." They could only respond to the explicit examples provided. In three cases, the fourth graders knew their mother had gone to and graduated from college. But, they didn't know about their mothers' advanced degrees. In another case, a fourth grader did not live with her mother or know her mother very well. She thought her mother did not finish high school while in actuality her mother had an advanced degree.

Revision

Decompose the question into the following yes/no questions:

a. Did your mother graduate from high school?

Yes	G
No	G

b. Did your mother go to school after high school?

Yes	G
No	G

c. Did your mother graduate from college?

Yes	G
No	G

d. Did your mother go to school after graduating from college?

Yes	G
No	G

Only asked of fourth graders (2)

6. a. Did your mother graduate from high school?

Yes G
No G

Error rate 18% (2 out of 11 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	8	-
No	2	1

Discussion

One potential discrepancy was resolved because a mother did not consider getting a GED graduating from high school. So, the child's answer ("yes") was correct.

Two children thought their mothers graduated from high school when in fact they didn't. They simply lacked the knowledge and guessed.

Only asked of fourth graders (2)

6. b. Did your mother go to school after high school?

Yes G
No G

Error rate 27% (3 out of 11 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	7	-	1
No	2	1	-

Discussion

One child thought his mother went to school after high school when in fact she didn't; one did not understand the concept of high school; and one child did not know the answer and didn't give a response.

Only asked of fourth graders (2)

6. c. Did your mother graduate from college?

Yes G
No G

Error rate 45% (5 out of 11 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	4	1	-
No	2	2	2

Discussion

Two children thought their mothers graduated from college when in fact they didn't. In one case, the child thought that since his parents knew math and helped him with homework, they probably graduated from college. The other child seems to have interpreted her mother's completion of beauty school as graduating from college.

One child, who mistakenly thought that her mother did not graduate from college, did not understand the concept of college. Additionally, two children did not know the answer and didn't give a response.

Only asked of fourth graders (2)

6. d. Did your mother go to school after graduating from college?

Yes G
No G

Error rate 45% (5 out of 11 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	1	1	1
No	2	5	1

Discussion

One potential discrepancy between a child's and a parent's responses was resolved because the parent considered "training school" as going to school after graduating from college. So, although literally correct, according to the item's intent, the mother was wrong and the child correct.

Two children mistakenly thought their mothers went to school after graduating from college: one thought that since his parents knew math and helped him with homework, they probably went to school after graduating from college. The other child knew that her mother took a class after high school and might have interpreted that as going to school after graduating from college.

One child who mistakenly thought that her mother did not go to school after graduating from college did not understand the concept of "going to school after graduating from college," and two children did not know the answer and didn't give a response.

Eighth graders

6. How far in school did your mother go?

She did not finish high school	G
She did finish high school	G
She went to school after high school	G
She graduated from college	G
She also has a special college degree (doctor, lawyer, etc.)	G

Error rate	67% (8 out of 12 responses)
Number of children overestimating	3
Average amount of overestimation	1 scale unit
Number of children underestimating	5
Average amount of underestimation	1 scale unit

"Correct" responses	Student responses				
	did not finish HS	graduated from HS	went to school after HS	graduated from college	special college degree
did not finish HS	-	-	-	-	-
graduated from HS	1	1	1	-	-
went to school after HS	-	1	1	1	-
graduated from college	-	-	2	1	1
special college degree	-	-	-	1	1

Discussion

Eight eighth graders answered this item incorrectly. This was due to the following:

- (1) Two children didn't know their mother's level of education and inferred that it was the same as their father's.
- (2) One child mistakenly thought his mother had a special college degree since she went to school after college to become a teacher. However, the mother

- got her teaching credential as an undergraduate.
- (3) One child was not aware that her mother went to school after high school, since she was only one year old when her mother took college courses.
 - (4) One parent thought her daughter underestimated because the examples “doctor” and “lawyer” were misleading (the mother has a Master’s degree, as well as teaching credentials).
 - (5) One child was not aware that his mother got a GED in the U.S.
 - (6) One child didn't understand the difference between graduation from college and special college degree.
 - (7) One child mistakenly thought his mother graduated from college.

Summary of Question 6

Revision effects

The item seems to have been improved by decomposing it into four yes/no questions. However, almost half (45 percent) of the fourth graders did not know if their mothers graduated from college or if they went to school after graduating from college. The fourth graders we studied simply were not good informants about their mother's educational attainment. Many simply lacked this knowledge and were forced to draw inferences about this. (It seems probable that several fourth graders who did not "know" the correct answer still managed to answer these items correctly because their inferences were correct.)

Age effects

The original item was administered to eighth graders to determine whether it would work better for this age group. The original wording did not seem to work any better for eighth graders than fourth graders. In fact, eighth graders had a slightly higher error rate (67 percent) than fourth graders (58 percent). We therefore believe the new item format (Questions 6a-d) is better.

If the original format is kept, one might consider adding other examples under special college degree such as Master's and Ph.D., but only for eighth graders. On a more technical note, it is unclear whether GEDs should be considered as graduating from high school. Test administrators need to be provided with guidance about how to respond to GED questions.

If a decomposed format is used, the final item needs to be clarified with the addition of further examples, so that children will answer affirmatively if their parents have advanced degrees in fields other than law or medicine. The recommended revisions, particularly for the last item (see below), should be tested prior to implementation.

Recommendations

Fourth graders should not be asked about their mother's education. They lack the knowledge to be accurate informants. If this item is asked of eighth graders, it should be asked using the new (decomposed) series of items:

a. Did your mother graduate from high school?

Yes G No G

b. Did your mother go to school after high school?

Yes G No G

c. Did your mother graduate from college?

Yes G No G

d. Did your mother earn an advanced college degree, such as a Master's degree or a doctoral degree? (Lawyers and physicians are some of the people who have advanced college degrees.)

Yes

G

No

G

Fourth graders (1)

7. How far in school did your father go?

- He did not finish high school G
- He did finish high school G
- He went to school after high school G
- He graduated from college G
- He also has a special college degree (doctor, lawyer, etc.) G

Error rate 58% (7 out of 12 responses. One child didn't know her father and skipped the question. Her response is counted as incorrect but is not summarized in the table below.)

Number overestimated 0

Average amount of overestimation n/a

Number underestimated 6

Average amount of underestimation 1.3 scale units

"Correct" responses	Student responses				
	did not finish HS	graduated from HS	went to school after HS	graduated from college	special college degree
did not finish HS	-	-	-	-	-
graduated from HS	-	-	-	-	-
went to school after HS	-	-	-	-	-
graduated from college	-	1	1	2	-
special college degree	-	-	1	3	3

Discussion

Unlike the comparable item for mother's education, all of the errors were underestimates. One child simply guessed—and guessed incorrectly. In most cases, the fourth graders simply did not know. One child knew her parents met in college. So, she responded her father had "graduated from college." Since he has an M.B.A., this response was wrong. Several parents seemed very surprised that their children did not know the right answer to this item. One

parent attributed the error to her child's failure to concentrate and nervousness. However, there is no evidence that the child had ever encoded a retrievable representation of this fact.

As in the previous item, the associate's degree and special college degree situations need to be resolved. The term "special college degree" was not well understood. Fourth graders again responded to the specific examples rather than the construct these examples were intended to represent.

Revision

Decompose the question down into the following yes/no questions:

a. Did your father graduate from high school?

Yes	G
No	G

b. Did your father go to school after high school?

Yes	G
No	G

c. Did your father graduate from college?

Yes	G
No	G

d. Did your father go to school after graduating from college?

Yes	G
No	G

Fourth graders (2)

7. a. Did your father graduate from high school?

Yes G
No G

Error rate 27% (3 out of 11 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	8	1
No	2	-

Discussion

Two children mistakenly thought their fathers had graduated from high school. This was apparently something that they felt they "knew." Another fourth grader did not understand the concept of high school and was furthermore thinking of his stepfather, whereas his mother was thinking of his biological father, resulting in the third error.

Two children were thinking of their stepfathers as opposed to their biological fathers, which in one case led to a discrepancy (discussed above). In the other case there was agreement since the mother gave responses for both the biological father and the stepfather not knowing whether the child would think of one or the other.

Eighth graders

7. a. Did your father graduate from high school?

Yes G
No G

Error rate 8% (1 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	11	1
No	-	-

Discussion

One child thought her father did not graduate from high school when in fact he did.

Fourth graders (2)

7. b. Did your father go to school after high school?

Yes G
No G

Error rate 45% (5 out of 11 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	5	1	2
No	2	1	-

Discussion

The reasons for these errors were:

- (1) Two children mistakenly thought their fathers went to school after graduating from high school.
- (2) One child did not understand the concept of going to school after graduating from high school and was furthermore thinking of his stepfather, whereas his mother was thinking of his biological father.
- (3) Two children did not know the answer and didn't give a response.

As previously noted in the discussion of 7a ("Did your father graduate from high school?"), two children were thinking of their stepfathers as opposed to their biological fathers, which in one case led to a discrepancy (discussed above). In the other case there was agreement since the mother gave responses for both the biological father and the stepfather not knowing whether the child would think of one or the other.

Eighth graders

7. b. Did your father go to school after high school?

Yes G
No G

Error rate 17% (2 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	9	2
No	-	1

Discussion

One child thought her father did not go to school after graduating from high school when in fact he did. Another child did not understand what was intended by the phrase "going to school after high school" and interpreted the question as going to school immediately after finishing high school.

Fourth graders (2)

7. c. Did your father graduate from college?

Yes G
No G

Error rate 45% (5 out of 11 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	5	-	1
No	3	1	1

Discussion

Two children mistakenly thought their fathers graduated from college: one thought that since his parents knew math and helped him with homework, they probably graduated from college. Also, the father went to school to learn English, which might have led the child to conclude that he graduated from college. The other child said that the father had told him that he went to college.

One child guessed, giving an answer that reflected the following logic (according to his mother): "My father is older and smarter than my mother, my mother graduated from college; therefore my father must have graduated from college."

Two children were thinking of their stepfathers as opposed to their biological fathers, but this did not lead to discrepancies even though one parent was thinking of the biological father. In this case, both the stepfather and the biological father graduated from college.

Eighth graders

7. c. Did your father graduate from college?

Yes G
No G

Error rate 25% (3 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	5	1
No	2	4

Discussion

Two children thought their fathers graduated from college when in fact they didn't. Their fathers did go to college, but they didn't graduate.

Guidelines are necessary about how to deal with graduation from a junior college. In one case, a child counted father attending (and graduating from) junior college as "graduating from college," which her mother felt was an incorrect response. (We considered it to be a correct response.) However, another parent counted an AA degree as graduating from college, whereas the child answered "no" to this question. This second case was treated as an incorrect response.

Fourth graders (2)

7. d. Did your father go to school after graduating from college?

Yes G
No G

Error rate 55% (6 out of 11 responses)

"Correct" responses	Student responses		
	Yes	No	Blank
Yes	-	1	1
No	2	5	2

Discussion

Two children mistakenly thought their fathers went to school after graduating from college. One was the child whose parents knew math and helped him with homework, so he felt that they probably went to school after graduating from college. Also, the father went to school to learn English, which might have led the child to conclude that he went to school after graduating from college. The other child did not understand the concept of "going to school after graduating from college" and was furthermore thinking of his stepfather, whereas his mother was thinking of his biological father.

One child did not know that "there was school after college," and three children did not know the answer and didn't give a response.

As previously noted, two children were thinking of their stepfathers as opposed to their biological fathers, which in one case led to a discrepancy (discussed above).

Eighth graders

7. d. Did your father go to school after graduating from college?

Yes G
No G

Error rate 17% (2 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	4	-
No	2	6

Discussion

Two children whose fathers took computer classes and technical courses were counted as "going to school after graduating from college." This literal interpretation is technically correct, but was considered wrong since it did not refer to enrollment in an advanced degree program (which was felt to be the item's real intent).

Summary of Question 7

Revision effects

The item was somewhat improved by decomposition into four yes/no questions. However, almost half (45 percent) of the fourth graders did not know if their fathers went to school after high school or if they graduated from college, and more than half (55 percent) did not know if their father went to school after graduating from college. Fourth graders are not good informants about their father's educational attainment.

In many situations, children can “recall” a fact but are unable to determine how they know this. Asking about anything their parents might have said or done that helped them figure this out does not always provide insights into the source of their belief. Parental educational attainment is an item that can be answered by fourth graders. However, their answers often are not valid.

Age effects

The decomposed items (7a-7d) worked better for eighth than fourth graders. The concept of “going to school after graduating from college” was not comprehensible to many fourth graders. Furthermore, there was an issue of stepfathers as opposed to biological fathers. Are children who live with stepfathers supposed to answer about their biological fathers or about their stepfathers? In many, but not all situations, fathers and stepfathers are comparably educated.

This issue may be moot. If the underlying construct being measured is the education level of the parent who fills the role of father, the child's response to an item asking about her/his “father's education” will most likely be answered about the person who is filling the father role for the student.²

For eighth graders, there are unresolved issues of how to define college in Question 7c: Does “college” include two-year colleges or only four-year colleges? Similarly for Question 7d: Does “going to school after graduating from college” include taking classes if the person is a college graduate? We assume the intent of the item is to determine if the parent has an advanced degree. Since “going to school after graduating from college” elicited affirmative responses attributable to computer classes and technical courses, this item needs further revision.

² This does not appear to apply to items dealing with race/ethnicity. For items asking about biological characteristics, most (but not all) students will assume that the biological parent is the parent of interest.

Recommendations

These items should not be administered to fourth graders. Eighth graders can be asked the following items:

a. Did your father graduate from high school?

Yes G
No G

b. Did your father go to school after high school?

Yes G
No G

c. Did your father graduate from college?

Yes G
No G

d. Did your father earn an advanced college degree, such as a Master's degree or a doctoral degree? (Lawyers and physicians are some of the people who have advanced college degrees.)

Yes G
No G

Fourth graders (1)

8. How much do your parents try to find out about who your friends are?

Don't know G
 Not at all G
 Just a little G
 Some G
 A lot G

Error rate 58% (7 out of 12 responses)
 Number reporting more frequently 2
 Average amount of overestimation 1.5 scale units
 Number reporting less frequently 5
 Average amount of underestimation 1.8 scale units

"Correct" responses	Student responses				
	don't know	not at all	just a little	some	a lot
don't know	-	-	-	-	-
not at all	-	-	-	-	-
just a little	-	-	2	-	1
some	-	1	1	-	1
a lot	1	-	-	2	3

Discussion

Responses to this item were influenced by the ways in which children and parents normally interact. Two children who talked a lot about their friends with their parents were not bothered by lots of questions from their parents. These questions were probably perceived as part of normal conversation. So, even though their parents reported that they asked their children lots of questions about their friends, these children didn't feel that their parents tried to find out very much about who their friends are. In comparison with their parents' responses, they underreported how much their parents tried to find out about their friends.

Conversely, if children perceive questions from their parents as prying, they may overestimate how much their parents try to find out about their friends. One child's response fell into that category.

Another child misinterpreted the meaning of the "don't know" category. She explained that her parents "don't know" who her friends are and therefore selected the "don't know" response option for this reason.

Accordingly, it may be better to just ask *how well they know* rather than *how much they try to know*.

Revision

How well do your parents know your friends?

They don't know my friends at all G
They know just a little about my friends G
They know my friends pretty well G
They know my friends very well G

Fourth graders (2)

8. How well do your parents know your friends?

They don't know my friends at all G
 They know just a little about my friends G
 They know my friends pretty well G
 They know my friends very well G

Error rate 36% (4 out of 11 responses)
 Number of children overestimating 1
 Average amount of overestimation 1 scale unit
 Number of children underestimating 3
 Average amount of underestimation 1 scale unit

"Correct" responses	Student responses			
	not at all	just a little	pretty well	very well
not at all	-	-	-	-
just a little	-	3	1	-
pretty well	-	1	1	-
very well	-	-	2	3

Discussion

Underestimation occurred because children and parents had different interpretations of the terms "pretty well" and "very well." As one child who said "pretty well" as opposed to "very well" explained, "(I said pretty well) because my parents don't know *everything* about my friends." The reason for the overestimation was that the child was thinking of his mother only, whereas the mother was thinking of both parents.

Eighth graders

8. How well do your parents know your friends?

They don't know my friends at all	G
They know just a little about my friends	G
They know my friends pretty well	G
They know my friends very well	G

Error rate	33% (4 out of 12 responses)
Number of children overestimating	4
Average amount of overestimation	1 scale unit
Number of children underestimating	0
Average amount of underestimation	n/a

"Correct" responses	Student responses			
	not at all	just a little	pretty well	very well
not at all	-	-	-	-
just a little	-	1	3	-
pretty well	-	-	4	1
very well	-	-	-	3

Discussion

Overestimation occurred for two reasons:

- (1) Two children and their parents had different interpretations of the concepts "pretty well" and "very well."
- (2) Three children and their parents were thinking of different groups of friends (best friends versus friends in general and school friends versus neighborhood friends). In one case, however, this different definition of "friends" did not lead to a discrepancy between the child and the parent's responses.

Summary of Question 8

Revision effects

The question was improved by rewording it to ask about how well parents know their child's friends as opposed to how much they try to find out about their child's friends. The error rate was decreased from 58 percent to 36 percent for fourth graders.

Age effects

The item is in need of further improvement. The terms “pretty well” and “very well” may be interpreted somewhat differently by fourth and eighth graders. Adolescents may be more sensitive to questions about their friends. The meager information they provide may seem to the adolescent to give their parents a “pretty” good idea about their friends’ characteristics. Fourth graders may respond more literally.

The term “parents” can be interpreted to refer to either the most knowledgeable parent or both parents. It is clear that one child only thought of his mother as opposed to both parents. The term “friends” also is subject to different interpretations. Eighth graders tend to respond to “friends” differently than their parents (e.g., as their best friends versus friends in general).

Recommendations

To ensure consistency of the meaning of “friends,” change the item to ask about “best friends.” In addition, consistency of meaning of “parents” can be facilitated by asking separately about mother and father.

a. How well does your *mother* know your *best* friends?

- | | |
|---|---|
| She doesn't know my best friends at all | G |
| She knows just a little about my best friends | G |
| She knows my best friends pretty well | G |
| She knows my best friends very well | G |

b. How well does your *father* know your *best* friends?

- | | |
|--|---|
| He doesn't know my best friends at all | G |
| He knows just a little about my best friends | G |
| He knows my best friends pretty well | G |
| He knows my best friends very well | G |

Fourth graders (1)

9. Are there certain TV shows that your parents don't let you watch?

Yes
No

Error rate 18% (2 out of 11 responses; response missing for one parent)

"Correct" responses	Student responses	
	Yes	No
Yes	9	2
No	-	-

Discussion

All of the parents who responded answered "Yes" to this item. The two children who said "No" didn't recognize that there were prohibitions. They weren't interested in watching shows that their parents wouldn't let them watch.

Revision

Do your parents care which TV shows you watch?

Yes G
No G

Fourth graders (2)

9. Do your parents care which TV shows you watch?

Yes G
No G

Error rate 9% (1 out of 11 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	10	1
No	-	-

Discussion

We were unable to probe to determine the reason for this discrepancy. The child providing this response was not feeling well and probing had to be drastically curtailed.

Eighth graders

9. Do your parents care which TV shows you watch?

Yes G
No G

Error rate 17% (2 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	9	2
No	-	1

Discussion

Two eighth graders interpreted "care" differently from their parents: one child interpreted care as control, and another interpreted it as turning the TV off.

Summary of Question 9

Revision effects

Error rates for fourth graders before and after the revision were similar: 18 percent before vs. 9 percent afterwards. The revised item may be preferable because it enables children without explicit restrictions on their television viewing habits nevertheless to reflect their awareness of their parents' interest in their choice of shows.

Age effects

The item works for both fourth and eighth graders. However, a few eighth graders interpreted "care" as control.

Recommendations

Both before and after revision the item received very little item variance: all but one parent responded "yes" to controlling and caring about which TV shows their children watch. As worded, the item deals with caring about the *quality* of the TV shows their children watch (i.e., the type of shows they watch). However, parents might also be concerned about the *amount* of TV their children watch.

In *NAEP 1994 Trends in Academic Progress* (1996)³, it was noted that family rules for TV watching were not related to mathematics scores, whereas number of hours watched per day were. The more time fourth and eighth graders spent watching TV, the lower their math scores were. It might therefore be informative to ask about parents' concern about the amount of TV watching.

Do your parents care *how much TV* you watch?

Yes G
No G

Responses to an item like this should be analyzed in conjunction with responses to items about the amount of TV watched per day and the item about parents caring about which shows are watched. Children who do not watch any TV because their parents care about how much TV they watch and those who do not watch any TV and whose parents do not care are very different types of children. The relationships among rules, behaviors, and academic outcomes are probably complex and may require several items to enable the proper analyses to be conducted.

³ Campbell, J., Reese, C., O'Sullivan, C., and Dossey, J. (1996). *NAEP 1994 Trends in Academic Progress*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, NCES 97-095.

Fourth graders (1)

10. Is there a specific place for you to study in your home?

Yes G
No G

Error rate 42% (5 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	5	2
No	3	2

Discussion

Of the five discrepancies, two children falsely reported there was not a place to study; three children falsely reported there was a specific place to study. The former didn't acknowledge the existence of a specific place because they studied elsewhere; the latter (and children in general) equated *specific place* with the place they *usually* studied in their home, whether that be in the kitchen, in the living room, at the coffee table or in their bed. In other words, they interpreted the question as asking, "Is there a place that you usually study in your home?"

Revision

Do you have your own desk or table at home where you can study whenever you want?

Yes G
No G

Fourth graders (2)

10. Do you have your own desk or table at home where you can study whenever you want?

Yes G
No G

Error rate 9% (1 out of 11 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	6	-
No	1	4

Discussion

One child counted a desk in a playroom even though he doesn't study there. The parent did not consider this to be a place where the child could study whenever he wanted.

Eighth graders

10. Do you have your own desk or table at home where you can study whenever you want?

Yes G
No G

Error rate 25% (3 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	7	-
No	3	2

Discussion

One potential discrepancy between a child's and a parent's responses was resolved because the parent incorrectly interpreted "own desk" to mean a desk that could be shared with other siblings.

Three children interpreted "own desk or table" to be:

- (1) the dining room table,
- (2) table in living room, or
- (3) any desk.

Summary of Question 10

Revision effects

The item was significantly improved after revision: for fourth graders, the error rate decreased from 42 percent to nine percent.

Age effects

The item works better for fourth than eighth graders (9 percent versus 25 percent error rate). Some eighth graders interpret "own desk or table" to be any desk or table in their home where they study.

Recommendations

The underlying construct being measured is the extent to which the household provides resources to allow the student to study at home whenever he or she wants to study. From this perspective, a desk or table exclusively dedicated for the child's use is an indicator of how the family values and supports education.

However, in many families the use of desks and tables is not restricted to a single person or a single activity. For example, a computer work table for the family computer is unlikely to be used only by a child. Accordingly, allowing the use of the dining room table -- or of any common furniture for study purposes -- whenever needed by the child can also be seen as an indication of the provision of resources for educational purposes. If this broader definition of support is to be assessed, the following rewording can be used:

Is there a desk or table at home where you can study whenever you want?

Yes G
No G

Fourth graders (1)

11. Do you have your own room at home?

- Yes
- No
-

Error rate 0%

"Correct" responses	Student responses	
	Yes	No
Yes	5	-
No	-	7

Discussion

All of the fourth graders knew whether or not they shared their room.

Revision

We suggest no revisions to this question.

Fourth graders (2)

11. Do you have your own room at home?

Yes G
No G

Error rate 9% (1 out of 11 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	3	-
No	1	7

Discussion

A child and his father both answered "yes" even though the child shares a room with his sister. They both interpreted "own room" as own space. We considered this to be an error.

In addition, in a 50/50 custody situation, the child had her own room at Mom's but not at Dad's. The mother answered both "yes" and "no" to this item, whereas the child said "yes" because the child spends more time at her mother's house.

Eighth graders

11. Do you have your own room at home?

Yes G
No G

Error rate 0%

"Correct" responses	Student responses	
	Yes	No
Yes	9	-
No	-	3

Summary of Question 11

Revision effects

No revisions were made to this item.

Age effects

The item works for both fourth and eighth graders. The only potential area of concern is children in joint custody situations.

Recommendations

A general instruction to students that defines home (for children in shared custody situations) might be verbally provided to students prior to completing background items.

Fourth graders (1)

12. What language do the people in your home usually speak?

English	G	Spanish	G
Chinese	G	Japanese	G
Korean	G	Filipino language	G
Italian	G	French	G
German	G	Polish	G
Portuguese	G	Other (Specify)	G

Error rate 17% (2 out of 12 responses)

"Correct" responses	Student responses		
	English	Spanish	Eng./Other
English	9	-	2
Spanish	-	1	-
Eng./Other	-	-	-

Discussion

Two children indicated that foreign languages were usually spoken in their home. One child said English and Chinese, and another said English and Arabic. In the absence of a specific instruction to check only one box, these students indicated two languages. However, in both cases, the parents indicated that they usually or nearly always spoke English. In the latter case, Arabic was only spoken during the blessing before meals.

Revision

Do you speak a language other than English at home?

Yes G---> a1. Which language or languages?



a2. How often do you speak English at home?

G I speak English all of the time or nearly all of the time

G I speak English about half of the time

G I speak another language all of the time or nearly all of the time

No G

Fourth graders (2)

12. Do you speak a language other than English at home?

Yes G---> a1. Which language or languages?

No G _____

Error rate 0% (0 out of 11 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	4	-
No	0	7

Discussion

Two children were confused about the formatting: both children correctly checked off "no," but then one child, in addition, incorrectly checked off "I speak English all of the time or nearly all of the time" in 12a2. One of the children who answered affirmatively doesn't speak a foreign language much, but understands it when his parents talk to him (in Greek). Since the intent of the item appeared to be communication, this was treated as a correct response.

The three students who reported speaking another language at home had no difficulty identifying the language (Spanish in three cases; Greek in the third case). Accordingly, there was a zero percent error rate for item 12a1 for these students.

Fourth graders (2)

12. a2. How often do you speak English at home?

- I speak English all of the time or nearly all of the time. G
 I speak English about half of the time. G
 I speak another language all of the time or nearly all of the time. G

Error rate (for children who were supposed to answer a2) 0% (0 out of 4 responses)

Error rate (for all children who responded to a2) 33% (2 out of 6 responses)

"Correct" responses	Student responses		
	English all or nearly all of the time	English half of the time	Other language all of the time
English all or nearly all of the time	1	-	-
English half of the time	-	-	-
Other language all of the time	-	-	3
Blank	2	-	-

Discussion

One child reported speaking another language all of the time at home. His parent reported "half of the time" because of the conversations the child has with his friends in English on the phone. Since it was felt that the intent of this item was to measure use of English with family members, the child's response was treated as correct.

Another child indicated that he spoke a language other than English at home (Greek), but correctly indicated that he spoke "English all of the time or nearly all of the time."

The suggested formatting was confusing for many fourth graders. At least two children checked off "I speak English all of the time or nearly all of the time" even though they answered "No" to item 12 (Do you speak a language other than English at home?). Others who answered correctly were frequently confused.

Eighth graders

12. Do you speak a language other than English at home?

Yes G---> a1. Which language or languages?

No G _____

Error rate 16% (2 out of 12 responses)

"Correct" responses	Student responses	
	Yes	No
Yes	5	-
No	2	5

Discussion

One potential discrepancy between a child's and a parent's responses was resolved because the child had a more accurate interpretation of "speaking another language." The mother included understanding another language as "speaking," whereas the child did not.

Two eighth graders interpreted "speaking another language" in a literal sense—that is, as knowing and using a few words or phrases of another language. Another child included sign language (one child). Whether sign language is a true language is a decision beyond the scope of this task; we decided to treat it as a correct response. Another child considered listening or hearing another language without responding as speaking another language. Since the intent of the item was felt to be as an indicator of languages used for communication at home, this was treated as a correct response.

All of the respondents were able to correct identify the languages that were used for communication. Accordingly, the error rate for item 12a1 was zero percent.

Eighth graders

12. a2. How often do you speak English at home?

- I speak English all of the time or nearly all of the time. G
 I speak English about half of the time. G
 I speak another language all of the time or nearly all of the time. G

Error rate (for children who were supposed to answer a2) 33% (1 out of 3 responses)
 Number of children overestimating 0
 Average amount of overestimation n/a
 Number of children underestimating 1
 Average amount of underestimation 1 scale unit

Error rate (for all children who answered a2) 71% (5 out of 7 responses)

"Correct" responses	Student responses		
	English all or nearly all of the time	English half of the time	Other language all of the time
English all or nearly all of the time	1	-	-
English half of the time	-	1	-
Other language all of the time	-	1	-
Blank	4	-	-

Discussion

One potential discrepancy between a child's and a parent's responses was resolved because the child had a more accurate interpretation of "How often do you speak English at home?" The child's response included interactions with his whole family, whereas the father only thought of his own interaction with the child.

One child underestimated his use of another language. The mother indicated that she only speaks a few words of English and that his sister tells him not to mix English and Spanish.

Four children checked off "I speak English all of the time or nearly all of the time" even though they should have been skipped out of this item. That is, they answered negatively to item 12, asking whether they spoke a language other than English at home, and

should not have completed items 12a1 and/or 12a2. In addition, another child who answered correctly was confused by the formatting.

Summary of Question 12

Revision effects

The revision had some positive effects on fourth grader's responses. Unfortunately, the use of a skip pattern and the proposed formatting created problems for several respondents.

In order to analyze the effectiveness of this item, a clear understanding of the construct that is being measured is necessary. We are assuming that the intent of the item is to provide an indicator of whether or not the child lives in a household in which English is the language that is spoken most often or in a household in which another language is predominantly spoken. If this is the case, a simple coding scheme can be used to combine responses from all three parts of the revised item to provide an indicator of this. In other words, if children who respond:

- S "yes" to "Do you speak a language other than English at home?" but who respond "I speak English all of the time or nearly all of the time" to "How often do you speak English at home?" or
- S "no" to "Do you speak a language other than English at home?"

are treated as children who speak English more than half the time at home, the error rate for the revised item would be 0 percent.

Age effects

Using the recoding schema discussed above, all four of the eighth graders who "incorrectly" indicated that they spoke a language other than English at home reported that they spoke English at home "all of the time or nearly all of the time." These responses would be recoded as correct (i.e., speaking English at home most of the time).

Recommendations

The format of the item should be changed to avoid the use of a skip pattern. This would involve rewording the second item to make it more logically appropriate:

How often do you speak a language other than English with your family at home?

- I speak English all of the time or nearly all of the time G
- I speak English about half of the time G
- I speak another language all of the time or nearly all of the time G

What language do your parents speak at home?

OVERALL RESULTS

Items were categorized as behavioral frequency items, time estimation items, and other items. Error rates for these items are summarized in Table 2-1. Error rates for the initial administration of survey items to fourth graders are summarized in the “4th Grade (1)” column; error rates for the administration of the revised items to a different group of fourth graders and a group of eighth graders are summarized in the “4th Grade (2)” and “8th Grade (2)” columns.

Table 2-1. Summary of Error Rates for Fourth and Eighth Graders

Type of Item	4th Grade (1)	4th Grade (2)	8th Grade (2)
Behavioral frequency	64.8%	52.8%	32.7%
Time estimation	41.7%	42.3%	42.3%
Other	33.2%	20.3%	20.2%
Total	43.0%	32.2%	26.6%

Behavioral frequency items (items A1, A2, A3, B3, B4, and B5) required the estimation of a rate. They all began with the phrase, “How often do(es)...” These items require the possession and application of rate estimation skills -- skills which many fourth graders do not possess. Although item rewordings can help clarify the construct being addressed by the item, they cannot overcome a lack of rate estimation skills. The suggested rewordings for this type of item resulted in a lower error rate for fourth graders (52.8 percent vs. 64.8 percent). Eighth graders seem to possess better rate estimation skills: their error rate on these items was 32.7 percent.

Time estimation items (items A4, A5, and B1) require the abilities to estimate time duration and “average” these durations. These items present cognitively challenging tasks for both fourth and eighth graders. As with the proposed behavioral frequency item modifications, item rewordings may help lower error rates through clarification of the constructs being addressed. However, rewordings cannot teach the time estimation and averaging skills required for the production of correct answers. The suggested item modifications for this type of item resulted in a slightly higher error rate for fourth graders (42.3 percent vs. 41.7 percent). This error rate was the same as the error rate for eighth graders (42.3 percent).

Other items (items A6, A7, A8, A9, A10, A11, A12, B6, B7, B8, B9, B10, and B12) did not require time estimation, rate estimation, or averaging skills. Suggested modifications for these items resulted in substantially lower error rates for fourth graders (20.3 percent vs. 33.2 percent). Overall, for all of these different types of items, suggested modifications were associated with lower error rates for fourth graders (32.2 percent vs. 43.0 percent) and error rates of 26.6 percent for eighth graders.

Calculation of error rates

In all cases, “correct” referred to what was believed to be reality. That is, if a parent felt their child was probably a better informant and more knowledgeable about a specific item, the child’s response would be considered correct. Or, if a parent misinterpreted an item, information would be elicited from the parent to provide a better indicator of what the item was intended to measure. For most items, error rates were calculated by dividing the number of incorrect responses by the total number of responses.

Special procedures were employed to estimate the error rate for certain items. To calculate the error rate for family composition items (A10, A11, and A12) that were revised through decomposition into two or more items, the new items were combined to provide a measure of the construct being measured. This measure was compared with the “correct” response. For example, the item asking “How many people in your family live at home with you?” was decomposed into 6 items asking about whether “your mother,” “your stepmother,” “your father,” and “your stepfather” live at home with you and items asking “how many brothers and sisters” and “how many other family members live at home with you.” Responses to each of these items were added to determine family size and compared with actual family size to determine if there was an error.

Special procedures were also used for calculating error rates for items (A6, A7, A8, B6, and B7) that were decomposed into several questions. For example, item A6 asked about educational expectations. This item was decomposed into four separate yes/no items (i.e., “Do you think you will ... (a) graduate from high school, (b) go to school after high school, (c) graduate from college, and (d) go to school after graduating from college. To enable comparisons with the original item, an average percent correct score for the four components was compared with the percent correct score for the original item. Similarly, special procedures were used to calculate an error rate for the decomposed items that replaced item B12 (“What language do the people in your home usually speak?”) The error rate for the revised item was derived from the new language items, indicating whether English was the language usually spoken by the respondent at home.

Overall average error rates were also calculated. Since the purpose of these error rates was to enable comparisons between the original items and the modified items, items that did not undergo any modifications (B2 and B11) were excluded.

Issues associated with comparisons

Since the samples of students were not selected randomly, and since relatively small numbers of students were studied, comparisons must be made cautiously. The first group of fourth graders was much less diverse than the second group. This reflected an intensive recruiting of minority students (to enable investigations of an item on race/ethnicity, discussed in Section 3) in the second phase of the study. There also was a preferential selection of lower SES students and families in the second phase of the study. Finally, the first phase was conducted in the spring, near the end of the school year; the second phase occurred in the fall of the next school year. This means that the second group of fourth graders was probably younger, on average, than the first group.

These differences would be expected to operate to the disadvantage of the second group of fourth graders (in comparison with the first group). Younger children are generally felt to be less accurate respondents than older children; the item omission rate for NAEP background items for minority students is higher than for white students. Nonetheless, the average error rate for fourth graders in the second phase (32 percent) was much lower than the average error rate for fourth graders in the first phase (43 percent). As expected, the error rate for eighth graders was lower (27 percent) than the error rate for phase 2 fourth graders (32 percent).

Magnitude of error rates

For certain items, high error rates were due to the fact that the student lacked the knowledge required to answer the question. That is, the student was simply not a knowledgeable informant. For example, many fourth graders simply do not know whether their parents graduated from college or whether their parents went to school after graduating from college. Item rewordings cannot be expected to overcome these sorts of problems.⁴

Similarly, in order to report the frequency with which certain events occurred or to report about how much time was typically spent in various activities, one must be able to retrieve information, compute estimates, compare these estimates with pre-existing response options, and select the option that best matches the judgement.⁵ The rate synthesis, time estimation, and averaging skills and abilities required for the computation of these estimates require the possession of cognitive skills and abilities which many fourth graders (as well as several eighth graders) lack. Without a drastic restructuring of these items (for example, asking about whether or not something occurred in the past 24 hours rather than asking about how frequently something occurs), item revisions will be only minimally effective. Minor item rewordings, without substantial changes in the item's task demands, cannot overcome these problems.

For other items, which do not require behavioral frequency or time estimates, item modifications appeared to be quite effective. Error rates for these items for fourth graders, as previously noted, were reduced from 33.2 percent to 20.3 percent.

⁴ Sudman, S., Bradburn, N., and Schwarz, N. (1996). *Thinking about answers: The application of cognitive processes to survey methodology*. San Francisco: Jossey-Bass Inc., Publishers.

⁵ Sudman, S., Bradburn, N., and Schwarz, N., *ibid.*

3 . RACE/ETHNICITY SURVEY ITEMS

Background

For over 20 years, the Office of Management and Budget's (OMB) Statistical Policy Directive No. 15, Race and Ethnic Standards for Federal Statistics and Administrative Reporting, provided the basic guidelines for federal agencies to employ in collecting racial and ethnic data. Since the 1990 Census, these standards have come under increasing criticism by people who felt that they did not reflect the increasing diversity in the nation's population. This diversity resulted from an increased prevalence of interracial marriages and a growth in immigration. As part of a comprehensive review of these standards, many alternatives were being considered. One of these alternatives involved the use of a "Multiracial" category.

To obtain information about the potential impact of a "Multiracial" category on fourth and eighth graders' responses to racial/ethnic identification items, two different items asking about a student's race/ethnicity were added to the list of questions administered to students. The basic procedures for investigating the questionnaire response process in children were employed (i.e., think alouds, directed probing), but were modified, as indicated below. In addition, special recruiting efforts were necessary to recruit a population of predominantly multiracial and minority students.

PROCEDURES

Survey items

Two different race/ethnicity survey items were evaluated. Both asked: "*Which best describes you?*" One version, Version A listed the following five options:

White (not Hispanic)

Black (not Hispanic)

Hispanic ("Hispanic" means someone who is Mexican, Mexican American, Chicano, Puerto Rican, or from some other Spanish or Hispanic background)

Asian or Pacific Islander ("Asian or Pacific Islander" means someone who is Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or from some other Asian or Pacific Island background)

American Indian or Alaskan Native ("American Indian or Alaskan Native" means someone who is from one of the American Indian tribes, or one of the original people of Alaska)

Version B included an additional category:

Multiracial (please specify)

Subjects

Subjects were recruited in schools whose enrollment was comprised predominantly of minority students. Both English and Spanish versions of recruiting materials were prepared. Spanish-speaking staff were available to answer questions about the study. When an individual indicated interest in participation, a brief telephone questionnaire was administered. This questionnaire asked for basic demographic information (race/ethnicity, income) and provided a pool from which minority students could be preferentially selected for participation.

A sample of 23 fourth and 23 eighth graders (a total of 46 students, 26 girls and 20 boys) was asked to describe their own race/ethnicity, as well as the race/ethnicities of their parents. Half of the students (12 fourth and 11 eighth graders) completed Version A and the rest of the students (11 fourth and 12 eighth graders) Version B. Table 3-1 shows the number of students in the different racial/ethnic categories.

Table 3-1. Racial/Ethnic Characteristics of Student Sample

	4th graders		8th graders		Total	
	Version A	Version B	Version A	Version B	Version A	Version B
White	2	4	8	4	10	8
Black	1	0	0	1	1	1
Hispanic	8	3	2	4	10	7
Asian	1	0	1	0	2	0
American Indian	0	0	0	0	0	0
Multiracial	n/a	4	n/a	3	n/a	7
Total	12	11	11	12	23	23

One-third (15 students) of the sample was multiracial. Eight of these students completed Version A, without the multiracial category (n/a in Table 3-1), and the rest (seven students) filled out Version B, which included the multiracial option.

Although items were administered to relatively small numbers of students, these sample sizes are more than adequate for the detection of both global problems and specific problems. The cognitive laboratory procedures employed are very similar to those employed in usability testing.¹ In fact, with the use of item-specific probes, projective techniques, and validation data, they are probably more sensitive than normal usability testing procedures. Nielsen and Molich (1990) have shown that normal usability testing can detect almost half of

¹ Dumas, J. & Redish, J. (1993). *A Practical Guide to Usability Testing*. Norwood, New Jersey: Ablex Publishing Company.

all major usability problems in a product with three participants.² Virzi (1992) showed that normal usability testing procedures detected 80 percent of a product's usability problems with 4 - 5 participants and 90 percent of the specific usability (and 100 percent of the global problems) were detected with ten participants.³

In fact, the cognitive laboratory procedures may be more sensitive than normal usability testing procedures. Instead of relying nearly exclusively on the think-aloud procedures of usability testing, Cognitive Laboratory procedures also employ optional item specific probes and projective techniques to insure an understanding of the cognitive processes employed by the student/participant. Nonetheless, the small size (or absence) of students with certain racial/ethnic characteristics hinders (or makes it impossible) for us to make statements about problems such students would have with these items.

Definition of race/ethnicity (criterion variable)

Parents were asked to describe the race/ethnicity of their child, their own race/ethnicity, and the race/ethnicity of the child's father or mother, depending on who accompanied the child to the interview. (The majority of the parents interviewed were mothers.) Given this information, it was possible to compare the child's racial/ethnic self-identification with the child's real race/ethnicity, as well as the accuracy of the child's description of their parents' race/ethnicities.

But, race and ethnicity are subjective constructs and inherently ambiguous.⁴ To minimize the subjectivity, a set of rules was developed which tried to capture the intent and spirit of the federal guidelines and census enumeration procedures. These rules used information provided by both the parent and student. We assumed that a parent's initial responses, in general, were better indicators than the child's responses.

In order to evaluate the "correctness" of their responses to Version A, students had to be classified into one of the five racial/ethnic categories provided. The child had to choose one of the five options. To classify the child into one of these categories, the following rules were applied.⁵

- 1) If a child was a combination of white and minority, the child's race/ethnicity was defined by the minority part (e.g., if a child is 1/4 Hispanic and 3/4 white, the child was defined as Hispanic). A reasonableness criterion was also imposed—only parents and grandparents were considered.
- 2) If a child was any combination of black and Hispanic, the child automatically was defined as Hispanic, because the category "Black" excludes Hispanic (i.e., "Black [not Hispanic]").

² Nielsen, J. & Molich, R. (1990). Heuristic evaluation of user interfaces. *Proceedings of the ACM CHI'90*, 249-256.

³ Virzi, R. (1992). Refining the test phase of usability evaluation: How many subjects is enough? *Human Factors*, 34, 457-468.

⁴ Office of Management and Budget, *Standards for the Classification of Federal Data on Race and Ethnicity; Notice*, Federal Register, August 28, 1995, 44674 - 44693.

⁵ The new OMB regulations, which were adopted after this study was completed, allow individuals to choose as many racial/ethnic categories as apply.

- 3) If a child was any combination of different minority groups, the race/ethnicity was defined by the greatest proportion (e.g., if a child was 1/4 black and 3/4 Asian/Pacific Islander, the child was defined as Asian/Pacific Islander).
- 4) If a child was 1/2 one minority group and 1/2 another minority group, the child's race/ethnicity was defined as the one that comes first alphabetically (e.g., if a child was 1/2 American Indian/Alaskan Native and 1/2 Hispanic, the child was defined as American Indian/Alaskan Native).

When responding to Version B, the above types of students would be considered as multiracial.

Of course, if a child was adopted or lived with stepparents, the child's race/ethnicity was defined based on the biological parents' race/ethnicities.

Seven of the eight multiracial students who received Version A of the question were defined as Hispanic (five had a white/Hispanic combination, with at least 1/8 Hispanic part (see Rule 1), one student was 3/4 Hispanic and 1/4 black (see Rule 2), and one student was 1/2 Hispanic, 3/8 white and 1/8 American Indian (see Rules 1 and 3). The remaining multiracial student was defined as Asian/Pacific Islander (1/2 white and 1/2 Asian/Pacific Islander [See Rule 1]).

Basic research protocol

The response processes of fourth and eighth grade children to this item on race/ethnicity were investigated using the basic cognitive interviewing techniques and validation procedures discussed in Chapter 2. From the child's perspective, this was just another survey question for which they were sharing information about the cognitive processes they employed in coming up with an answer.

As part of the basic protocol, students were asked to read the survey questions out loud prior to responding. However, it became obvious that the language load of the closed-ended race/ethnicity item exceeded most fourth graders' reading abilities. We therefore chose to read this item aloud for the fourth grade students.

Most eighth grade students were able to read the question without any problems. However, five out of the 12 eighth grade students who completed Version B (42 percent) read "multiracial" as "multicultural" in their first reading attempt before they were made aware of their mistake. This might be a result of "sloppy" reading or it might reflect the current atmosphere of "political correctness" which focuses on the respect and acceptance of multiple cultures, in particular given that the student sample was drawn from California.

Through the use of concurrent think-aloud protocols and directed and non-directed probing, insights into the cognitive processes underlying their responses were obtained. A parent or guardian was present to provide "correct answers." This enabled subsequent probing of both parents and children with respect to "incorrect" answers, providing greater insights into the children's questionnaire response processes.

Assessment of students' knowledge of the terms "race" and "ethnicity"

Prior to being asked the closed-ended race/ethnicity question with its response options, students were asked about their race/ethnicity in an open-ended manner:

What is your race/ethnicity?

The reason for asking students this question was to get a sense of their understanding of the concepts out of context (i.e., without the racial categories). They were asked to define race and ethnicity separately.

In order to determine whether students defined race and ethnicity correctly, we had to decide what an acceptable definition of each term would be. We decided that the following definitions from fourth and eighth grade students would be considered as correct:

Definition of race: The color of your skin or the mentioning of at least two different races (e.g., black and white)

Definition of ethnicity: Your cultural background or heritage

RESULTS AND DISCUSSION

Definitions of race and ethnicity

Since two students were not asked to define race and ethnicity, the following results are based on a sample of 44 students. Sixteen of the 44 students (36 percent) defined race correctly, whereas 20 students (45 percent) defined it incorrectly. Eight students (18 percent) did not know what it meant. For example, one eighth grader definition of race as "Black, white, Chinese, or Mexican" was close enough to be correct, whereas a fourth grader's definition of race as "Something you do to win or just for fun. I have done two races and got two trophies!" was clearly incorrect.

Not surprisingly, eighth grade students were better at defining race than fourth graders: almost twice as many eighth graders compared to fourth graders (48 percent vs. 26 percent) correctly defined race. (See table 3-2.) Also, fewer eighth graders than fourth graders did not know what the term meant.

Defining ethnicity was much harder for the students, in particular for the fourth graders: two students defined the term incorrectly and the rest of the fourth graders did not know what the term meant. Also, they had a really hard time reading it. Only four eighth graders (19 percent) defined ethnicity correctly, as shown in table 3-2.

Table 3-2. Percentage of Students Correctly Defining Race and Ethnicity

	4th graders			8th graders			Total		
	n	n correct	% correct	n	n correct	% correct	n	n correct	% correct
Race	23	6	26	21	10	48	44	16	36
Ethnicity	23	0	0	21	4	19	44	4	9

Description of own race/ethnicity

Results are summarized separately for Versions A and B.

Accuracy of self-identification (Version A). Twenty of the 23 students completing Version A (87 percent) described their race/ethnicity correctly. (See Table 3-3.) Only three students—one Hispanic fourth grader, one Hispanic eighth grader, and one Asian eighth grader—incorrectly described their race/ethnicity, as shown in Table 3-3. The reasons for the incorrect self-identifications were:

- 1) The Hispanic fourth grader lacked a concept of ethnicity. She saw people in terms of being white or black—“I’m white, from Mexico.”
- 2) The Hispanic eighth grader, who in reality was 1/2 Hispanic, 3/8 white, and 1/8 American Indian, described himself as Hispanic and American Indian by checking off two boxes. By our definitional criteria, he was Hispanic.
- 3) The Asian/Pacific Islander eighth grader, who in reality was 1/2 Asian/Pacific Islander and 1/2 white described herself as white. By our definitional criteria, she was Asian/Pacific Islander.

Table 3-3. Accuracy of Self-identification: Version A (No Multiracial Option)

	4th graders			8th graders			Total		
	n	n correct	% correct	n	n correct	% correct	n	n correct	% correct
White	2	2	100	8	8	100	10	10	100
Black	1	1	100	0	-	-	1	1	100
Hispanic	8	7	88	2	1	50	10	8	80
Asian	1	1	100	1	0	0	2	1	50
American Indian	0	-	-	0	-	-	0	-	-
Total	12	11	92	11	9	82	23	20	87

Accuracy of self-identification (Version B). Only 15 of the 23 students (65 percent) described their race/ethnicity correctly, and eight students—five fourth graders and three eighth graders—incorrectly self-identified. As shown in Table 3-4, three of these students were white, two were Hispanic, and three were multiracial. The reasons for the incorrect descriptions were:

- 1) Lack of a concept of race/ethnicity (three students): A white fourth grader did not know what Hispanic, black, or white meant; an Hispanic fourth grader described himself as American Indian “because I live in America”; and another Hispanic fourth grader thought he was black because his older brothers tease him about his dark skin.
- 2) Incorrect use of multiracial category (five students): A multiracial eighth grader described herself as white and American Indian by checking off two boxes instead of using the multiracial category option; a multiracial fourth grader knew there was some American Indian blood in his family and described himself as such, in spite of the multiracial option; conversely, a white eighth grader described himself as multiracial, even though he was only 1/32 American Indian; another white eighth grader described himself as multiracial “because my mother is Irish and my father is Italian;” finally, a multiracial fourth grader described himself as white, basing his race/ethnicity on the race/ethnicity of his adopted parents.

Table 3-4. Accuracy of Self-identification: Version B (Multiracial Option)

	4th graders			8th graders			Total		
	n	n correct	% correct	n	n correct	% correct	n	n correct	% correct
White	4	3	75	4	2	50	8	5	63
Black	0	-	-	1	1	100	1	1	100
Hispanic	3	1	33	4	4	100	7	5	71
Asian	0	-	-	0	-	-	0	-	-
American Indian	0	-	-	0	-	-	0	-	-
Multiracial	4	2	50	3	2	67	7	4	57
Total	11	6	55	12	9	75	23	15	65

Description of parents' race/ethnicities

Students were also asked to describe their parents' race/ethnicities. In six cases, however, these questions were not asked closed-ended (i.e., with respect to the race categories), which made it impossible to determine the child's description of his or her parents' race/ethnicities. Consequently, the following analysis is based on a sample of 40 students (20 fourth graders and 20 eighth graders), 20 of whom completed version A of the question about each of their parents and 20 of whom completed version B about each of their parents.

Accuracy of parental race/ethnicity identification (Version A). A total of 18 students (90 percent) were able to describe their mother's race/ethnicity correctly, and 18 students (90 percent) were able to describe correctly their father's race/ethnicity as determined by our analysis of parents' responses to items about their own race/ethnicities. However, only 15 students (75 percent) were able to describe both parents' race/ethnicities correctly. Thus, five students (three fourth graders and two eighth graders) were unable to identify at least one of their parents' race/ethnicities correctly. As shown in Table 3-5, two of these students were white and three were Hispanic.

Table 3-5. Percentage of Children Correctly Identifying Both Parents' Race/Ethnicity: Version A (No Multiracial Option)

Child's race/ethnicity	4th graders			8th graders			Total		
	n	n correct	% correct	n	n correct	% correct	n	n correct	% correct
White	2	2	100	7	5	71	9	7	78
Black	1	1	100	0	-	-	1	1	100
Hispanic	7	4	57	1	1	100	8	5	63
Asian	1	1	100	1	1	100	2	2	100
American Indian	0	-	-	0	-	-	0	-	-
Total	11	8	73	9	7	78	20	15	75

Eighty-seven percent of the students completing Version A described their own race/ethnicities correctly (Table 3-3), and 90 percent correctly identified at least one of their parents' race/ethnicities. Using Version A, a student's description of his or her own race/ethnicity was almost as accurate as the student's description of his or her parents' race/ethnicities.

Accuracy of parental race/ethnicity identification (Version B). A total of 16 students (80 percent) were able to identify their mother's race/ethnicity correctly, and 17 students (85 percent) were able to correctly describe their father's race/ethnicity. However, similar to Version A, only 15 students (75 percent) were able to describe both parents' race/ethnicities correctly. Thus, five students (three fourth graders and two eighth graders) were not able to identify at least one of their parents' race/ethnicities correctly. As shown in Table 3-6, one of these students was white, one was Hispanic, and three were multiracial.

Table 3-6. Percentage of Children Correctly Identifying Both Parents' Race/Ethnicity: Version B (Multiracial Option)

Child's race/ethnicity	4th graders			8th graders			Total		
	n	n correct	% correct	n	n correct	% correct	n	n correct	% correct
White	3	2	67	3	3	100	6	5	83
Black	0	-	-	1	1	100	1	1	100
Hispanic	2	1	50	4	4	100	6	5	83
Asian	0	-	-	0	-	-	0	-	-
American Indian	0	-	-	0	-	-	0	-	-
Multiracial	4	3	75	3	1	33	7	4	57
Total	9	6	67	11	9	82	20	15	75

Only 65 percent of the students completing Version B described their own race/ethnicities correctly (Table 3-4), but 83 percent of these students were able to describe at least one of their parents' race/ethnicities correct. It appears that for Version B, a student's description of his or her parents' race/ethnicities was more accurate than the student's self-identification.

Definition of multiracial category

Students who completed Version B were asked to define the term. However, since data were missing for two students, the following section is based on a sample of 21 students (9 fourth graders and 12 eighth graders). Similar to the definition of race and ethnicity, we had to decide what an acceptable definition of the term would be. We accepted the following definition:

Definition of multiracial: Belonging to two or more race/ethnicities

Twelve out of 21 students (57 percent) defined multiracial correctly; five students (24 percent) defined it incorrectly; and four students (19 percent) did not know what it meant. A fourth grader correctly defined the term as: "If your Dad is German and your Mom is Filipino," whereas an eighth grader incorrectly defined it as "Two races, like Asian and Pacific Islander."⁶

⁶ It is interesting to note that, according to the *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity* (<http://www.whitehouse.gov/WH/EOP/OMB/html/fedreg/Ombdir15.html>), this response would be considered correct. The revised standards categorize Asian and Pacific Islander separately.

However, similar to the definition of race/ethnicity, eighth graders were better at defining the term than fourth graders: 67 percent of the eighth graders defined it correctly, whereas only 44 percent of the fourth graders did, as shown in Table 3-7. Of the nine students who either defined multiracial incorrectly or did not know what it meant, three were white, four were Hispanic, and two were multiracial. One of the five multiracial students who correctly defined the term did not apply it properly. The student (a 1/2 white, 1/2 black fourth grader) knew there was some American Indian blood in the family, and defined himself as such, in spite of the multiracial option. Overall, only about half of the multiracial students (four out of seven students) were able to use the multiracial category properly. This improper use might be alleviated if a definition of multiracial was provided.

Table 3-7. Percentage of Students Correctly Defining Multiracial

	4th graders			8th graders			Total		
	n	n correct	% correct	n	n correct	% correct	n	n correct	% correct
White	2	1	50	4	2	50	6	3	50
Black	0	-	-	1	1	100	1	1	100
Hispanic	3	0	0	4	3	75	7	3	43
Asian	0	-	-	0	-	-	0	-	-
American Indian	0	-	-	0	-	-	0	-	-
Multiracial	4	3	75	3	2	67	7	5	71
Total	9	4	44	12	8	67	21	12	57

Other findings

A few students had trouble with the lack of definitional examples of the black and white categories, (e.g., students referred to themselves as African American as opposed to black). Other students had trouble realizing that being from Europe is the same as being white. It might be helpful to give examples such as Irish, German, Italian, Scandinavian, etc., as examples of being white, as well as mentioning African American as an alternative example of being black.

SUMMARY OF FINDINGS

Only 16 of 44 students (36 percent) were able to define race correctly, and even fewer, four students (9 percent), were able to define ethnicity correctly. Not surprisingly, eighth graders had a better understanding of these terms. None of the fourth graders knew what ethnicity meant.

Using the standard five racial/ethnic categories, 87 percent of the fourth and eighth graders were able to correctly describe their own race/ethnicity. When an alternative version that included a multiracial category was used, only 65 percent were able to correctly describe their own race/ethnicity. However, it must be noted that “correct” is a relative term. In other words, the same child might be “Hispanic” if classified according to Version A definitional criteria and “Multiracial” if classified by Version B criteria.

Using Version A definitional criteria, children were almost as accurate in describing their own race/ethnicity (87 percent) as in describing their parents' race/ethnicities (90 percent). Using Version B, which contained a multiracial option, children were more accurate in describing their parents' race/ethnicities (83 percent) than in describing their own race/ethnicity (65 percent).

Problems were found with interpretation of the multiracial response category: Only 12 out of 21 students (57 percent) were able to define the term correctly, and five students, three of whom were multiracial, did not use it properly. If a multiracial option is employed, comprehension might be enhanced by providing examples.

No explicit recommendations are proposed since the purpose of this investigation was to obtain information about the potential impact of a “Multiracial” category on fourth and eighth grade students' responses to an item asking about race/ethnicity. It should be noted that these data were shared with the Office of Management and Budget as part of their process of producing new *Standards for the Classification of Federal Data on Race and Ethnicity*. In the new standards, the multiracial option was rejected. Instead of providing a multiracial option, respondents are provided a listing of different racial/ethnic options and asked to “Check all that apply.”

4 . PARENTAL ASSESSMENT OF STUDENT SURVEY ITEMS' INVASIVENESS

Introduction

As part of the National Assessment of Educational Progress (NAEP), students complete questionnaires that contain items about their general background, about their background in the assessment's subject area, and about their motivation. Some individuals and groups have opposed such a survey because they felt that the items, particularly those dealing with home and family background factors, were intrusive and should not be collected through federally sponsored research. To determine how parents actually felt about these types of items, a sample of parents was personally interviewed.

PROCEDURES

Sample

The parents of the 48 fourth graders and 23 eighth graders participating in the Home Background Indicators study were interviewed. These parents were primarily recruited through local Bay Area schools. They (and their children) agreed to participate in the Home Background Indicators study, for which they received an honorarium of \$50.

Research protocol

For each of the survey items that were being investigated, parents were asked:

Would having your child answer this question make you feel...

- a. very uneasy,*
- b. moderately uneasy,*
- c. slightly uneasy, or*
- d. not at all uneasy?*⁷

If the parents indicated that they felt any level of uneasiness, they were asked the reasons why they felt uneasy.

⁷ In the first round of data collection, where 25 parents of fourth graders were interviewed, the question was worded in more general terms: "Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy?" In spite of this change in wording substantial differences in parents' levels of uneasiness were not detected between the first and second rounds of data collection.

RESULTS

Results from the fourth and eighth grade parent surveys were analyzed separately. Since there were no apparent differences between parents' levels of uneasiness and grade level of students, the data were combined. They are summarized in Table 4-1.

There only was a single item that parents were very uncomfortable about having their child answer: the item about family income. For all of the other items, a majority of the parents were "not at all uneasy" about having their child answer.

For 10 of the 28 questions (36 percent), 10 percent or more of the parents felt either moderately or very uneasy about having their child answer the question. For three of the questions, related to family income and the child's race/ethnicity, at least one-fifth of the parents felt either moderately or very uneasy. The other relatively sensitive questions related to family composition, parents' educational attainment, and child's computer usage. Questions such as parents' knowledge of child's friends, amount of TV watching, and language spoken at home were not felt to be very sensitive.

Table 4-1. Parents' Level of Uneasiness about Having Their Child Answer Questions Related to Home Background Factors

Question	Not at all uneasy	Moderately or very uneasy
QA13. Family income (n=69)	35%	49%
QA12. Racial/ethnic background (w/o multiracial category) (n=45)*	56%	22%
QB13. Racial/ethnic background (w/multiracial category) (n=46)*	59%	20%
QA11CD (old Q11). Father or stepfather living at home (n=69)	72%	13%
QA11AB (old Q10). Mother or stepmother living at home (n=69)	72%	12%
QA7. Father's expectations about educational attainment (n=69)	77%	12%
QB6. Mother's educational attainment (n=70)	66%	11%
QB7. Father's educational attainment (n=70)	71%	11%
QA10. Marital (divorced) status of parents (n=45)*	76%	11%
QB3. Frequency of computer usage for schoolwork (n=70)	71%	10%
QB4. Frequency of mother's math usage (n=70)	80%	9%

Question	Not at all uneasy	Moderately or very uneasy
QA8. Mother's expectations about educational attainment (n=69)	80%	9%
QB8. Parents' knowledge of child's friends (n=70)	81%	9%
QB5. Frequency of father's math usage (n=70)	77%	7%
QB11. Presence of own room at home (n=70)	80%	6%
QA11EF (old Q12). Number of (other) people living at home (n=69)	83%	6%
QA6. Own expectations about educational attainment (n=69)	83%	6%
QB1. Amount of TV watching (n=70)	77%	4%
QB9. Parents' monitoring of child's TV watching (n=70)	86%	4%
QA3. Frequency of father reading for fun (n=69)	83%	3%
QB10. Presence of own desk, table, or place to study at home (n=70)	84%	3%
QA1. Frequency of talking with adults about things studied in school (n=69)	94%	3%
QB2. Number of books in the home (n=69)	87%	1%
QA2. Frequency of mother reading for fun (n=69)	88%	1%
QB12. Language spoken at home (n=70)	89%	1%
QA5. Time spent reading for fun (n=69)	91%	1%
QA9. Newspaper received regularly (n=69)	93%	1%
QA4. Time spent on homework (n=69)	94%	1%

* Question was only asked of children during the second round of data collection.

NOTE: The percent of responses by row does not add up to 100 percent because only the "not at all uneasy," "moderately uneasy," and "very uneasy" responses were presented. The difference between the sum of the percentages and 100 percent represents the "slightly uneasy" respondents (e.g., 16 percent in the first row of Table 4-1).

Parents mentioned several reasons for their uneasiness. Below is a summary of these reasons by question. Only the ten questions for which ten percent or more of the respondents reported they would be moderately or very uneasy about having their child answer are summarized. The numbers following each of these items reflect the number of parents who reported they would be moderately or very uneasy about having their child answer such a question.

Family income (34). The main reasons that parents felt uneasy about having their children answer a question about family income had to do with lack of knowledge. More than half (18) of these parents felt that their children would not know this information. About one-fourth (9) felt that the information was personal or that the question was invasive. The rest of the parents felt that the question either was inappropriate for children, could cause bad feelings among children, or question was unimportant.

Racial/ethnic background, without multiracial category (10). Four of the ten parents were uneasy about this question because they felt race should not matter. Two parents expressed a related concern about categorization and its potential prejudicial impact. Three parents felt that a multiracial category was missing and one parent did not think her child would know what to answer.

Racial/ethnic background, with multiracial category (9). Similar to the objections raised above, three parents felt that race should not matter. Also, two parents felt that this information was nobody's business and that the government should not be grouping races. Another two parents felt that their children would not understand "multiracial" or would be confused, and the remaining two parents indicated that they either did not like the question or felt that it was too difficult.

Father or stepfather living at home (9). Eight parents felt that asking about the presence of a father or stepfather in the home was a sensitive issue, particularly for children without fathers in the home. But it also can be a sensitive issue for children from different cultural backgrounds or children whose parents have alternative lifestyles. One parent felt the question was unrelated to assessing ability.

Mother or stepmother living at home (8). Similar to the question above, seven parents felt that asking about the presence of a mother or stepmother in the home was a sensitive issue for children without mothers in the home, children from different cultural backgrounds, or children whose parents have alternative lifestyles. One parent felt that the question was unrelated to assessing ability.

Father's expectations about educational attainment (8). The main objection to this question had to do with children having to guess what their fathers' educational expectations were. Parents did not feel that questions about the expectations of others were okay. Some parents also felt there were emotional issues involved that put pressure on children.

Mother's educational attainment (8). Parents who objected to this item did so because they believed educational attainment was a measure of status. Therefore, there was a stigma attached to not doing well in school (either not graduating from high school or not going to college). One parent indicated that children do not know this information.

Father's educational attainment (8). Parents objected to this item because of the status and stigma issues raised above. One parent indicated that children do not know this information and another parent suggested that it might be difficult for children to answer this question if there were no father in the house.

Marital (divorced) status of parents (5). This item was felt to be problematic for children whose parents were divorced. One parent indicated that her child does not get involved in his parents' affairs.

Frequency of computer usage for schoolwork (7). Parents did not feel that this question was fair for children who do not have a computer at home. They felt that not all families can afford a computer.

Summary

With the exception of questions about family income and race/ethnicity, the parents of children participating in the Home Background Indicators Study had few reservations about their children answering home background questions. Nearly one-half of the parents were uncomfortable (that is, were moderately or very uneasy) about having their child answer a question about family income; one-fifth were uncomfortable about having their child answer a question about the child's race/ethnicity.

5. PARENTAL ITEM SENSITIVITY REVIEW PANEL

Introduction

A parent focus group was held on Saturday, May 31, 1997, to evaluate home background indicator items that might be administered to fourth, eighth, and twelfth grade students in connection with the National Assessment of Educational Progress (NAEP). Seven parents and two facilitators met in the conference room of the American Institutes for Research (AIR) in Palo Alto, CA, for a three-hour session to discuss 31 items. In addition, parents were asked about other things they do to try to help their children's academic performance. They also were asked whether having items reviewed and approved by a panel of parents would favorably dispose them to answer—and allow their children to answer—questions like the 31 that might be administered as part of a national assessment.

PROCEDURES

Sample

Eight parents who had children in elementary school were invited to participate in the focus group, but only seven came to the session. (When the eighth did not appear, a facilitator telephoned her but learned that she was unable to attend.) When participants were recruited, special efforts were undertaken to make the group as representative as possible. For example, two conservative groups (the John Birch Society and the Eagle Forum) as well as minority special interest groups that are active in the Palo Alto area were contacted and asked to nominate parents who might like to participate. (It was made clear that the participants would only be representing themselves, not the national organization.) Calls were also made to school districts and other local contacts to ensure that the group was diverse as to racial and ethnic background and socioeconomic status and that parents with children attending private as well as public schools were included. The primary requirement was that the parent have a child in school, with an emphasis on those in fourth grade or higher.

The group consisted of four women and three men representing four school districts, two racial groups (white and black; an Hispanic woman was the no-show), a range of socioeconomic backgrounds, and diverse political perspectives. Three participants were single parents, and one participant sent her children to private school. Participants received an honorarium of \$50 for participating in the panel.

Facilitators

Two AIR project staff served as facilitators. These individuals were responsible for developing the protocol and procedures employed. They developed the Focus Group Guide and spent several hours preparing for the session. Both staff were experienced in the conduct of focus groups.

Item presentation procedures

An overhead projector was used to present each of the 31 items. Parents were first asked how they felt about having their child answer the question and second, how they felt about having parents answer it. To express their opinions, participants were given three cards, corresponding to traffic light colors, and “voted” by raising one of the cards for each item: green (no objections), yellow (not sure), or red (objections). When red or yellow cards were held up, participants’ concerns were discussed. Objections and comments were noted on a flip chart so that participants could see that their ideas were being heard and recorded accurately. When all green cards were held up, facilitators did a quick check to ensure that agreement was unanimous; any additional ideas on the item were noted. (See the Focus Group Guide in Appendix D.) The 31 questions are presented in Table 5-1.

After general introductions, an overview of the purpose of the panel, and a description of the ground rules and procedures, the 31 items were projected one by one and participants were asked to vote and express their reactions to each item. In their introduction to this activity, the facilitators emphasized that there were no “right” or “wrong” answers, that all opinions were to be respected, and that all responses would be kept confidential. The emphasis was on the participants’ unique ideas and perceptions; they were the experts. The facilitators were aware that peer pressure might affect the “votes” of the participants and tried to accommodate all viewpoints, recording ideas and clarifying points when needed.

Both facilitators had the strong impression that participants felt free to disagree with one another. Although they sometimes hesitated before holding up a green, yellow, or red card, they were studying the items projected overhead, not the cards being held up by other panelists. They did not seem to be influenced by the votes of the other participants. In a few cases, after the votes were taken and an item was discussed, a participant would modify his or her ideas about an item, but this was rare. Some evidence of peer *influence* (as opposed to peer pressure) can be seen in responses to items that asked questions first about one parent and then about the other. The second set of votes reflected slight shifts in thinking about the item (e.g., mother and then father reading for fun).

The participants’ votes, comments, and suggestions are summarized below, by question, with comments related to both the “child” version of the question (e.g., “How often do you talk...”) and the “parent” version (e.g., “How often does your child...”) Only the child versions of the questions are presented below; however, both versions were projected and reviewed. In the few cases in which votes were changed, they are noted. A summary table of “votes” by item is included as Table 5-1.

Table 5-1. Level of Acceptance for Proposed Home Background Items for Child and Parent, as Measured by “Traffic Light” Votes

Question	Green		Yellow		Red	
	Child	Parent	Child	Parent	Child	Parent
1. Talk w/adult about school	7	7	0	0	0	0
2. Mother read for fun	3	3	3	1	1	3
3. Father read for fun	3	4	2	0	2	3
4. Time spent on homework	6	4	1	3	0	0
5. Time spent reading for fun on weekends	4	4	1	2	2	1
6. Own expectations re educ. attainment	6	n/a	0	n/a	1	n/a
7. Father’s wishes re educational attainment	0	1	3	2	4	4
8. Mother’s wishes re educ. attainment	0	3	2	1	5	3
9. Newspaper subscription	7	7	0	0	0	0
10. Marital status of parents	0	4	0	0	7	3
11. Adults in home	1	4	0	0	6	3
12. Racial-ethnic background	0	1	2	2	5	4
13. Annual family income, all sources	0	1	0	2	7	4
14. Amount of TV watched each day	6	5	0	1	1	1
15. Number of books in home	6	6	1	1	0	0
16. Use of home computer	6	7	0	0	1	0
17. Mother’s use of numbers	0	1	3	3	4	3
18. Father’s use of numbers	0	1	3	3	4	3
19. Mother’s educational attainment	0	6	3	1	4	0
20. Father’s educational attainment	0	6	2	1	5	0

Question	Green		Yellow		Red	
	Child	Parent	Child	Parent	Child	Parent
21. Parent knowledge of child's friends	5	7	0	0	2	0
22. Parent interest re TV shows watched	4	7	0	0	3	0
23. Own desk or table for study at home	6	3	1	4	0	0
24. Own room at home	1	3	5	3	1	1
25. Language spoken at home	1	6	5	1	1	0
26. Participation in outside-school activities	2	2	3	3	2	2
27. Household items (car, VCR, musical instruments)	1	3	2	0	4	4
28. Parent limits on TV watching	7	7	0	0	0	0
29. Talk w/adult about school topics	7	7	0	0	0	0
30. Parent participation in school activities	5	7	2	0	0	0
31. Decision makers: child's friends, activities	1	1	3	5	3	1

ITEM-BY-ITEM RESULTS

1. How often do you talk about things you have studied in school with an adult member of your family? (Options: Almost every day, Once or twice a week, Once or twice a month, and Never or hardly ever)

Child: 7 Green

Parent: 7 Green

Child and Parent Versions: All seven participants voted “green” for both child and parent versions of the items and agreed that this focuses on a very important issue. They felt that communication between child and parents was critical and thought that the item should include all aspects of school, not just classroom activities.

2. How often does your mother read for fun? (Options: Every day, Almost every day, A few times a week, Once a week, Less than once a week, My mother doesn’t read for fun)

Child: 3 Green, 3 Yellow, 1 Red

Parent: 3 Green, 1 Yellow, 3 Red

Child: The participant showing a red card for the child version thought that the item was intrusive and was somehow “grading” a parent as good or bad and providing a scapegoat for schools. The participants expressed ambivalence and thought that the item required a value judgment regarding what reading was “fun” or “not fun” and might not result in an accurate answer. In a similar vein, they noted that mothers often read after their children have gone to bed so that answers could be based on incomplete knowledge. The participants also felt that simple frequency of reading had little or no meaning: “fun” reading might be comics; the reading material could vary from pornography to very serious material. The amount of reading the child did was far more important, they thought

Parent: Responses were evenly split, with the “green” votes reflecting a feeling that parents were better able to answer the item than children were, and “red” votes expressing concerns about “fun” and intrusiveness.

3. How often does your father read for fun? (Options: Every day, Almost every day, A few times a week, Once a week, Less than once a week, My father doesn’t read for fun)

Child: 3 Green, 2 Yellow, 2 Red

Parent: 4 Green, 0 Yellow, 3 Red

Child and Parent: Concerns expressed were basically those expressed for the “mother” form of this item above. Participants expressed particular misgivings about use of the words *for fun*.

4. How much time do you spend on homework each school day? (Options: I don't usually have homework assigned; I have homework but I don't usually do it; About 30 minutes; About an hour; About an hour and a half; About 2 hours; More than 2 hours)

Child: 6 Green, 1 Yellow, 0 Red

Parent: 4 Green, 3 Yellow, 0 Red

Child: The group felt that it was okay to ask this question but they were concerned about language load. They thought that the options were too complicated and suggested four options (not necessarily in the following words): None assigned; Don't do; Less than an hour; More than an hour.

Parent: Misgivings about the accuracy of parent answers were expressed. One participant said that he does not always know if his child *has* homework to do; lack of communication, especially between home and school, is a problem. "Are you aware of homework assignments?" would be a good question for parents, he felt.

5. On weekends, how much time do you read for fun? (Options: I don't read for fun; About an hour; About an hour and a half; About 2 hours; More than 2 hours)

Child: 4 Green, 1 Yellow, 2 Red

Parent: 4 Green, 2 Yellow, 1 Red

Child: The two "Red" votes were based on feelings that the item is intrusive and that weekends, often busy with sports and family activities, are the parents' business. One of the participants casting a "Yellow" vote said that the item had too many options. The participant thought the number of choices should be reduced, with a "less than an hour" option included (many children, particularly younger ones, read for 20 minutes a day), along with "more than an hour." One participant also suggested that children might feel as though they should choose a response that indicates some reading, whether they actually do read for fun or not.

Parent: The definition of *for fun* was again questioned. Participants thought the focus should be on unassigned and self-initiated reading: children may read about a topic of interest for information, not fun. The participants felt that just reading was what was important, not the type of reading matter. The participant who voted "Red" thought that family activities were more important on weekends than reading.

6. a. Do you think you will graduate from high school? b. Do you think you will go to school after high school? c. Do you think you will graduate from college? d. Do you think you will go to school after graduating from college? (Options: Yes, No)

Child: 6 Green, 0 Yellow, 1 Red

Parent: (none)

Child: Consensus among all participants was that children (even eighth graders) would not understand the concept of graduate school. One participant objected to the item, saying that children would resent it if they were in a work-focused (vocational) track rather than a college (academic) track.

Parents: Since this item dealt with the child’s expectations, no “parent” version of the question was prepared or evaluated.

7. a. Do you think your father wants you to graduate from high school? b. Do you think your father wants you to go to school after high school? c. Do you think your father wants you to graduate from college? d. Do you think your father wants you to go to school after graduating from college? (Options: Yes, No)
Child: 0 Green, 3 Yellow, 4 Red
Parent: 1 Green, 2 Yellow, 4 Red

Child: The participants again questioned students’ ability to understand the concept of graduate school, but expressed more serious misgivings about the thought processes such an item triggers. They did not want their children to try to guess what their fathers were feeling or to consider their relationship with their fathers in this way. Parents want their children to be happy, whatever the goal, and if that involves postsecondary education, great—but educational attainment is a secondary concern. Their consensus was that this item should not be asked: it is intrusive and sensitive.

Parents: The same concerns were raised. The participant who voted “Green” would skip the item; the others felt they would as well. They emphasized their desire not to dictate to their children but to support them in whatever path they chose.

8. a. Do you think your mother wants you to graduate from high school? b. Do you think your mother wants you to go to school after high school? c. Do you think your mother wants you to graduate from college? d. Do you think your mother wants you to go to school after graduating from college? (Options: Yes, No)
Child: 0 Green, 2 Yellow, 5 Red
Parent: 3 Green, 1 Yellow, 3 Red

Child, Parent: Although the votes were slightly different, the concerns expressed were the same as those raised for Item 7 above. One of the participants who voted “Red” pointed out that some other adult (e.g., uncle, grandparent) could also be influential in setting educational goals.

9. Does your family get a newspaper regularly? (Options: Yes, No)
Child: 7 Green, 0 Yellow, 0 Red
Parent: 7 Green, 0 Yellow, 0 Red

Child, Parent: No objections were raised. One participant pointed out that in addition to a delivered newspaper, he gets several newspapers electronically: students may not always know if newspapers are received. More important, he felt, would be a question asking “What percentage of the newspaper do you read?”

10. Are your parents divorced or separated? (Options: Yes, No)

Child: 0 Green, 0 Yellow, 7 Red

Parent: 4 Green, 0 Yellow, 3 Red

Child: The participants felt that this item was too intrusive. They also pointed out that children are very emotional about this issue.

Parent: Although the participants split on their reactions to asking this item of parents, the “Red” voters felt strongly that it was intrusive and inappropriate. Parents already report this information on school forms, one pointed out. Another participant noted that he and his wife had both been divorced when they married each other: their child could answer “Yes” to the item even though the parents were not divorced from one another.

11. a. Does your mother live at home with you? b. Does your stepmother live at home with you?

c. Does your father live at home with you? d. Does your stepfather live at home with you? (Options: Yes, No) e. How many brothers and sisters live at home with you? (Option: _____ brothers and sisters) f. How many OTHER family members live at home with you? (Option: _____ other family members)

Child: 1 Green, 0 Yellow, 6 Red

Parent: 4 Green, 0 Yellow, 3 Red

Child: One participant felt that this item was better than the item asking if parents were divorced or separated and was less value-laden. The other six participants felt that this item was too intrusive and too hard for children to follow. They said that children often blame themselves for divorces and thought that the references to “step” parents complicated it. One participant wondered how a child whose parent had died would respond. The item is “too emotional,” this participant said.

Parent: Three participants switched from “Red” to “Green” when this item was posed for completion by parents; however, they repeated the concerns expressed in regard to children above. They also pointed out that children living with gay parents would have difficulty in responding.

12. Which best describes you? (Options: White [not Hispanic]; Black [not Hispanic];Hispanic [“Hispanic” means someone who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or from some other Spanish or Hispanic background.]; Asian or Pacific Islander [“Asian or Pacific Islander” means someone who is Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or from some other Asian or Pacific Island background.] American Indian or Alaskan Native [“American Indian or Alaskan Native” means someone who is from one of the American Indian tribes, or one of the original people of Alaska.]; Multiracial [Please specify])

Child: 0 Green, 2 Yellow, 5 Red
 Parent: 1 Green, 2 Yellow, 4 Red

Child: A number of concerns were expressed regarding this item:

- it is divisive,
- it is unrelated to home background factors and to achievement,
- it categorizes, stereotypes, and promotes judgment by groups, and
- it is hard to read.

Items related to racial and ethnic background cannot be required by law; hence children need to know that it is optional. Children may not understand the concept of minority (it is particularly confusing in areas in which “minorities” are the majority). The list could cause a child born in Australia to mark “Asian or Pacific Islander”; a child from Iran or Saudi Arabia would not know how to answer.

Parent: One participant had no problem in responding to this item; the others felt strongly that the same issues raised above would apply. They felt that such identification divides people and leaves out many Americans who are mixtures of many groups.

13. Which category covers your family’s total combined income from all sources during 1995? Include both earnings from all of your family’s jobs (before deductions) and income from other sources such as dividends, interest, social security, welfare, and unemployment. (Options: Under \$5,000; \$5,000-\$9,999; \$10,000-\$14,999; \$15,000-\$19,999; \$20,000-\$24,999; \$25,000-\$29,999; \$30,000-\$34,999; \$35,000-\$39,999; \$40,000-\$49,999; \$50,000-\$59,999; \$60,000-\$69,999; \$70,000-\$84,999; \$85,000-\$99,999; and \$100,000 and over)

Child: 0 Green, 0 Yellow, 7 Red
 Parent: 1 Green, 2 Yellow, 4 Red

Child: All participants felt strongly that the item was inappropriate and that children would not know the answer to it.

Parent: The participants were less adamant about their opposition to this item for parents; however, they felt that it had far too many boxes. One said that it’s “an insane question: I wouldn’t answer it.”

14. How much TV do you usually watch each school day? (Options: I don't watch TV on school days; One hour or less; More than 1 hour but less than 2 hours; Between 2 and 3 hours; More than 3 hours)

Child: 6 Green, 0 Yellow, 1 Red

Parent: 5 Green, 1 Yellow, 1 Red

Child: With one exception, the participants had no difficulty with this item. One participant suggested that it might be changed to include all electronic means (e.g., computer games, Web surfing). The "Red" vote reflected a feeling that the item was intrusive and that younger children might not be able to answer accurately.

Parent: One participant who had voted "Green" changed the vote to "Yellow" for parents because of a lack of knowledge of the child's TV watching. The child has a TV in his/her room, and the parent is not always aware of what the child is watching. Another participant (a "Green" vote) felt that he/she could answer accurately. The "Red" vote was based on doubts as to how the government would use the information and a feeling that the question was too broad.

15. How many books are there in your home? (Options: Less than a full bookshelf (0 to 25 books); One or several bookshelves (26 to 100 books); One or more bookcases full (over 100 books))

Child: 6 Green, 1 Yellow, 0 Red

Parent: 6 Green, 1 Yellow, 0 Red

Child and Parent: The participants expressed general approval of this item for both children and parents. One participant thought the response options should refer only to bookshelves, omitting the number of books. Another participant wondered about the quality of the answer, pointing out that the quality of books was more important than the quantity. Another thought that the item could become dated as Internet and CD-ROM media gain in popularity.

16. How often do you use a computer at home to do schoolwork and to play educational games? (Options: Almost every day; Once or twice a week; Once or twice a month; Never or hardly ever; There is no computer at home.)

Child: 6 Green, 0 Yellow, 1 Red

Parent: 7 Green, 0 Yellow, 0 Red

Child and Parent: The dissenting voice reflected the participant's feeling that this item raised sensitivity and money issues for many children whose parents cannot afford computers. It was okay to ask parents this question; however, one noted that computers are available in libraries, computer centers and other places so that the item may not be an accurate reflection of computer use outside the classroom.

17. How often does your mother use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing. (Options: Several times a day; Every day; A few times a week; Once a week; Once a month; Less than once a month; Never)

Child: 0 Green, 3 Yellow, 4 Red

Parent: 1 Green, 3 Yellow, 3 Red

Child: Although the “vote” does not reflect it, the group really hated this item, and the more they discussed it, the more opposition to it they expressed. One participant found it intrusive; others noted that it was a nonsensical question: does any mother *not* use numbers every day? Another said that it asks, “Is your mother stupid?”; still another pointed out that “using numbers” can also refer to smoking marijuana.

Parent: “Insulting and intrusive,” said two participants who voted “Red.” The third “Red” voter said, “It’s stupid; I wouldn’t answer it and it would affect my responses to the rest of the questions.” Another participant thought it would be much more useful to ask students about their use of mathematics. If children’s perception of the importance of mathematics is the salient factor, its connection to this item was not clear to participants.

18. How often does your father use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing. (Options: Several times a day; Every day; A few times a week; Once a week; Once a month; Less than once a month; Never)

Child: 0 Green, 3 Yellow, 4 Red

Parent: 1 Green, 3 Yellow, 3 Red

Child and Parent: Participants cited the same issues as for Question 17 above.

19. How far in school did your mother go? (Options: She did not finish high school; She did finish high school; She went to school after high school; She graduated from college; She also has a special college degree (doctor, lawyer, etc.)

Child: 0 Green, 3 Yellow, 4 Red

Parent: 6 Green, 1 Yellow, 0 Red

Child: Participants expressed several reservations about this item: knowledge of “college” is problematic for fourth graders; the last option (“special college degree”) is a judgmental issue and should be left out; there is too much emphasis on doctors and lawyers. The participants wondered how this item relates to the child and pointed out that mother’s education may not be a determinant for the child.

Parent: Participants did not generally object to answering this item themselves but still found the “special college degree” problematic. One thought that the options should not begin with a negative (i.e., “She did not finish high school”); another participant thought that the parent with little education might not answer the item.

20. a. Did your father graduate from high school?
b. Did your father go to school after high school?
c. Did your father graduate from college?
d. Did your father go to school after graduating from college? (Options: Yes, No)
Child: 0 Green, 2 Yellow, 5 Red
Parent: 6 Green, 1 Yellow, 0 Red

Child, Parent: Participants said that they were opposed to this item because of its length and complexity and the child’s probable lack of knowledge about the father’s education. They did not object to having a parent answer it; however, one participant pointed out that “going to school after graduating” could include anything from graduate school to one course at the local community college.

21. How well do your parents know your friends? (Options: They don't know my friends at all; They know just a little about my friends; They know my friends pretty well; They know my friends very well)
Child: 5 Green, 0 Yellow, 2 Red
Parent: 7 Green, 0 Yellow, 0 Red

Child, Parent: Participants liked the idea of asking for this information: they thought it was very important and appropriate. Two participants objected to asking it of children, mainly because they thought that parents would give better, more accurate answers. Others then noted that answers from teenagers might not be accurate. All felt that it was a good question for parents and would provide a good sense of their involvement with their children.

22. Do your parents care which TV shows you watch? (Options: Yes, No)
Child: 4 Green, 0 Yellow, 3 Red
Parent: 7 Green, 0 Yellow, 0 Red

Child: On this vote, two participants first voted “Green,” making the total six, then changed their votes to “Red.” The reason for this was that the person who originally objected to the item expressed an opinion that it requires the children to guess whether a parent cares, and how do children know what their parents care about? Instead, this person said, the item should focus on whether the parents restrict TV watching. Two agreed and asked that their votes be changed.

Parent: Participants felt that the item was OK for parents to answer, since they would not have to guess, but still felt that the item should be reworded to focus on restricting, not caring.

23. Do you have your own desk or table at home where you can study whenever you want? (Options: Yes, No)

Child: 6 Green, 1 Yellow, 0 Red

Parent: 3 Green, 4 Yellow, 0 Red

Child: The person who voted “Yellow” noted that *having* a desk or table does not reflect whether the child studies and suggested that the item ask “Do you have a place at home where you can study whenever you want?” The other six participants agreed and, with this change, the vote would be seven Green.

Parent: The group felt that the question was okay, with the change to “place.” The “Yellow” votes reflected four participants’ desire to have the item reworded for place; with this change, the vote would be seven Green.

24. Do you have your own room at home? (Options: Yes, No)

Child: 1 Green, 5 Yellow, 1 Red

Parent: 3 Green, 3 Yellow, 1 Red

Child: The participants’ main objection was that the purpose of this item was unclear. They felt that having a time and place to study seemed far more important to a child’s achievement than having a private room.

Parent: Participants cited the same issues and said that, because its purpose was so cloudy, if presented with such an item, they probably would skip it.

25. Do you speak a language other than English at home? (Options: Yes, No. If Yes): a1. Which language or languages? [Specify]; a2. How often do you speak English at home? (Options: I speak English all of the time or nearly all of the time; I speak English about half of the time; I speak another language all of the time or nearly all of the time.)

Child: 1 Green, 5 Yellow, 1 Red

Parent: 6 Green, 1 Yellow, 0 Red

Child: One participant felt that the home language was no one’s business; another felt that it was a great question. Still another said it seemed irrelevant and thought a better question would be “Is English your native language?” or “Is English your first language?”

Parent: The group did not object to having parents answer this item; the “Yellow” vote was based on perceived irrelevance and intrusiveness.

26. Have you participated or are you participating in any of the following outside-school activities this year, either as a member, or as an officer (for example, vice-president, coordinator, team captain)? (Options: Did not participate, Participated as member, Participated as officer for three items in a list: Religious youth groups; Non-school team sports; Summer programs, such as workshops or institutes in science, language, drama, and so on)

Child: 2 Green, 3 Yellow, 2 Red

Parent: 2 Green, 3 Yellow, 2 Red

Child, Parent: One participant voted “Red” because it is against the law to ask about religious affiliations. Another participant felt that the item was intrusive and irrelevant and that it did not relate to achievement. This person felt that asking about summer programs was okay but suggested that the item only ask about participation. Another participant noted that being an officer does not necessarily indicate greater participation. Two participants had no problems with the item as written. No new issues were raised in regard to parents.

[Note: At this point, time was running short, so the facilitators curtailed discussion somewhat if it seemed to be repeating earlier points.]

27. How many of each of the following items do you have in your home? (Options: None, One, Two or more for three items in a list: Car that runs; Video recorder (VCR); Musical instrument, such as a piano or guitar)

Child: 1 Green, 2 Yellow, 4 Red

Parent: 3 Green, 0 Yellow, 4 Red

Child, Parent: One participant thought it was okay to ask children this item, but no one particularly liked it. They thought it was irrelevant, particularly asking for quantity; they thought the wording was odd (i.e., If “A car that runs,” why not “a VCR that works?”) The consensus was that the item should be dropped. The parent version raised the same issues of relevance.

28. How often do your parents or guardians limit the amount of time you can spend watching TV? (Options: Often; Sometimes; Rarely; Never)

Child: 7 Green, 0 Yellow, 0 Red

Parent: 7 Green, 0 Yellow, 0 Red

Child, Parent: The group liked this item better than the previous, similar item (i.e., Question 22, “Do your parents care which TV shows you watch?”). They thought the response options were “short and sweet,” and they were glad to see “guardians” included. They recommended that this item be used instead of Question 22.

29. How often have you talked with your parents or guardians or another adult in your family about the following school topics during this school year? (Options: Not at all; Rare or occasionally; Frequently for three items in a list: Your grades; Safety at school; Other school subjects)

Child: 7 Green, 0 Yellow, 0 Red

Parent: 7 Green, 0 Yellow, 0 Red

Child: The group liked the item, but they felt that additional school topics should be added. Grades and safety are important, they said, but so are many other topics. “Other school subjects” seemed overly broad to them. Time was short so specific suggestions for additions were not solicited.

Parent: The same issues applied. One parent noted that the parent version should refer to “Your child’s grades,” and not, as shown on the overhead in error, “Your grades.”

30. During this school year, have your parents or guardians or another adult in your family ... (Options: Yes, No for a list of three items: Attended a school open house or back-to-school night? Attended meetings of your school’s parent-teacher organization? Acted as a volunteer in your school?)

Child: 5 Green, 2 Yellow, 0 Red

Parent: 7 Green, 0 Yellow, 0 Red

Child: The group generally supported this item but thought that it should refer to “parent” or “guardian” singular rather than plural. With so many single-parent families, using the plural form would imply that both parents had to participate for a student to respond “Yes.” One participant also suggested adding “Attended a meeting with your teacher” or similar wording to get at parent communication with their children’s classroom teachers.

Parent: The group felt that asking parents this item, rather than children, would be preferable.

31. In your family, who makes most of the decisions on each of the following topics?(Options: Parents decide themselves; Parents decide after discussing with me; We decide together after discussion; I decide after discussing it with my parents; I decide by myself for three items in a list: Which friends I can spend time with; Whether I should go out for a school sport; Whether I should be in other school activities)

Child: 1 Green, 3 Yellow, 3 Red

Parent: 1 Green, 5 Yellow, 1 Red

Child, Parent: The objections to this item were based on its format, which the group found very confusing, busy, and wordy. One participant pointed out that it is 15 questions in one and thought that children would find it very hard to answer. Another participant felt that answers would vary according to different situations. For example, a parent might generally let a child decide which friends to spend time with but if one friend seemed like a bad influence, the parent might say that the child cannot spend time with that person. Another

participant said that, even within the same family, different children would respond differently. The group was more favorably disposed toward having parents respond to the item but questioned its relevance for either child or parent.

SUMMARY OF ITEM-BY-ITEM REVIEW

As seen in Table 5-1, the participants felt that 12 of the 31 items were acceptable for children to complete, giving them five or more “Green” votes, to indicate approval. These are discussed below.

Child—Approved items

Four items received all “Green” votes from the seven participants, indicating unanimous approval of the item:

- Item 1 (talk with adult about school)
- Item 9 (receiving newspaper regularly)
- Item 28 (parent limits on TV watching)
- Item 29 (talk with adult about school topics).

Six items received near-unanimous votes of approval, with “Green” votes from six of the seven participants:

- Item 4 (time spent on homework)
- Item 6 (own expectations re educational attainment)
- Item 14 (amount of TV watched each day)
- Item 15 (number of books in home)
- Item 16 (use of home computer)
- Item 23 (own desk or table for study at home).

Two additional items received “Green” votes from five of the seven participants:

- Item 21 (parent knowledge of child’s friends)
- Item 30 (parent participation in school activities)

Participants were unanimous in suggesting that both of the above items were appropriate for completion by parents.

Item 22 (parent interest re: TV shows watch) received four “Green” votes and three “Red” votes. However, if the focus of the item were on whether the parents restrict TV watching, two of the “Red” votes would have changed to “Green.”

Child—Disapproved items

Only six items evoked strong disapproval from the group, with only two receiving all “Red” votes from the seven participants, indicating strong disapproval:

- Item 10 (marital status of parents)
- Item 13 (annual family income)

Four other items received five or six “Red” votes from participants:

- Item 8 (mother’s wishes re educational attainment)—5 votes
- Item 11 (adults in home)—6 votes
- Item 12 (racial-ethnic background)—5 votes
- Item 20 (father’s educational attainment)—5 votes

Other child items

For the remaining items, participants’ “votes” and comments reflected one of three perceptions:

- *Children either would not understand the item or would not have the knowledge to answer it accurately.*
Reflecting this perception were participants’ comments regarding Items 2 and 3 (mother/father read for fun), Item 5 (time spent reading for fun on weekends), and Item 31 (decision makers: child’s friends, activities).
- *The item was not relevant, served no clear purpose, and was often intrusive.*
Reflecting this perception were participants’ comments regarding Items 17 and 18 (mother’s/father’s use of numbers), Items 19 and 20 (mother’s/father’s educational attainment), Item 24 (own room at home), Item 25 (language spoken at home), Item 26 (participation in outside-school activities), and Item 27 (household items).
- *The item evoked undesirable thought processes or ideas in children.*
Reflecting this perception were participants’ comments regarding Items 7 and 8 (father’s/mother’s wishes re educational attainment), and Item 12 (racial-ethnic background).

The remaining items were criticized for a combination of reasons or were perceived as acceptable for parents to answer, as described below.

Parent—Approved items

Eight items received all “Green” votes from the seven participants, indicating unanimous approval of the item:

- Item 1 (talk with adult about school)—also unanimously approved for students
- Item 9 (subscription to newspaper)—also unanimously approved for students
- Item 16 (use of home computer)
- Item 21 (parent knowledge of child’s friends)
- Item 22 (parent interest re TV shows watched)
- Item 28 (parent limits on TV watching)—also unanimously approved for students)
- Item 29 (talk with adult about school topics)—also unanimously approved for students)
- Item 30 (parent participation in school activities)

Four items received near-unanimous votes of approval, with “Green” votes from six of the seven participants:

- Item 15 (number of books in the home)
- Item 19 (mother’s educational attainment)
- Item 20 (father’s educational attainment)
- Item 25 (language spoken at home)

Note that in regard to all of the above, except for the number of books in the home, the group expressed serious misgivings about having children answer the items but thought they were fine for parents.

One additional item received “Green” votes from five of the seven participants:

- Item 14 (amount of TV watched each day)

However, participants preferred to have children answer that item.

Item 23 (own desk or table for study at home) received three “Green” votes and four “Yellow” votes. However, if “desk” were changed to “place,” all seven parents would have given the item “Green” votes.

Parent—Disapproved items

Participants did not strongly reject any of the items for parents. They grumbled that some of the items seemed irrelevant, but the greatest number of “Red” votes cast for any of the parent items was four, or barely half the group. This occurred for four items.

Average voting scores

The data in Table 5-1 were used to calculate average scores for the child and parent versions. The averages were calculated by adding the number of votes in each of the “traffic light” categories (Green, Yellow, Red), and dividing by the number of items. The averages follow:

Child Version, All Items:	3.06 Green, 1.52 Yellow, 2.42 Red
Parent Version, All Items:	4.27 Green, 1.30 Yellow, 1.43 Red

The averages again point up the tendency of the group to respond positively and to be somewhat more inclined to have questions asked of parents than of children.

OTHER THINGS PARENTS DO

As a closing activity, participants were also asked about other things they do to help their children do better in school. All seven participants agreed that involvement in their children's lives is one of the most important things a parent can do. One participant mentioned that one-on-one involvement with her children is critical; another said that communication with the school and her children's teachers is a very important way of getting involved; and yet another indicated that dinner time is an important time for her family to connect and get involved in each other's lives. Two participants cited activities such as trips and games as important opportunities for parent and student interaction to promote learning, and three participants described efforts to challenge their children to solve problems and become more creative and imaginative (e.g., by turning off the TV or asking their child “dumb questions”). Finally, two participants stressed the importance of giving their children positive feedback, such as celebrating achievement and giving positive strokes (e.g., sending positive notes in the child's lunch box).

IMPACT OF PARENT REVIEW

To conclude the session, participants were asked what impact the knowledge that background items like these had been reviewed and approved by a panel of parents would have on their willingness to answer—and their willingness to have their children answer—questions like this that were administered as part of a national assessment. These participants reported that they would not be more likely to answer home background questions knowing that the questions had been reviewed and approved by a panel of parents like themselves. Only one participant indicated that he would be slightly more likely to let his child answer such questions knowing that the questions had been reviewed. The other participants said that a review panel would not influence their thinking, since they would not know the parents or the results of the review.

APPENDIX A.

RECRUITING AND CONSENT MATERIALS

1. Study Information Sheet

2. Parental Interest Form

3. Consent Form

4. Video Release Form

4th Graders and Parent--Participate in a Research Study and Earn \$50.

What is the purpose of this study?

The U. S. Department of Education's National Center for Education Statistics is involved in a major effort to measure educational achievement in our nation's children. As part of this effort, they are interested in learning about home and family factors that might be associated with test performance, such as TV watching habits and computer usage. So, when students take national achievement tests, they also answer questions about their home and family.

This study is designed to address the following concerns:

- (1) Can students understand these questions and provide accurate information?
- (2) Do parents think that these questions are appropriate and proper for the government to be asking?

How will this study be conducted?

The government has awarded a contract to the American Institutes for Research (AIR) to address these concerns. We (AIR) will have children and a parent or guardian come to our Palo Alto research facility at 1791 Arastradero Road, near Alpine Road. Our staff, who are experienced in working with school-age children in this setting, will ask your children questions about their home and family and to tell how they came up with their answers. Parent(s)/guardian(s) will be asked how they think their children will answer these questions and if they think these questions are appropriate and proper.

When children are answering these questions, they will be videotaped. Using the information provided by the parent(s)/guardian(s), cognitive psychologists will analyze the videotapes to determine if students can provide accurate information. Parent/guardians' responses will be summarized to determine if these questions are felt to be appropriate and proper.

How much time will this require?

This will require no more than 90 minutes of you and your child's time.

What is the American Institutes for Research?

The American Institutes for Research (AIR) is an independent, not-for-profit corporation engaged in research, development, evaluation, and analysis in the behavioral and social sciences. About three-quarters of our funding comes from the U.S. Government. The remainder is from private companies, foundations, associations, and state and municipal governments.

AIR was founded in 1946. Over 100 people work in our Palo Alto office; more than 250 others work at our Washington, D.C. and Lexington, MA offices.

How can I get more information?

If you are interested in participating in this study, fill out the attached sheet and return it in the attached envelope. Or, if you want more information about this study, either call or write Dr. Roger Levine, Project Director, or Dr. Jill Allen, Associate Research Scientist, at the address and phone number below.

U.S. Department of Education Home Background Indicators Study

My fourth grade child and I are interested in participating in your research study. Please contact me so that I can find out more about this study.

I understand that:

- (1) The study will take no more than 90 minutes of our time.
- (2) Participation in the study is voluntary, and we may choose to leave at any time.
- (3) We will receive \$50.00 for participating in the study.
- (4) This study is sponsored by the United States Department of Education.
- (5) Our responses are strictly confidential. Results will never be presented in any way that would permit any response to be associated with any specific individual.

Name: _____

Child's name: _____

Address: _____

Telephone number(s): _____

Best time(s) to call: _____

Please return to: Dr. Jill Allen, AIR, P.O. Box 1113, Palo Alto, CA 94302

CONSENT FORM

U.S. Department of Education Home Background Indicators Study

My child and I would like to participate in the Home Background Indicators Study. We understand that:

(1) This study is designed to (a) determine whether or not students can understand questions about home and family factors and provide accurate information, and (b) find out if parents think that these questions are appropriate and proper for the government to be asking.

(2) This study is sponsored by the United States Department of Education.

(3) This study will require no more than 90 minutes of our time.

(4) My child will be videotaped during the interview.

(5) Participation in the study is voluntary, and we may choose to leave at any time.

(6) We will receive \$50.00 for participating in the study.

(7) Our responses are strictly confidential. Results will never be presented in any way that would permit any response to be associated with any specific individual.

I agree to participate and I give permission for my child to participate.

Print Parent/Guardian Name: _____
First Middle Last

Parent/Guardian Signature: _____ Date _____

I understand the above and I agree to participate.

Print Student's Name: _____
First Middle Last

Student's Signature: _____ Date _____

American Institutes for Research

PARTICIPANT/SUBJECT RELEASE FORM

We give our permission to allow the videotape of NAME OF CHILD to be edited and shown to others for instructional and informational purposes only.

Parent Signature

Date

Student Signature

Date

APPENDIX B.

PROTOCOL: PHASE 1

- 1. Fourth Grade Student Protocol: Form A**
- 2. Fourth Grade Student Protocol: Form B**
- 3. Parent Protocol: Form A**
- 4. Parent Protocol: Form B**

LIST A: Child Survey Protocol: 26 April 1996

1. How often do you talk about things you have studied in school with an adult at home?

Almost every day	G
Once or twice a week	G
Once or twice a month	G
Never or hardly ever	G

C1--What do you think they mean by "adult" in this question?

C2--(If child does not indicate with whom they are talking) Which grown-ups do you talk to about school?

C3--(If child does NOT answer never or hardly ever) What types of school things do you talk about with (PERSON)?

C4--(If child does NOT answer never or hardly ever) Does (PERSON) talk to you about school during a particular time of the day (e.g., during dinner, driving home from school)?

C5--Did you talk with anyone about school yesterday?

C6--When was the last time you talked with an adult about school?

2. How often do you see your mother reading books, magazines, or newspapers?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

C1--(If child indicates that his/her mother reads) What kinds of things does your mother read?

C2--(If child indicates that his/her mother reads) Does your mother read to you?

C3--(If child indicates that his/her mother reads) When was the last time you saw your mother reading? Tell me about it.

C4--What about the time before that? Tell me about it.

3. How often do you see your father reading books, magazines, or newspapers?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

C1--(If child indicates that his/her father reads) What kinds of things does your father read?

C2--(If child indicates that his/her father reads) Does your father read to you?

C3--(If child indicates that his/her father reads) When was the last time you saw your father reading? Tell me about it.

C4--What about the time before that? Tell me about it.

4. How much time do you spend on homework each school day?

_____ or

I don't usually have homework assigned G

I have homework but I don't usually do it G

C1--How did you figure that out?

C2--(If child does homework) How many hours/minutes did you spend on homework yesterday?

5. How many hours per week do you read for fun?

_____ hours per week or

I don't read for fun G

C1--How did you come up with that answer?

C2--(If child reads for fun) How many hours/minutes did you read for fun yesterday? Tell me about it.

C3--(If child reads for fun) How many hours/minutes did you read for fun today?

C4--(If child reads for fun) What types of things do you read?

6. As things stand now, how far in school do you think you will get?

- | | |
|--|---|
| Won't finish high school | G |
| Will graduate from high school, but won't go any further | G |
| Will go to vocational, trade, or business school after high school | G |
| Will attend college | G |
| Will graduate from college | G |
| Will attend a higher level of school after graduating from college | G |
-

C1--How did you know that was the right answer?

C2--What do you think they mean by "As things stand now?"

C3--What do you want to be when you grow up?

C4--(If child indicates that they want to go to college) Is there a particular college you want to go to?

7. How far in school do you think your father wants you to get?

- | | |
|---|---|
| Less than high school graduation | G |
| Graduate from high school, but not go any further | G |
| Go to vocational, trade, or business school after high school | G |
| Attend college | G |
| Graduate from college | G |
| Attend a higher level of school after graduating from college | G |
| Don't know | G |
-

C1--How do you know how far your father wants you to go in school?

C2--What do you think they mean by "college"?

8. How far in school do you think your mother wants you to get?

Less than high school graduation	G
Graduate from high school, but not go any further	G
Go to vocational, trade, or business school after high school	G
Attend college	G
Graduate from college	G
Attend a higher level of school after graduating from college	G
Don't know	G

C1--How did you know that was the right answer?

C2--How do you know how far your mother wants you to go in school?

9. Does your family get a newspaper regularly?

Yes	G
No	G
I don't know	G

C1--What do you think they mean by "regularly"?

C2--(If yes) Do you know the name of the newspaper?

C3--(If answers no) Do you ever read the comics in a newspaper?

10. Does either your mother or your stepmother live at home with you?

Yes	G
No	G

C1--What do you think they mean by “your mother or your stepmother”?

11. Does either your father or your stepfather live at home with you?

Yes	G
No	G

C1--What do you think they mean by “your father or your stepfather”?

12. How many people in your family live at home with you?

C1--Can you tell me the names of everyone who normally lives at home with you?

C2--Are there people who are not living at home now, but who usually live there, such as an older brother/sister away at college?

C3--Is there anyone else who lives with you such as an aunt/uncle, grandparent, nanny?

GENERAL QUESTIONS:

Did any of these questions sound strange to you?

Was there anything that you didn't understand?

Do you think it's fun answering questions like this?

LIST B: Child Survey Protocol: 3 June 1996

1. How much TV do you usually watch each school day?

C1--How did you figure that out?

C2--What do you think they mean by “usually”?

C3--(If child watches TV) How much TV did you watch yesterday? PROBE FOR HOURS/MINUTES

2. How many books are there in your home?

- | | |
|--|---|
| Less than a full bookshelf (0 to 25 books) | G |
| One or several bookshelves (26 to 100 books) | G |
| One or more bookcases full (over 100 books) | G |

C1--How many books do you think there are in your home? PROBE FOR A SPECIFIC NUMBER.

C2--How did you come up with that number? Tell me what you were thinking.

3. How often do you use a computer at home for schoolwork?

- | | |
|------------------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
| There is no computer at home | G |
-

C1--How did you come up with that answer?

C2--(If child has a computer at home) Do you know what kind of computer you have at home?

C3--(If child has a computer at home and does schoolwork on it) When was the last time you used the computer for schoolwork? Tell me about it.

C4--(If child has a computer) What other things do you use the computer for?

4. How often do you see your mother using mathematics (that is, measuring things, writing checks, or doing arithmetic)?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

C1--(If child indicates that his/her mother uses mathematics) When was the last time you saw your mother using math? Tell me about it.

C2--What about the time before that? Tell me about it.

C3--(If child indicates that his/her mother uses mathematics) When was the last time you did something with your mother involving math? Tell me about it.

5. How often do you see your father using mathematics (that is, measuring things, writing checks, or doing arithmetic)?

Every day	G
A few times a week	G
Once a week	G
Once a month	G
Less than once a month	G
Never	G

C1--(If child indicates that his/her father uses mathematics) When was the last time you saw your father using math? Tell me about it.

C2--What about the time before that? Tell me about it.

C3--(If child indicates that his/her father uses mathematics) When was the last time you did something with your father involving math? Tell me about it.

6. How far in school did your mother go?

She did not finish high school	G
She did finish high school	G
She went to school after high school	G
She graduated from college	G
She also has a special college degree (doctor, lawyer, etc.)	G

C1--How did you know that?

C2--Do you know the name of the high school your mother went to?

C3--What do you think they mean by "special college degree"? Can you give me an example of a special college degree?

C4--(If child indicates that mother went to college) Do you know the name of the college(s) your mother went to?

C5--(If child indicates that mother went to college) Do you know what degree she received?

7. How far in school did your father go?

- | | |
|---|---|
| He did not finish high school | G |
| He did finish high school | G |
| He went to school after high school | G |
| He graduated from college | G |
| He also has a special college degree (doctor, lawyer, etc.) | G |
-

C1--How did you know that?

C2--Do you know the name of the high school your father went to?

C3--(If child indicates that father went to college) Do you know the name of the college(s) your father went to?

C4--(If child indicates that father went to college) Do you know what degree your father received?

8. How much do your parents try to find out about who your friends are?

- | | |
|---------------|---|
| Don't know | G |
| Not at all | G |
| Just a little | G |
| Some | G |
| A lot | G |
-

C1--What are the names of your friends?

C2--You said _____ (RESPONSE). What were you thinking when you said _____ (RESPONSE)?

C3--Why did you choose _____ (RESPONSE) instead of _____ (ALTERNATE RESPONSE)?

9. Are there certain TV shows that your parents don't let you watch?

Yes	G
No	G

C1--(If yes) Can you give me some examples of the TV shows your parents won't let you watch?

10. Is there a specific place for you to study in your home?

Yes	G
No	G

C1--(If yes) Where do you study in your home?

C2--What do you think they mean by "specific place"?

C3--(If no) Do you ever study or do homework in your home? (If yes) Where do you study in your home?

11. Do you have your own room at home?

Yes	G
No	G

C1--What do you think they mean by "own room"?

12. What language do the people in your home USUALLY speak?

English	G	Spanish	G
Chinese	G	Japanese	G
Korean	G	Filipino Language	G
Italian	G	French	G
German	G	Polish	G
Portuguese	G	Other (SPECIFY)	G

C1--What do you think they mean by “usually”?

GENERAL QUESTIONS:

Did any of these questions sound strange to you?

Was there anything that you didn't understand?

Do you think it's fun answering questions like this?

Subject #
Date:

Child Interviewer:
Parent Interviewer:

LIST A PARENT QUESTIONNAIRE: 26 April 96

1. How often do you talk about things you have studied in school with an adult at home?

Almost every day	G
Once or twice a week	G
Once or twice a month	G
Never or hardly ever	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If parent talks to child about schoolwork) Is there a specific time of the day that you talk to (CHILD) about schoolwork? (e.g., every evening during dinner)

P2--Did anyone talk to (CHILD) about schoolwork yesterday?

P3--When was the last time an adult talked with (CHILD) about schoolwork?

2. How often do you see your mother reading books, magazines, or newspapers?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer? Remember, we want to know what (CHILD) sees.

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If parent reads in child's presence) When was the last time (YOU/CHILD'S MOTHER) read while (CHILD) was at home?

P2-How often do (YOU/CHILD'S MOTHER) read to (CHILD)?

3. How often do you see your father reading books, magazines, or newspapers?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If parent reads in child's presence) When was the last time (YOU/CHILD'S FATHER) read while (CHILD) was at home?

P2--How often do (YOU/CHILD'S FATHER) read to (CHILD)?

4. How much time do you spend on homework each school day?

_____ or

I don't usually have homework assigned G
I have homework but I don't usually do it G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If child has homework assigned) Do you help (CHILD) with his/her homework?

P2--(If child has homework assigned) Is (CHILD) able to complete his/her homework independently?

P3--(If child has homework assigned) How much time did (CHILD) spend doing homework yesterday?

5. How many hours per week do you read for fun?

_____ hours per week or

I don't read for fun G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If child reads for fun) About how many hours/minutes did (CHILD) read for fun yesterday?

P2--(If child reads for fun) Has (CHILD) read for fun today? For how long?

P3--(If child reads for fun) What types of books/magazines does (CHILD) read?

6. As things stand now, how far in school do you think you will get?

Won't finish high school	G
Will graduate from high school, but won't go any further	G
Will go to vocational, trade, or business school after high school	G
Will attend college	G
Will graduate from college	G
Will attend a higher level of school after graduating from college	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) Go through the list of item specific probes:

P1--What do you think (CHILD) wants to be when (SHE/HE) grows up?

7. How far in school do you think your father wants you to get?

Less than high school graduation	G
Graduate from high school, but not go any further	G
Go to vocational, trade, or business school after high school	G
Attend college	G
Graduate from college	G
Attend a higher level of school after graduating from college	G
Don't know	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) **IF FATHER IS RESPONDENT: How far in school do you want (CHILD) to get? IF NOT, ASK: How far in school does (CHILD's) father want (him/her) to get?**

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If parent wants child to go to college) Is there a particular college(YOU/CHILD'S FATHER) want (CHILD) to attend?

P2--(If parent wants child to do post-baccalaureate work) What degree do(YOU/CHILD'S FATHER) want (CHILD) to obtain (e.g., M.D., Ph.D., J.D., etc.)?

8. How far in school do you think your mother wants you to get?

Less than high school graduation	G
Graduate from high school, but not go any further	G
Go to vocational, trade, or business school after high school	G
Attend college	G
Graduate from college	G
Attend a higher level of school after graduating from college	G
Don't know	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) **IF MOTHER IS RESPONDENT: How far in school do you want (CHILD) to get? IF NOT, ASK: How far in school does (CHILD's) mother want (him/her) to get?**

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If parent wants child to go to college) Is there a particular college(YOU/CHILD'S MOTHER) want (CHILD) to attend?

P2--(If parent wants child to do post-baccalaureate work) What degree do(YOU/CHILD'S MOTHER) want (CHILD) to obtain (e.g., M.D., Ph.D., J.D., etc.)?

9. Does your family get a newspaper regularly?

Yes	G
No	G
I don't know	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If yes) What is the name of the newspaper(s)?

P2--(If yes) Does (CHILD) read the comics in the newspaper?

P3--(If yes) Do you read the newspaper with (CHILD) or in (CHILD's) presence?

10. Does either your mother or your stepmother live at home with you?

Yes
No

G
G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

No probes.

11. Does either your father or your stepfather live at home with you?

Yes
No

G
G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

No probes.

12. How many people in your family live at home with you?

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--Please tell me the names of everyone who normally lives at home with you, and their relationship to (CHILD). Include people who are not living at home now, but who usually live there, such as students away at college.

13. Which category covers your family’s total combined income from all sources during 1995? Include both earnings from all of your family’s jobs (before deductions) and income from other sources such as dividends, interest, social security, welfare, and unemployment.

Under \$5,000	G	\$35,000-\$39,999	G
\$5,000-\$9,999	G	\$40,000-\$49,999	G
\$10,000-\$14,999	G	\$50,000-\$59,999	G
\$15,000-\$19,999	G	\$60,000-\$69,999	G
\$20,000-\$24,999	G	\$70,000-\$84,999	G
\$25,000-\$29,999	G	\$85,000-\$99,999	G
\$30,000-\$34,999	G	\$100,000 and over	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) Even though this item will NOT be asked of (CHILD), how do you think (CHILD) would answer it?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won’t say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--Whose earnings were included in your answer?

P2--Are there any people living in your household whose earnings you did not include?

ITEMS FROM LIST B--QUESTIONS CHILDREN DID NOT ANSWER

14. How much TV do you usually watch each school day?

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

15. How many books are there in your home?

- | | |
|--|---|
| Less than a full bookshelf (0 to 25 books) | G |
| One or several bookshelves (26 to 100 books) | G |
| One or more bookcases full (over 100 books) | G |

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

16. How often do you use a computer at home for schoolwork?

- | | |
|------------------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
| There is no computer at home | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

17. How often do you see your mother using mathematics (that is, measuring things, writing checks, or doing arithmetic)?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

18. How often do you see your father using mathematics (that is, measuring things, writing checks, or doing arithmetic)?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

19. How far in school did your mother go?

- | | |
|--|---|
| She did not finish high school | G |
| She did finish high school | G |
| She went to school after high school | G |
| She graduated from college | G |
| She also has a special college degree (doctor, lawyer, etc.) | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

20. How far in school did your father go?

He did not finish high school	G
He did finish high school	G
He went to school after high school	G
He graduated from college	G
He also has a special college degree (doctor, lawyer, etc.)	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

21. How much do your parents try to find out about who your friends are?

Don't know	G
Not at all	G
Just a little	G
Some	G
A lot	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

22. Are there certain TV shows that your parents don't let you watch?

Yes G
No G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

23. Is there a specific place for you to study in your home?

Yes G No G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

24. Do you have your own room at home?

Yes G No G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

25. What language do the people in your home USUALLY speak?

English	G	Spanish	G
Chinese	G	Japanese	G
Korean	G	Filipino Language	G
Italian	G	French	G
German	G	Polish	G
Portuguese	G	Other (SPECIFY)	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

Subject #
Date:

Child Interviewer:
Parent Interviewer:

LIST B PARENT QUESTIONNAIRE: 26 April 96

1. How much TV do you usually watch each school day?

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If child watches TV) Do you monitor the amount of TV that (CHILD) watches?

P2--(If child watches TV) How much TV did (CHILD) watch yesterday?

2. How many books are there in your home?

- | | |
|--|---|
| Less than a full bookshelf (0 to 25 books) | G |
| One or several bookshelves (26 to 100 books) | G |
| One or more bookcases full (over 100 books) | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--About how many books are there in your home? PROBE FOR A SPECIFIC NUMBER.

3. How often do you use a computer at home for schoolwork?

- | | |
|------------------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
| There is no computer at home | G |

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1-(If computer at home) What kind(s)?

P2--(If computer at home) Is (CHILD) allowed to use it/them:

(1) to play games?

(2) for schoolwork?

4. How often do you see your mother using mathematics (that is, measuring things, writing checks, or doing arithmetic)?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer? Remember, we want to know what (CHILD) sees.

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If parent uses math) When was the last time (YOU/CHILD'S MOTHER) used math when (CHILD) was present?

P2--(If parent uses math with child) What types of math activities do (YOU/CHILD'S MOTHER) do with (CHILD)?

P3--(If parent uses math with child) When was the last time (YOU/CHILD'S MOTHER) did something with (CHILD) involving math?

5. How often do you see your father using mathematics (that is, measuring things, writing checks, or doing arithmetic)?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If parent uses math) When was the last time (YOU/CHILD'S FATHER) used math when (CHILD) was present?

P2--(If parent uses math with child) What types of math activities do (YOU/CHILD'S FATHER) do with (CHILD)?

P3--(If parent uses math with child) When was the last time (YOU/CHILD'S FATHER) did something with (CHILD) involving math?

6. How far in school did your mother go?

- | | |
|--|---|
| She did not finish high school | G |
| She did finish high school | G |
| She went to school after high school | G |
| She graduated from college | G |
| She also has a special college degree (doctor, lawyer, etc.) | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--What is the name of the high school (YOU/CHILD'S MOTHER) attended?

P2--(If mother went to school after high school) What other school(s) did (YOU/CHILD'S MOTHER) attend?

P3--What degrees (if any) did (YOU/CHILD'S MOTHER) earn?

7. How far in school did your father go?

- | | |
|---|---|
| He did not finish high school | G |
| He did finish high school | G |
| He went to school after high school | G |
| He graduated from college | G |
| He also has a special college degree (doctor, lawyer, etc.) | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--What is the name of the high school (YOU/CHILD'S FATHER) attended?

P2--(If father went to school after high school) What other school(s) did (YOU/CHILD'S FATHER) attend?

P3--What degrees (if any) did (YOU/CHILD'S FATHER) earn?

8. How much do your parents try to find out about who your friends are?

Don't know	G
Not at all	G
Just a little	G
Some	G
A lot	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--Who are (CHILD's) friends (ones child might name)?

P2--(If parent tries to find out about child's friends) What types of questions do you ask (CHILD) about his/her friends?

9. Are there certain TV shows that your parents don't let you watch?

Yes
No

G
G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If yes) Can you give me some examples of the TV shows you don't let (CHILD) watch?

10. Is there a specific place for you to study in your home?

Yes
No

G
G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--(If yes) Where does (CHILD) study in your home?

11. Do you have your own room at home?

Yes
No

G
G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

No probes.

12. What language do the people in your home USUALLY speak?

English	G	Spanish	G
Chinese	G	Japanese	G
Korean	G	Filipino Language	G
Italian	G	French	G
German	G	Polish	G
Portuguese	G	Other (SPECIFY) G	

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) How do you think (CHILD) will answer?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

No probes.

QUESTIONS CHILDREN DID NOT ANSWER

13. Which category covers your family's total combined income from all sources during 1995? Include both earnings from all of your family's jobs (before deductions) and income from other sources such as dividends, interest, social security, welfare, and unemployment.

Under \$5,000	G	\$35,000-\$39,999	G
\$5,000-\$9,999	G	\$40,000-\$49,999	G
\$10,000-\$14,999	G	\$50,000-\$59,999	G
\$15,000-\$19,999	G	\$60,000-\$69,999	G
\$20,000-\$24,999	G	\$70,000-\$84,999	G
\$25,000-\$29,999	G	\$85,000-\$99,999	G
\$30,000-\$34,999	G	\$100,000 and over	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(2) Even though this item will NOT be asked of (CHILD), how do you think (CHILD) would answer it?

(3) What is the correct answer?

If (2) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 3)?

(4) Go through the list of item specific probes:

P1--Whose earnings were included?

P2--Are there any people living in your household whose earnings you did not include?

ITEMS FROM LIST A

14. How often do you talk about things you have studied in school with an adult at home?

- | | |
|-----------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

15. How often do you see your mother reading books, magazines, or newspapers?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

16. How often do you see your father reading books, magazines, or newspapers?

- | | |
|------------------------|---|
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

17. How much time do you spend on homework each school day?

_____ or

- | | |
|---|---|
| I don't usually have homework assigned | G |
| I have homework but I don't usually do it | G |
-

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

20. How far in school do you think your father wants you to get?

Less than high school graduation	G
Graduate from high school, but not go any further	G
Go to vocational, trade, or business school after high school	G
Attend college	G
Graduate from college	G
Attend a higher level of school after graduating from college	G
Don't know	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

21. How far in school do you think your mother wants you to get?

Less than high school graduation	G
Graduate from high school, but not go any further	G
Go to vocational, trade, or business school after high school	G
Attend college	G
Graduate from college	G
Attend a higher level of school after graduating from college	G
Don't know	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

22. Does your family get a newspaper regularly?

Yes	G
No	G
I don't know	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

23. Does either your mother or your stepmother live at home with you?

Yes	G
No	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

24. Does either your father or your stepfather live at home with you?

Yes	G
No	G

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

25. How many people in your family live at home with you?

(1) Do you think having children answer this question would make most parents/guardians feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would parents feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would parents feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would parents feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

APPENDIX C.

PROTOCOL: PHASE 2

1. Student Protocol: Form A

(same for fourth and eighth grade)

2. Student Protocol: Form B

(same for fourth and eighth grade, with one exception noted)

3. Parent Protocol: Form A

(same for fourth and eighth grade)

4. Parent Protocol: Form B

(same for fourth and eighth grade)

LIST A: 4th Grade Child Survey Protocol: 11 October 1996

1. How often do you talk about things you have studied in school with an adult member of your family?

- | | |
|-----------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
-

C1--(If child does not indicate with whom they are talking) Which adults do you talk to about school?

C2--What types of school things do you talk about with (PERSON)? How about homework? Did you include this? (If no) Why not?

C3--(If child does NOT answer never or hardly ever) Does (PERSON) talk to you about school during a particular time of the day (e.g., during dinner, driving home from school)?

C4--Did you talk with anyone about school yesterday?

C5--When was the last time you talked with an adult about school?

2. How often does your mother read for fun?

- | | |
|--------------------------------|---|
| Every day | G |
| Almost every day | G |
| A few times a week | G |
| Once a week | G |
| Less than once a week | G |
| My mother doesn't read for fun | G |
-

C1--(If child indicates that his/her mother reads) What kinds of things does your mother read for fun?

C2--(If child indicates that his/her mother reads) How much time does your mother read for fun in a week?

C3--When was the last time you saw your mother reading for fun? Tell me about it.

C4--What about the time before that? Tell me about it.

3. How often does your father read for fun?

Every day	G
Almost every day	G
A few times a week	G
Once a week	G
Less than once a week	G
My father doesn't read for fun	G

C1--(If child indicates that his/her father reads) What kinds of things does your father read for fun?

C2--(If child indicates that his/her father reads) How much time does your father read for fun in a week?

C3--When was the last time you saw your father reading for fun? Tell me about it.

C4--What about the time before that? Tell me about it.

C5--Give me an example of what you think they mean by "read for fun". Can you give another example?

4. How much time do you spend on homework each school day?

- | | |
|---|---|
| I don't usually have homework assigned | G |
| I have homework but I don't usually do it | G |
| About 30 minutes | G |
| About an hour | G |
| About an hour and a half | G |
| About 2 hours | G |
| More than two hours | G |
-

C1--How did you figure that out?

C2--Do you do any homework at school? (If yes) Did you include that in time you spend on homework each school day?

*C3--(If child does homework) How much time did you spend on homework yesterday?
(If interview takes place on a Monday: How much time did you spend on homework over the weekend?)*

C4--IF [CATEGORY] DOES NOT SEEM TO MATCH RESPONSE: "Why did you say [CATEGORY] instead of [CATEGORY]?"

5. On weekends, how much time do you read for fun?

- | | |
|--------------------------|---|
| I don't read for fun | G |
| About an hour | G |
| About an hour and a half | G |
| About 2 hours | G |
| More than two hours | G |
-

C1--How did you come up with that answer?

C2--Did you include assigned reading in your answer?

C3--(If child reads for fun) How much time did you read for fun last weekend? Tell me about it.

C4--(If child reads for fun) What types of things do you read for fun?

****Please note that you should probe after each question.**

6. a. Do you think you will graduate from high school?

Yes G No G

C1--Why did you choose (RESPONSE)?

b. Do you think you will go to school after high school?

Yes G No G

C2--What do you think they mean by "will go to school after high school"?

c. Do you think you will graduate from college?

Yes G No G

C3--In what ways, if any, is this different from "will go to school after high school"?

C4--(If child indicates that they want to go to college) Is there a particular college you want to go to?

d. Do you think you will go to school after graduating from college?

Yes G No G

C5--What kind of work do you want to do when you become an adult?

7. a. Do you think your father wants you to graduate from high school?

Yes G No G

b. Do you think your father wants you to go to school after high school?

Yes G No G

c. Do you think your father wants you to graduate from college?

Yes G No G

d. Do you think your father wants you to go to school after graduating from college?

Yes G No G

C1--How do you know how far your father wants you to go in school? What has your father said or done that shows you this?

C2--What do you think they mean by “go to school after graduating from college”?

8. a. Do you think your mother wants you to graduate from high school?

Yes G No G

b. Do you think your mother wants you to go to school after high school?

Yes G No G

c. Do you think your mother wants you to graduate from college?

Yes G No G

d. Do you think your mother wants you to go to school after graduating from college?

Yes G No G

C1--How do you know how far your mother wants you to go in school? What has your mother said or done that shows you this?

9. Does your family get a newspaper regularly?

Yes G
No G

C1--What do you think they mean by “regularly”?

C2--(IF YES) Do you know the name of the newspaper?

C3--(IF NO) Do you ever read the comics?

C4--(IF CHILD DOESN'T KNOW): How would you answer this?

****Please note that you should probe after each question.**

10. Are your parents divorced or separated?

Yes G

No G

C1--What do you think they mean by “divorced”?

C2--What do you think they mean by “separated”?

C3--(IF NO) Do you know any kids whose parents are divorced or separated?

The next questions ask about the people you live with. If you live at more than one place, please answer the following questions about the place that is your home most of the time.

11. a. Does your mother live at home with you?

Yes G

No G

C1--What do you think they mean by “at home with you”?

C2--What is the address of this place?

b. Does your stepmother live at home with you?

Yes G

No G

C1--What do you think they mean by “stepmother”?

c. Does your father live at home with you?

Yes G

No G

d. Does your stepfather live at home with you?

Yes G

No G

e. How many brothers and sisters live at home with you?

_____ brothers and sisters

C1--Can you tell me the names of your brother(s) and sister(s)?

C2--Do you have any brothers or sisters who don't live with you?

C3--(IF YES): Did you count them? Why (not)?

f. How many OTHER family members live at home with you?

_____ other family members

C1--Can you tell me their names and their relationship to you?

C2--Are there any other people who live with you? (IF YES): Who are they?

12. What is your race/ethnicity?

C1--How did you know that?

C2--What do you think they mean by “race”?

C3--What do you think they mean by “ethnicity”?

****Please read the following question out loud to the student.**

A. Which best describes you?

White (not Hispanic) G

Black (not Hispanic) G

Hispanic (“Hispanic” means someone who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or from some other Spanish or Hispanic background.) G

Asian or Pacific Islander (“Asian or Pacific Islander” means someone who is Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or from some other Asian or Pacific Island background.) G

American Indian or Alaskan Native (“American Indian or Alaskan Native” means someone who is from one of the American Indian tribes, or one of the original people of Alaska.) G

C4--What is your mom’s “race/ethnicity”? How did you know that?

C5--What is your dad’s “race/ethnicity”? How did you know that?

GENERAL QUESTIONS:

Did any of these questions sound strange to you?

Was there anything that you didn't understand?

Do you think it's fun answering questions like this?

LIST B: 8th Grade Child Survey Protocol: 1 October 1996

1. How much TV do you usually watch each school day?

- | | |
|--|---|
| I don't watch TV on school days | G |
| One hour or less | G |
| More than 1 hour but less than 2 hours | G |
| Between 2 and 3 hours | G |
| More than 3 hours | G |
-

C1--How did you figure that out?

C2--What do you think they mean by "usually"?

C3--(IF CHILD CHOSE CATEGORY THAT DOES NOT MATCH INITIAL SELF-REPORT) Why did you say (CATEGORY) rather than (CORRECT CATEGORY)?

C4--Do you watch TV at school? IF YES: Did you include this in the time you spend watching TV?

C5--How much TV did you watch YESTERDAY (OR THE LAST SCHOOL DAY)?

C6--Do you ever watch videotapes? IF YES: Did you include this in the time you spend watching TV?

2. How many books are there in your home?

- | | |
|--|---|
| Less than a full bookshelf (0 to 25 books) | G |
| One or several bookshelves (26 to 100 books) | G |
| One or more bookcases full (over 100 books) | G |
-

C1--How many books do you think there are in your home? PROBE FOR A SPECIFIC NUMBER.

C2--How did you come up with that number? Tell me what you were thinking.

3. How often do you use a computer at home to do schoolwork and to play educational games?

- | | |
|------------------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
| There is no computer at home | G |
-

C1--How did you come up with that answer?

C2--What do you think they mean by "educational games"? Can you give me some examples?

C3--(If child has a computer at home) Do you know what kind of computer you have at home?

C4--(If child has a computer at home and does schoolwork on it) When was the last time you used the computer for schoolwork? Tell me about it.

C5--(If child has a computer at home and uses it for educational games) When was the last time you used the computer for educational games? Tell me about it.

C6--(If child has a computer at home) What (other things) do you use the computer for?

4. How often does your mother use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

- | | |
|------------------------|---|
| Several times a day | G |
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

C1--(If child indicates that his/her mother uses numbers) When was the last time your mother used numbers? Tell me about it.

C2--What about the time before that? Tell me about it.

5. How often does your father use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

- | | |
|------------------------|---|
| Several times a day | G |
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

C1--(If child indicates that his/her father uses numbers) When was the last time your father used numbers? Tell me about it.

C2--What about the time before that? Tell me about it.

C3--What do you think they mean by "using numbers"? Can you give me some more examples?

6. How far in school did your mother go?

- | | |
|--|---|
| She did not finish high school | G |
| She did finish high school | G |
| She went to school after high school | G |
| She graduated from college | G |
| She also has a special college degree (doctor, lawyer, etc.) | G |
-

C1--How did you know that?

C2--Do you know the name of the high school your mother went to?

C3--What do you think they mean by "special college degree"? Can you give me an example of a special college degree (apart from doctor and lawyer)?

C4--(If child indicates that mother went to college) Do you know the name of the college(s) your mother went to?

C5--(If child indicates mother went to college) Do you know what degree(s) your mother received?

NOTE: THIS ITEM WAS ADMINISTERED TO FOURTH GRADERS IN LIEU OF THE PREVIOUS ITEM (WHICH WAS ADMINISTERED TO EIGHTH GRADERS)

****Please note that you should probe after each question.**

6. a. Did your mother graduate from high school?

Yes G

No G

C1--How did you know that?

C2--Do you know the name of the high school your mother went to?

b. Did your mother go to school after high school?

Yes G

No G

C1--Do you know the name of the school or schools?

c. Did your mother graduate from college?

Yes G

No G

C1--How did you know that?

C2--(IF YES) Do you know the name of the college your mother went to?

d. Did your mother go to school after graduating from college?

Yes G

No G

C1--(IF YES) What kind of school was this?

C2--(IF YES) What was the school's name?

C3--(IF YES) Do you know what degree(s) your mother received?

****Please note that you should probe after each question.**

7. a. Did your father graduate from high school?

Yes G

No G

C1--How did you know that?

C2--Do you know the name of the high school your father went to?

b. Did your father go to school after high school?

Yes G

No G

C1--Do you know the name of the school or schools?

c. Did your father graduate from college?

Yes G

No G

C1--How did you know that?

C2--(IF YES) Do you know the name of the college your father went to?

d. Did your father go to school after graduating from college?

Yes G

No G

C1--(IF YES) What kind of school was this?

C2--(IF YES) What was the school's name?

C3--(IF YES) Do you know what degree(s) your father received?

8. How well do your parents know your friends?

- | | |
|--|---|
| They don't know my friends at all | G |
| They know just a little about my friends | G |
| They know my friends pretty well | G |
| They know my friends very well | G |

C1--Were you thinking about your best friend or your friends in general when you answered this question?

C2--What are the names of your friends?

C3--You said _____ (RESPONSE). What were you thinking when you said _____ (RESPONSE)?

C4--Why did you choose _____ (RESPONSE) instead of _____ (ADJACENT RESPONSE)?

C5--Does your father (RESPONSE--e.g. know your friends pretty well)? (If no) How well does your father know your friends?

C6--Does your mother (RESPONSE--e.g. know your friends pretty well)? (If no) How well does your mother know your friends?

9. Do your parents care which TV shows you watch?

Yes G
No G

C1--How do you know that?

C2--Which TV shows do you watch?

C3--Are there some TV shows your parents won't let you watch? IF YES: What are they?

10. Do you have your own desk or table at home where you can study whenever you want?

Yes G
No G

C1--IF YES: Where is this desk or table?

C2--Where do you usually study in your home?

*C3--What do you think they mean by "study"? (If child does not mention doing homework)
Does it include doing homework?*

11. Do you have your own room at home?

Yes G

No G

C1--Does anyone in your family share a room?

12. Do you speak a language other than English at home?

Yes G---> a1. Which language or languages?



a2. How often do you speak English at home?

I speak English all of the time or nearly all of the time. G

I speak English about half of the time. G

I speak another language all of the time or nearly all of the time. G

No G

C1--What language do the people in your home usually speak?

C2--Do they speak any languages other than English?

IF YES: About how much of the time do they speak English with each other?

IF YES: About how much time do they speak English with you?

13. What is your race/ethnicity?

C1--How did you know that?

C2--What do you think they mean by "race"?

C3--What do you think they mean by "ethnicity"?

C4--What is your mom's "race/ethnicity"? How did you know that?

C5--What is your dad's "race/ethnicity"? How did you know that?

A. Which best describes you?

White (not Hispanic) G

Black (not Hispanic) G

Hispanic ("Hispanic" means someone who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or from some other Spanish or Hispanic background.) G

Asian or Pacific Islander ("Asian or Pacific Islander" means someone who is Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or from some other Asian or Pacific Island background.) G

American Indian or Alaskan Native ("American Indian or Alaskan Native" means someone who is from one of the American Indian tribes, or one of the original people of Alaska.) G

Multiracial (PLEASE SPECIFY) G

C1--What do you think they mean by "multiracial"?

C2--(IF MULTIRACIAL) Why did you say multiracial rather than (RACE)?

C3--What do you think they mean by "Please specify"?

C4--What would you do (in response to "Please specify")?

GENERAL QUESTIONS:

Did any of these questions sound strange to you?

Was there anything that you didn't understand?

Do you think it's fun answering questions like this?

Subject #
Date:

Child Interviewer:
Parent Interviewer:

LIST A: FOURTH GRADE PARENT QUESTIONNAIRE: 18 October 96

1. How often do you talk about things you have studied in school with an adult member of your family?

Almost every day	G
Once or twice a week	G
Once or twice a month	G
Never or hardly ever	G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--(If parent talks to child about schoolwork) Is there a specific time of the day that you talk to (CHILD) about schoolwork? (e.g., every evening during dinner, on the way home from school)

P2--What types of things do you talk about with (CHILD)? Did you include homework?

P3--Did anyone talk to (CHILD) about schoolwork yesterday?

(If interview takes place on a Monday: Did anyone talk to (CHILD) about schoolwork on Friday?)

P4--When was the last time an adult talked with (CHILD) about schoolwork?

2. How often does your mother read for fun?

- | | |
|--------------------------------|---|
| Every day | G |
| Almost every day | G |
| A few times a week | G |
| Once a week | G |
| Less than once a week | G |
| My mother doesn't read for fun | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1-What kinds of things do (YOU/CHILD'S MOTHER) read for fun?

P2-How much time do (YOU/CHILD'S MOTHER) read for fun in a week?

P3-When was the last time (YOU/CHILD'S MOTHER) were reading for fun when (CHILD) was present?

3. How often does your father read for fun?

- | | |
|--------------------------------|---|
| Every day | G |
| Almost every day | G |
| A few times a week | G |
| Once a week | G |
| Less than once a week | G |
| My father doesn't read for fun | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1-What kinds of things do (YOU/CHILD'S FATHER) read for fun?

P2-How much time do (YOU/CHILD'S FATHER) read for fun in a week?

P3-When was the last time (YOU/CHILD'S FATHER) were reading for fun when (CHILD) was present?

4. How much time do you spend on homework each school day?

- | | |
|---|---|
| I don't usually have homework assigned | G |
| I have homework but I don't usually do it | G |
| About 30 minutes | G |
| About an hour | G |
| About an hour and a half | G |
| About 2 hours | G |
| More than two hours | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--(If child has homework assigned) Does (CHILD) do homework at school? (If yes) Did you include that time in your response?

P2--(If child has homework assigned) How much time did (CHILD) spend on homework yesterday?

(If interview takes place on a Monday: How much time did [CHILD] spend on homework over the weekend?)

5. On weekends, how much time do you read for fun?

- | | |
|--------------------------|---|
| I don't read for fun | G |
| About an hour | G |
| About an hour and a half | G |
| About 2 hours | G |
| More than two hours | G |

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--Did you include time that the child spends reading assigned materials in your response?

P2--(If child reads for fun) About how long did (CHILD) read for fun last weekend?

(If child reads for fun and interview takes place on a Monday: About how long did (CHILD) read for fun this past weekend?)

P3--(If child reads for fun) What types of things does (CHILD) read for fun?

6. a. Do you think you will graduate from high school?

Yes G No G

b. Do you think you will go to school after high school?

Yes G No G

c. Do you think you will graduate from college?

Yes G No G

d. Do you think you will go to school after graduating from college?

Yes G No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

a.

b.

c.

d.

(2) Go through the list of item specific probes:

P1--What kind of work do you think (CHILD) wants to do when (SHE/HE) becomes an adult?

7. a. Do you think your father wants you to graduate from high school?

Yes G No G

b. Do you think your father wants you to go to school after high school?

Yes G No G

c. Do you think your father wants you to graduate from college?

Yes G No G

d. Do you think your father wants you to go to school after graduating from college?

Yes G No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

a.

b.

c.

d.

(2) IF FATHER IS RESPONDENT: How far in school do you want (CHILD) to get? IF NOT, ASK: How far in school does (CHILD's) father want (him/her) to get?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (FATHER'S RESPONSE)?

(3) Go through the list of item specific probes:

P1--(If parent wants child to go to college) Is there a particular college(YOU/CHILD'S FATHER) want (CHILD) to attend?

P2--(If parent wants child to do post-baccalaureate work) What degree do (YOU/CHILD'S FATHER) want (CHILD) to obtain (e.g., M.D., Ph.D., J.D., etc.)?

8. a. Do you think your mother wants you to graduate from high school?

Yes G No G

b. Do you think your mother wants you to go to school after high school?

Yes G No G

c. Do you think your mother wants you to graduate from college?

Yes G No G

d. Do you think your mother wants you to go to school after graduating from college?

Yes G No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

a.

b.

c.

d.

(2) IF MOTHER IS RESPONDENT: How far in school do you want (CHILD) to get? IF NOT, ASK: How far in school does (CHILD'S) mother want (him/her) to get?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (MOTHER'S RESPONSE)?

(3) Go through the list of item specific probes:

P1--(If parent wants child to go to college) Is there a particular college(YOU/CHILD'S MOTHER) want (CHILD) to attend?

P2--(If parent wants child to do post-baccalaureate work) What degree do (YOU/CHILD'S MOTHER) want (CHILD) to obtain (e.g., M.D., Ph.D., J.D., etc.)?

9. Does your family get a newspaper regularly?

Yes	G
No	G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--(If yes) What is the name of the newspaper(s)?

P2--(If yes) Do you read the newspaper in (CHILD's) presence?

10. Are your parents divorced or separated?

Yes G
No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

No probes.

The next questions ask about the people you live with. If you live at more than one place, please answer the following questions about the place that is your home most of the time.

11. a. Does your mother live at home with you?

Yes G

No G

b. Does your stepmother live at home with you?

Yes G

No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

a.

b.

(2) What is the correct answer?

a.

b.

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

a.

b.

No probes.

11. c. Does your father live at home with you?

Yes G
No G

d. Does your stepfather live at home with you?

Yes G
No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

c.

d.

(2) What is the correct answer?

c.

d.

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

c.

d.

No probes.

11. e. How many brothers and sisters live at home with you?
_____ brothers and sisters

f. How many OTHER family members live at home with you?
_____ other family members

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

e.

f.

(2) What is the correct answer?

e.

f.

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

e.

f.

(3) Go through the list of item specific probes:

P1--Please tell me the names of everyone who normally lives at home with you, and their relationship to (CHILD). Include people who are not living at home now, but who usually live there, such as students away at college.

12. Which best describes you?

- White (not Hispanic) G
- Black (not Hispanic) G
- Hispanic (“Hispanic” means someone who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or from some other Spanish or Hispanic background.) G
- Asian or Pacific Islander (“Asian or Pacific Islander” means someone who is Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or from some other Asian or Pacific Island background.) G
- American Indian or Alaskan Native (“American Indian or Alaskan Native” means someone who is from one of the American Indian tribes, or one of the original people of Alaska.) G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--What is (YOUR/CHILD'S MOTHER) race/ethnicity?

P2--What is (YOUR/CHILD'S FATHER) race/ethnicity?

QUESTIONS CHILDREN DID NOT ANSWER

13. Which category covers your family's total combined income from all sources during 1995? Include both earnings from all of your family's jobs (before deductions) and income from other sources such as dividends, interest, social security, welfare, and unemployment.

Under \$5,000	G	\$35,000-\$39,999	G
\$5,000-\$9,999	G	\$40,000-\$49,999	G
\$10,000-\$14,999	G	\$50,000-\$59,999	G
\$15,000-\$19,999	G	\$60,000-\$69,999	G
\$20,000-\$24,999	G	\$70,000-\$84,999	G
\$25,000-\$29,999	G	\$85,000-\$99,999	G
\$30,000-\$34,999	G	\$100,000 and over	G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) Even though this item will NOT be asked of (CHILD), how do you think (CHILD) would answer it?

(2) What is the correct answer?

If (1) and (3) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--Whose earnings were included in your answer?

P2--Are there any people living in your household whose earnings you did not include?

ITEMS FROM LIST B--QUESTIONS CHILDREN DID NOT ANSWER

14. How much TV do you usually watch each school day?

- | | |
|--|---|
| I don't watch TV on school days | G |
| One hour or less | G |
| More than 1 hour but less than 2 hours | G |
| Between 2 and 3 hours | G |
| More than 3 hours | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

15. How many books are there in your home?

- | | |
|--|---|
| Less than a full bookshelf (0 to 25 books) | G |
| One or several bookshelves (26 to 100 books) | G |
| One or more bookcases full (over 100 books) | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

16. How often do you use a computer at home to do schoolwork and to play educational games?

- | | |
|------------------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
| There is no computer at home | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

17. How often does your mother use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

- | | |
|------------------------|---|
| Several times a day | G |
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

18. How often does your father use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

- | | |
|------------------------|---|
| Several times a day | G |
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

19. a. Did your mother graduate from high school?

- | | |
|-----|---|
| Yes | G |
| No | G |

b. Did your mother go to school after high school?

- | | |
|-----|---|
| Yes | G |
| No | G |

c. Did your mother graduate from college?

- | | |
|-----|---|
| Yes | G |
| No | G |

d. Did your mother go to school after graduating from college?

- | | |
|-----|---|
| Yes | G |
| No | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

20. a. Did your father graduate from high school?

- Yes G
- No G

b. Did your father go to school after high school?

- Yes G
- No G

c. Did your father graduate from college?

- Yes G
- No G

d. Did your father go to school after graduating from college?

- Yes G
- No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

21. How well do your parents know your friends?

- They don't know my friends at all G
- They know just a little about my friends G
- They know my friends pretty well G
- They know my friends very well G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

22. Do your parents care which TV shows you watch?

Yes	G
No	G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

23. Do you have your own desk or table at home where you can study whenever you want?

Yes	G
No	G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

24. Do you have your own room at home?

Yes G
No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

25. Do you speak a language other than English at home?

Yes G---> a1. Which language or languages?



a2. How often do you speak English at home?

I speak English all of the time or nearly all of the time. G
I speak English about half of the time. G
I speak another language all of the time or nearly all of the time. G

No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

26. Which best describes you?

- White (not Hispanic) G
- Black (not Hispanic) G
- Hispanic (“Hispanic” means someone who is Mexican, Mexican American,
Chicano, Puerto Rican, Cuban, or from some other Spanish
or Hispanic background.) G
- Asian or Pacific Islander (“Asian or Pacific Islander” means someone who
is Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or
from some other Asian or Pacific Island background.) G
- American Indian or Alaskan Native (“American Indian or Alaskan Native”
means someone who is from one of the American Indian tribes, or one
of the original people of Alaska.) G
- Multiracial (PLEASE SPECIFY) G

Note: Mention presence of “multiracial” category since it may not be apparent.

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

Subject #
Date:

Child Interviewer:
Parent Interviewer:

LIST B: EIGHTH GRADE PARENT QUESTIONNAIRE: 19 October 96

1. How much TV do you usually watch each school day?

- | | |
|--|---|
| I don't watch TV on school days | G |
| One hour or less | G |
| More than 1 hour but less than 2 hours | G |
| Between 2 and 3 hours | G |
| More than 3 hours | G |

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--(If child watches TV) Do you monitor the amount of TV that (CHILD) watches?

P2--(If child watches TV) How much TV did (CHILD) watch yesterday (OR THE LAST SCHOOL DAY)?

P3--Does (CHILD) ever watch videotapes? (If yes) Did you include this in the time (CHILD) spends watching TV?

2. How many books are there in your home?

- | | |
|--|---|
| Less than a full bookshelf (0 to 25 books) | G |
| One or several bookshelves (26 to 100 books) | G |
| One or more bookcases full (over 100 books) | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--About how many books are there in your home? PROBE FOR A SPECIFIC NUMBER.

3. How often do you use a computer at home to do schoolwork and to play educational games?

- | | |
|------------------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
| There is no computer at home | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1-(If computer at home) What kind(s)?

P2--(If computer at home) Is (CHILD) allowed to use it/them:

(1) to play recreational games?

(2) for schoolwork or educational games? (If yes) What kinds of educational games do you have at home?

P3--(If computer at home) When was the last time (CHILD) used the computer for schoolwork or educational games?

4. How often does your mother use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

- | | |
|------------------------|---|
| Several times a day | G |
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--(If parent uses numbers) When was the last time (YOU/CHILD'S MOTHER) used numbers when (CHILD) was present?

P2--When was the last time (YOU/CHILD'S MOTHER) did something with (CHILD) involving numbers?

5. How often does your father use numbers? Using numbers includes measuring things as well as adding, subtracting, multiplying, and dividing.

- | | |
|------------------------|---|
| Several times a day | G |
| Every day | G |
| A few times a week | G |
| Once a week | G |
| Once a month | G |
| Less than once a month | G |
| Never | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--(If parent uses numbers) When was the last time (YOU/CHILD'S FATHER) used numbers when (CHILD) was present?

P2--When was the last time (YOU/CHILD'S FATHER) did something with (CHILD) involving numbers?

6. How far in school did your mother go?

- | | |
|--|---|
| She did not finish high school | G |
| She did finish high school | G |
| She went to school after high school | G |
| She graduated from college | G |
| She also has a special college degree (doctor, lawyer, etc.) | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--What is the name of the high school (YOU/CHILD'S MOTHER) attended?

P2--(If mother went to school after high school) What other school(s) did (YOU/CHILD'S MOTHER) attend?

P3--What degrees (if any) did (YOU/CHILD'S MOTHER) earn?

7. a. Did your father graduate from high school?

- Yes G
- No G

b. Did your father go to school after high school?

- Yes G
- No G

c. Did your father graduate from college?

- Yes G
- No G

d. Did your father go to school after graduating from college?

- Yes G
- No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

- a.
- b.
- c.
- d.

(2) What is the correct answer?

- a.
- b.
- c.
- d.

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--What is the name of the high school (YOU/CHILD'S FATHER) attended?

P2--(If father went to school after high school) What other school(s) did (YOU/CHILD'S FATHER) attend?

P3--What degrees (if any) did (YOU/CHILD'S FATHER) earn?

8. How well do your parents know your friends?

- | | |
|--|---|
| They don't know my friends at all | G |
| They know just a little about my friends | G |
| They know my friends pretty well | G |
| They know my friends very well | G |

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--Who are (CHILD's) friends (ones child might name)?

P2--(If parent tries to find out about child's friends) What types of questions do you ask (CHILD) about his/her friends?

P3--How well do (YOU/CHILD'S MOTHER) know (CHILD'S) friends?

P4--How well do (YOU/CHILD'S FATHER) know (CHILD'S) friends?

9. Do your parents care which TV shows you watch?

Yes	G
No	G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:
P1--What TV shows does (CHILD) watch?

P2--(If yes) Are there TV shows you don't let (CHILD) watch? (If yes) What are they?

10. Do you have your own desk or table at home where you can study whenever you want?

Yes G
No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
 - b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
 - c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
 - d. IF NOT AT ALL, ASK: Why not?
-

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--(If yes) Where is this desk or table?

P2--Where does (CHILD) usually study in your home?

11. Do you have your own room at home?

Yes	G
No	G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--Does anyone in your family share a room?

12. Do you speak a language other than English at home?

Yes G---> a1. Which language or languages?



a2. How often do you speak English at home?

- | | |
|---|---|
| I speak English all of the time or nearly all of the time. | G |
| I speak English about half of the time. | G |
| I speak another language all of the time or nearly all of the time. | G |

No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

*P1--What language do the **people in your home** usually speak?*

*P2--(If they speak another language besides English) About how much of the time, if ever, do the **people in your home** speak English (use three response categories above)?*

13. Which best describes you?

- White (not Hispanic) G
- Black (not Hispanic) G
- Hispanic (“Hispanic” means someone who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or from some other Spanish or Hispanic background.) G
- Asian or Pacific Islander (“Asian or Pacific Islander” means someone who is Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or from some other Asian or Pacific Island background.) G
- American Indian or Alaskan Native (“American Indian or Alaskan Native” means someone who is from one of the American Indian tribes, or one of the original people of Alaska.) G
- Multiracial (PLEASE SPECIFY) G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) How do you think (CHILD) will answer?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--What is (YOUR/CHILD'S MOTHER) race/ethnicity?

P2--What is (YOUR/CHILD'S FATHER) race/ethnicity?

QUESTIONS CHILDREN DID NOT ANSWER

14. Which category covers your family's total combined income from all sources during 1995? Include both earnings from all of your family's jobs (before deductions) and income from other sources such as dividends, interest, social security, welfare, and unemployment.

Under \$5,000	G	\$35,000-\$39,999	G
\$5,000-\$9,999	G	\$40,000-\$49,999	G
\$10,000-\$14,999	G	\$50,000-\$59,999	G
\$15,000-\$19,999	G	\$60,000-\$69,999	G
\$20,000-\$24,999	G	\$70,000-\$84,999	G
\$25,000-\$29,999	G	\$85,000-\$99,999	G
\$30,000-\$34,999	G	\$100,000 and over	G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

(1) Even though this item will NOT be asked of (CHILD), how do you think (CHILD) would answer it?

(2) What is the correct answer?

If (1) and (2) do not match, then the parent should be asked: Why do you think (CHILD) won't say (RESPONSE TO 2)?

(3) Go through the list of item specific probes:

P1--Whose earnings were included?

P2--Are there any people living in your household whose earnings you did not include?

ITEMS FROM LIST A--QUESTIONS CHILDREN DID NOT ANSWER

15. How often do you talk about things you have studied in school with an adult member of your family?

- | | |
|-----------------------|---|
| Almost every day | G |
| Once or twice a week | G |
| Once or twice a month | G |
| Never or hardly ever | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

16. How often does your mother read for fun?

- | | |
|--------------------------------|---|
| Every day | G |
| Almost every day | G |
| A few times a week | G |
| Once a week | G |
| Less than once a week | G |
| My mother doesn't read for fun | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

17. How often does your father read for fun?

- | | |
|--------------------------------|---|
| Every day | G |
| Almost every day | G |
| A few times a week | G |
| Once a week | G |
| Less than once a week | G |
| My father doesn't read for fun | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

18. How much time do you spend on homework each school day?

- | | |
|---|---|
| I don't usually have homework assigned | G |
| I have homework but I don't usually do it | G |
| About 30 minutes | G |
| About an hour | G |
| About an hour and a half | G |
| About 2 hours | G |
| More than two hours | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

19. On weekends, how much time do you read for fun?

- | | |
|--------------------------|---|
| I don't read for fun | G |
| About an hour | G |
| About an hour and a half | G |
| About 2 hours | G |
| More than two hours | G |
-

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

20. a. Do you think you will graduate from high school?

Yes	G	No	G
-----	---	----	---

b. Do you think you will go to school after high school?

Yes	G	No	G
-----	---	----	---

c. Do you think you will graduate from college?

Yes	G	No	G
-----	---	----	---

d. Do you think you will go to school after graduating from college?

Yes	G	No	G
-----	---	----	---

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

21. a. Do you think your father wants you to graduate from high school?

Yes G No G

b. Do you think your father wants you to go to school after high school?

Yes G No G

c. Do you think your father wants you to graduate from college?

Yes G No G

d. Do you think your father wants you to go to school after graduating from college?

Yes G No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

22. a. Do you think your mother wants you to graduate from high school?

Yes G No G

b. Do you think your mother wants you to go to school after high school?

Yes G No G

c. Do you think your mother wants you to graduate from college?

Yes G No G

d. Do you think your mother wants you to go to school after graduating from college?

Yes G No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

23. Does your family get a newspaper regularly?

Yes G
No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

24. Are your parents divorced or separated?

Yes G
No G

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

The next questions ask about the people you live with. If you live at more than one place, please answer the following questions about the place that is your home most of the time.

25. a. Does your mother live at home with you?

Yes G

No G

b. Does your stepmother live at home with you?

Yes G

No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

25. c. Does your father live at home with you?

Yes G

No G

d. Does your stepfather live at home with you?

Yes G

No G

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?

b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?

c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?

d. IF NOT AT ALL, ASK: Why not?

25. e. How many brothers and sisters live at home with you?
_____ brothers and sisters

f. How many OTHER family members live at home with you?
_____ other family members

Would having your child answer these questions make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

26. Which best describes you?

- White (not Hispanic) G
- Black (not Hispanic) G
- Hispanic (“Hispanic” means someone who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or from some other Spanish or Hispanic background.) G
- Asian or Pacific Islander (“Asian or Pacific Islander” means someone who is Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or from some other Asian or Pacific Island background.) G
- American Indian or Alaskan Native (“American Indian or Alaskan Native” means someone who is from one of the American Indian tribes, or one of the original people of Alaska.) G

Note: Mention absence of “multiracial” category since it may not be apparent.

Would having your child answer this question make you feel very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy? (CIRCLE ONE)

- a. IF VERY UNEASY, ASK: For what reasons would you feel very uneasy?
- b. IF MODERATELY UNEASY, ASK: For what reasons would you feel uneasy?
- c. IF SLIGHTLY UNEASY, ASK: For what reasons would you feel at all uneasy?
- d. IF NOT AT ALL, ASK: Why not?

APPENDIX D.
PARENTAL ITEM SENSITIVITY PANEL
FOCUS GROUP GUIDE

Timetable/Guide for May 31 Focus Group

9:30 **Introductions**

Phyllis and Mette introduce themselves (make sure parents have made name tags)
[To parents] Please tell us your name, what city you live in, and how old your children are.

9:35 **Brief Overview of AIR**

Include these points:

- ? 50-year history
- ? This site since early 1960s; also have four offices in Washington, DC (including our corporate office, a statistics institute, and an office specializing in international research) and one in New England (specializing in human factors engineering)
- ? About 100 employees here—research in education (e.g., magnet schools study), health (e.g., self-monitoring programs for children and adults who have asthma), community, special education, education finance. This building includes a Cognitive Lab where we test products and conduct interviews
- ? Have materials they can take if interested (AIR brochure, 50-year booklet)

9:40 **Background for this Task, Ground Rules**

- ? ***The U.S. Dept. of Education is responsible for monitoring the achievement of the nation's students.*** As part of this monitoring, achievement tests in different subjects areas are administered to a representative sample of 4th, 8th, and 12th graders on a regular basis.
- ? ***The family plays an important role in a student's achievement.*** All of us know that parents' values and activities have a critical impact on their children. Kids usually want to emulate and please their parents. So, for example, if parents value academic performance, their children will usually also want to do well. If parents like to read and spend time reading with their children, their children are more likely to enjoy reading—and to be good readers.
- ? ***Parents can do things at home that will help their children's academic achievement at school.*** Some of these things are well known, like reading with children. We also know that watching TV excessively has a negative impact on educational achievement.
- ? ***How can parents and educators identify the factors that help and encourage all parents to do these things?*** Some efforts have been made to do this. Suppose you want to know what the parents of 4th and 8th graders can do to help their children achieve better in school, for example. One way to help determine the factors that make a difference is to ask students or their parents about those factors, measure achievement (e.g., math ability), and see which factors are related to high and low achievement.

Certain problems arise, and that's what our study is about. Here are the problems:

- ? ***Students don't always know the answers to questions.*** For example, if we ask students how much education each of their parents has, they may not know.
- ? ***The questions may not be understood.*** We have been testing students' understanding of some questions in our Cognitive Laboratory, and we have learned, for example, that if you ask 4th graders if they have a mother or stepmother living at home with them—Yes or No—and they do not have a stepmother, they will often answer No, even though they live at home with their mother.

? ***Parents may think it's not appropriate for some questions to be asked.*** For example, some parents might feel that the government should not be asking them or their children about things that are private.

Today we'll look at some questions that are being developed to identify home background factors that we believe might effect the achievement of 4th and 8th graders. We're going to ask you to look at each question and ask: Are they appropriate? Will children or their parents know the information? If not, how might they be changed? What additional items might be added to get this information?

You are our experts: we don't expect you to agree on every item, but we're eager to hear the ideas of each of you. We have 31 questions to review so we will need to move along as quickly as possible.

Ground Rules

1. *There are no "right" or "wrong" answers.* We want your ideas about each item, and every idea is valid.
2. *Everyone gets a chance to talk.* We have lots of items and only a few hours to meet. In some cases, we may need to cut discussion a bit so that we can hear from everyone who wants to talk and still get through the items.
3. *We will keep all information confidential.* You will note that we are videotaping this session so that we can be sure that we report on it accurately; however, the videotape will be used for reference only. When we write our report, we will not use any of your names and will not include information that would associate you with any response.

9:50 **Description of the Task**

Here's an example item: "How many family trips did you take during the summer?" We will put the item on the overhead and ask you to express your approval, concern, or disapproval about having your child asked this question on an assessment. Note that you have three cards (green, yellow, and red), and they're similar to traffic lights—green is "Go; this item is fine"; yellow is "Slow, I'm not sure about this one"; and Red is "Stop; I object to this item." As each item appears on the overhead, we want you to read it and hold up one of the cards to indicate how you feel about it.

If one or more of you object to an item, it will not necessarily be dropped as an item for students, but we would like to identify your concerns and try to finding alternative ways to get the information, if possible. If/when you have concerns or objections to an item, please be ready to say why you think it is objectionable and how it might be revised.

Our goal is to obtain consensus on how the items might be acceptably measured. The items could either be asked of students (i.e., your children) or of parents. So we'd like to consider each item two ways: first how you feel about having **children** answer the item; and second how you feel about having *parents* answer this about their children or themselves. Finally, we'd like you to identify any problems that might be encountered in answering these items or how the wording might be revised to make the item better or more acceptable to them. [*Then briefly review procedure again with "How many family trips did you take during the summer?" with the question answered separately for children and parents.*]

Context. For 25 years, the Department of Education has been measuring the achievement of students in the U.S., and this has provided information about trends and student, school, and teacher characteristics associated with achievement in different subject areas. Hundreds of thousands of students have participated in this project, but not every student and school participates. Please imagine that the items we'll show you are being administered as part of this federally sponsored test of student achievement and your child is to take that test. To link your child's item responses to his or her achievement test responses, your child is to be assigned an ID number. Your child and others are promised that their responses will be confidential.

We know that you may be skeptical about guarantees about confidentiality, and we can discuss that later if you wish. So that we can focus on the items, however, we ask you to assume that the responses will be confidential and that no one will trace your child's responses to him or her or to you.

9:55 **Item-by-Item Review**

OK, let's get started. As the agenda indicates, we want to look at items until 10:55, when we'll take a break, then continue looking at items until around noon. We'll have a general discussion and finish by 12:30.

We're going to show an item on the overhead and ask you to indicate whether you think it is appropriate for the government to ask 4th, 8th, and 12th grade students like your child to answer it. We're interested only in items that might relate to your child's educational achievement.

When you see the item, it's natural to think of your situation and how your child would answer the question. We're NOT interested in your child's answer to the question—we are interested in how you feel about having your child answer this question. For example, the first question asks how often the child talks about things he or she studied in school with an adult member of your family. For the purposes of this study, we don't care how often that it is or who the child talks with. We just want to know how you feel about having your child answer this question. Show how you feel by holding up one of the "traffic" cards. As you "vote," we're going to keep track of how you respond, but remember that every opinion is OK. There are no right and wrong answers. Any questions?

[For each item, record responses for asking the child the item and for asking the parent the item.]

10:55 **Break**

[Should have completed Item 15 at this point]

11:05 **Item-by-Item Review (cont.)**

11:55 **Brainstorming**

The items we've considered this morning have looked at a number of home-related factors. We are interested in other things that parents do that help their children learn in school. This will help us write questions to see how these things are related to student achievement. For a few minutes, we'd like for you to give us some help on these questions:

What do you do to help your children do better at school?

Are there other things that parents do—or can do—to help their children learn that have not already been discussed this morning?

12:25 **Wrap-Up**

Do you have any concerns about confidentiality that you would like to raise?

Is there a better way to explain the purpose of the data collection to parents?

Before you agreed to let your child participate in a test like the one we described, what would you want to know?

Would *you* be more or less likely to answer such questions if you were told that they had been screened for review and approved by a panel of parents like yourselves?

Less likely G No difference G Slightly more likely G Much more likely G

Would you be more or less likely to let *your children* answer such questions if you were told that they had been screened for review and approved by a panel of parents like yourselves?

Less likely G No difference G Slightly more likely G Much more likely G

How did you feel about this process? Do you have any questions for improving it? [*Go around room and ask each one.*]

Thank you very much. You have been really helpful, and we appreciate all of your good ideas. Please see us for your honoraria on your way out. Thanks again!

Listing of NCES Working Papers to Date

Working papers can be downloaded as pdf files from the NCES Electronic Catalog (<http://nces.ed.gov/pubsearch/>). You can also contact Sheilah Jupiter at (202) 502-7444 (sheilah_jupiter@ed.gov) if you are interested in any of the following papers.

Listing of NCES Working Papers by Program Area

No.	Title	NCES contact
Baccalaureate and Beyond (B&B)		
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2001-15	Baccalaureate and Beyond Longitudinal Study: 2000/01 Follow-Up Field Test Methodology Report	Andrew G. Malizio
Beginning Postsecondary Students (BPS) Longitudinal Study		
98-11	Beginning Postsecondary Students Longitudinal Study First Follow-up (BPS:96-98) Field Test Report	Aurora D'Amico
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
1999-15	Projected Postsecondary Outcomes of 1992 High School Graduates	Aurora D'Amico
2001-04	Beginning Postsecondary Students Longitudinal Study: 1996-2001 (BPS:1996/2001) Field Test Methodology Report	Paula Knepper
Common Core of Data (CCD)		
95-12	Rural Education Data User's Guide	Samuel Peng
96-19	Assessment and Analysis of School-Level Expenditures	William J. Fowler, Jr.
97-15	Customer Service Survey: Common Core of Data Coordinators	Lee Hoffman
97-43	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
1999-03	Evaluation of the 1996-97 Nonfiscal Common Core of Data Surveys Data Collection, Processing, and Editing Cycle	Beth Young
2000-12	Coverage Evaluation of the 1994-95 Common Core of Data: Public Elementary/Secondary School Universe Survey	Beth Young
2000-13	Non-professional Staff in the Schools and Staffing Survey (SASS) and Common Core of Data (CCD)	Kerry Gruber
2001-09	An Assessment of the Accuracy of CCD Data: A Comparison of 1988, 1989, and 1990 CCD Data with 1990-91 SASS Data	John Sietsema
2001-14	Evaluation of the Common Core of Data (CCD) Finance Data Imputations	Frank Johnson
Data Development		
2000-16a	Lifelong Learning NCES Task Force: Final Report Volume I	Lisa Hudson
2000-16b	Lifelong Learning NCES Task Force: Final Report Volume II	Lisa Hudson
Decennial Census School District Project		
95-12	Rural Education Data User's Guide	Samuel Peng
96-04	Census Mapping Project/School District Data Book	Tai Phan
98-07	Decennial Census School District Project Planning Report	Tai Phan
2001-12	Customer Feedback on the 1990 Census Mapping Project	Dan Kasprzyk
Early Childhood Longitudinal Study (ECLS)		
96-08	How Accurate are Teacher Judgments of Students' Academic Performance?	Jerry West
96-18	Assessment of Social Competence, Adaptive Behaviors, and Approaches to Learning with Young Children	Jerry West
97-24	Formulating a Design for the ECLS: A Review of Longitudinal Studies	Jerry West
97-36	Measuring the Quality of Program Environments in Head Start and Other Early Childhood Programs: A Review and Recommendations for Future Research	Jerry West
1999-01	A Birth Cohort Study: Conceptual and Design Considerations and Rationale	Jerry West

No.	Title	NCES contact
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meetings	Dan Kasprzyk
2001-02	Measuring Father Involvement in Young Children's Lives: Recommendations for a Fatherhood Module for the ECLS-B	Jerry West
2001-03	Measures of Socio-Emotional Development in Middle Childhood	Elvira Hausken
2001-06	Papers from the Early Childhood Longitudinal Studies Program: Presented at the 2001 AERA and SRCD Meetings	Jerry West
Education Finance Statistics Center (EDFIN)		
94-05	Cost-of-Education Differentials Across the States	William J. Fowler, Jr.
96-19	Assessment and Analysis of School-Level Expenditures	William J. Fowler, Jr.
97-43	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
98-04	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.
1999-16	Measuring Resources in Education: From Accounting to the Resource Cost Model Approach	William J. Fowler, Jr.
High School and Beyond (HS&B)		
95-12	Rural Education Data User's Guide	Samuel Peng
1999-05	Procedures Guide for Transcript Studies	Dawn Nelson
1999-06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
HS Transcript Studies		
1999-05	Procedures Guide for Transcript Studies	Dawn Nelson
1999-06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
International Adult Literacy Survey (IALS)		
97-33	Adult Literacy: An International Perspective	Marilyn Binkley
Integrated Postsecondary Education Data System (IPEDS)		
97-27	Pilot Test of IPEDS Finance Survey	Peter Stowe
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2000-14	IPEDS Finance Data Comparisons Under the 1997 Financial Accounting Standards for Private, Not-for-Profit Institutes: A Concept Paper	Peter Stowe
National Assessment of Adult Literacy (NAAL)		
98-17	Developing the National Assessment of Adult Literacy: Recommendations from Stakeholders	Sheida White
1999-09a	1992 National Adult Literacy Survey: An Overview	Alex Sedlacek
1999-09b	1992 National Adult Literacy Survey: Sample Design	Alex Sedlacek
1999-09c	1992 National Adult Literacy Survey: Weighting and Population Estimates	Alex Sedlacek
1999-09d	1992 National Adult Literacy Survey: Development of the Survey Instruments	Alex Sedlacek
1999-09e	1992 National Adult Literacy Survey: Scaling and Proficiency Estimates	Alex Sedlacek
1999-09f	1992 National Adult Literacy Survey: Interpreting the Adult Literacy Scales and Literacy Levels	Alex Sedlacek
1999-09g	1992 National Adult Literacy Survey: Literacy Levels and the Response Probability Convention	Alex Sedlacek
2000-05	Secondary Statistical Modeling With the National Assessment of Adult Literacy: Implications for the Design of the Background Questionnaire	Sheida White
2000-06	Using Telephone and Mail Surveys as a Supplement or Alternative to Door-to-Door Surveys in the Assessment of Adult Literacy	Sheida White
2000-07	"How Much Literacy is Enough?" Issues in Defining and Reporting Performance Standards for the National Assessment of Adult Literacy	Sheida White
2000-08	Evaluation of the 1992 NALS Background Survey Questionnaire: An Analysis of Uses with Recommendations for Revisions	Sheida White
2000-09	Demographic Changes and Literacy Development in a Decade	Sheida White
2001-08	Assessing the Lexile Framework: Results of a Panel Meeting	Sheida White

No.	Title	NCES contact
National Assessment of Educational Progress (NAEP)		
95-12	Rural Education Data User's Guide	Samuel Peng
97-29	Can State Assessment Data be Used to Reduce State NAEP Sample Sizes?	Steven Gorman
97-30	ACT's NAEP Redesign Project: Assessment Design is the Key to Useful and Stable Assessment Results	Steven Gorman
97-31	NAEP Reconfigured: An Integrated Redesign of the National Assessment of Educational Progress	Steven Gorman
97-32	Innovative Solutions to Intractable Large Scale Assessment (Problem 2: Background Questionnaires)	Steven Gorman
97-37	Optimal Rating Procedures and Methodology for NAEP Open-ended Items	Steven Gorman
97-44	Development of a SASS 1993-94 School-Level Student Achievement Subfile: Using State Assessments and State NAEP, Feasibility Study	Michael Ross
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
1999-05	Procedures Guide for Transcript Studies	Dawn Nelson
1999-06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
2001-07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein
2001-08	Assessing the Lexile Framework: Results of a Panel Meeting	Sheida White
2001-11	Impact of Selected Background Variables on Students' NAEP Math Performance	Arnold Goldstein
2001-13	The Effects of Accommodations on the Assessment of LEP Students in NAEP	Arnold Goldstein
2001-19	The Measurement of Home Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Graders to Questionnaire Items and Parental Assessment of the Invasiveness of These Items	Arnold Goldstein
National Education Longitudinal Study of 1988 (NELS:88)		
95-04	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings
95-06	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings
95-07	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-12	Rural Education Data User's Guide	Samuel Peng
95-14	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
96-03	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
98-06	National Education Longitudinal Study of 1988 (NELS:88) Base Year through Second Follow-Up: Final Methodology Report	Ralph Lee
98-09	High School Curriculum Structure: Effects on Coursetaking and Achievement in Mathematics for High School Graduates—An Examination of Data from the National Education Longitudinal Study of 1988	Jeffrey Owings
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
1999-05	Procedures Guide for Transcript Studies	Dawn Nelson
1999-06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
1999-15	Projected Postsecondary Outcomes of 1992 High School Graduates	Aurora D'Amico
2001-16	Imputation of Test Scores in the National Education Longitudinal Study of 1988	Ralph Lee
National Household Education Survey (NHES)		
95-12	Rural Education Data User's Guide	Samuel Peng
96-13	Estimation of Response Bias in the NHES:95 Adult Education Survey	Steven Kaufman
96-14	The 1995 National Household Education Survey: Reinterview Results for the Adult Education Component	Steven Kaufman
96-20	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-21	1993 National Household Education Survey (NHES:93) Questionnaires: Screener, School Readiness, and School Safety and Discipline	Kathryn Chandler

No.	Title	NCES contact
96-22	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
96-29	Undercoverage Bias in Estimates of Characteristics of Adults and 0- to 2-Year-Olds in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
96-30	Comparison of Estimates from the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-02	Telephone Coverage Bias and Recorded Interviews in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-03	1991 and 1995 National Household Education Survey Questionnaires: NHES:91 Screener, NHES:91 Adult Education, NHES:95 Basic Screener, and NHES:95 Adult Education	Kathryn Chandler
97-04	Design, Data Collection, Monitoring, Interview Administration Time, and Data Editing in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-05	Unit and Item Response, Weighting, and Imputation Procedures in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-06	Unit and Item Response, Weighting, and Imputation Procedures in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-08	Design, Data Collection, Interview Timing, and Data Editing in the 1995 National Household Education Survey	Kathryn Chandler
97-19	National Household Education Survey of 1995: Adult Education Course Coding Manual	Peter Stowe
97-20	National Household Education Survey of 1995: Adult Education Course Code Merge Files User's Guide	Peter Stowe
97-25	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler
97-28	Comparison of Estimates in the 1996 National Household Education Survey	Kathryn Chandler
97-34	Comparison of Estimates from the 1993 National Household Education Survey	Kathryn Chandler
97-35	Design, Data Collection, Interview Administration Time, and Data Editing in the 1996 National Household Education Survey	Kathryn Chandler
97-38	Reinterview Results for the Parent and Youth Components of the 1996 National Household Education Survey	Kathryn Chandler
97-39	Undercoverage Bias in Estimates of Characteristics of Households and Adults in the 1996 National Household Education Survey	Kathryn Chandler
97-40	Unit and Item Response Rates, Weighting, and Imputation Procedures in the 1996 National Household Education Survey	Kathryn Chandler
98-03	Adult Education in the 1990s: A Report on the 1991 National Household Education Survey	Peter Stowe
98-10	Adult Education Participation Decisions and Barriers: Review of Conceptual Frameworks and Empirical Studies	Peter Stowe
National Longitudinal Study of the High School Class of 1972 (NLS-72)		
95-12	Rural Education Data User's Guide	Samuel Peng
National Postsecondary Student Aid Study (NPSAS)		
96-17	National Postsecondary Student Aid Study: 1996 Field Test Methodology Report	Andrew G. Malizio
2000-17	National Postsecondary Student Aid Study:2000 Field Test Methodology Report	Andrew G. Malizio
National Study of Postsecondary Faculty (NSOPF)		
97-26	Strategies for Improving Accuracy of Postsecondary Faculty Lists	Linda Zimbler
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2000-01	1999 National Study of Postsecondary Faculty (NSOPF:99) Field Test Report	Linda Zimbler
Postsecondary Education Descriptive Analysis Reports (PEDAR)		
2000-11	Financial Aid Profile of Graduate Students in Science and Engineering	Aurora D'Amico
Private School Universe Survey (PSS)		
95-16	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-17	Estimates of Expenditures for Private K-12 Schools	Stephen Broughman
96-16	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
96-26	Improving the Coverage of Private Elementary-Secondary Schools	Steven Kaufman
96-27	Intersurvey Consistency in NCES Private School Surveys for 1993-94	Steven Kaufman

No.	Title	NCES contact
97-07	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-22	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meetings	Dan Kasprzyk
2000-15	Feasibility Report: School-Level Finance Pretest, Private School Questionnaire	Stephen Broughman
Recent College Graduates (RCG)		
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
Schools and Staffing Survey (SASS)		
94-01	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-06	Six Papers on Teachers from the 1990-91 Schools and Staffing Survey and Other Related Surveys	Dan Kasprzyk
95-01	Schools and Staffing Survey: 1994 Papers Presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk
95-08	CCD Adjustment to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk
95-10	The Results of the 1991-92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation	Dan Kasprzyk
95-11	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
95-12	Rural Education Data User's Guide	Samuel Peng
95-14	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
95-15	Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Follow-up Survey	Sharon Bobbitt
95-16	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-18	An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey	Dan Kasprzyk
96-01	Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study	Dan Kasprzyk
96-02	Schools and Staffing Survey (SASS): 1995 Selected papers presented at the 1995 Meeting of the American Statistical Association	Dan Kasprzyk
96-05	Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey	Dan Kasprzyk
96-06	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy	Dan Kasprzyk
96-07	Should SASS Measure Instructional Processes and Teacher Effectiveness?	Dan Kasprzyk
96-09	Making Data Relevant for Policy Discussions: Redesigning the School Administrator Questionnaire for the 1998-99 SASS	Dan Kasprzyk
96-10	1998-99 Schools and Staffing Survey: Issues Related to Survey Depth	Dan Kasprzyk
96-11	Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance	Dan Kasprzyk
96-12	Predictors of Retention, Transfer, and Attrition of Special and General Education Teachers: Data from the 1989 Teacher Followup Survey	Dan Kasprzyk
96-15	Nested Structures: District-Level Data in the Schools and Staffing Survey	Dan Kasprzyk
96-23	Linking Student Data to SASS: Why, When, How	Dan Kasprzyk
96-24	National Assessments of Teacher Quality	Dan Kasprzyk
96-25	Measures of Inservice Professional Development: Suggested Items for the 1998-1999 Schools and Staffing Survey	Dan Kasprzyk
96-28	Student Learning, Teaching Quality, and Professional Development: Theoretical Linkages, Current Measurement, and Recommendations for Future Data Collection	Mary Rollefson

No.	Title	NCES contact
97-01	Selected Papers on Education Surveys: Papers Presented at the 1996 Meeting of the American Statistical Association	Dan Kasprzyk
97-07	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-09	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
97-10	Report of Cognitive Research on the Public and Private School Teacher Questionnaires for the Schools and Staffing Survey 1993-94 School Year	Dan Kasprzyk
97-11	International Comparisons of Inservice Professional Development	Dan Kasprzyk
97-12	Measuring School Reform: Recommendations for Future SASS Data Collection	Mary Rollefson
97-14	Optimal Choice of Periodicities for the Schools and Staffing Survey: Modeling and Analysis	Steven Kaufman
97-18	Improving the Mail Return Rates of SASS Surveys: A Review of the Literature	Steven Kaufman
97-22	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman
97-23	Further Cognitive Research on the Schools and Staffing Survey (SASS) Teacher Listing Form	Dan Kasprzyk
97-41	Selected Papers on the Schools and Staffing Survey: Papers Presented at the 1997 Meeting of the American Statistical Association	Steve Kaufman
97-42	Improving the Measurement of Staffing Resources at the School Level: The Development of Recommendations for NCES for the Schools and Staffing Survey (SASS)	Mary Rollefson
97-44	Development of a SASS 1993-94 School-Level Student Achievement Subfile: Using State Assessments and State NAEP, Feasibility Study	Michael Ross
98-01	Collection of Public School Expenditure Data: Development of a Questionnaire	Stephen Broughman
98-02	Response Variance in the 1993-94 Schools and Staffing Survey: A Reinterview Report	Steven Kaufman
98-04	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.
98-05	SASS Documentation: 1993-94 SASS Student Sampling Problems; Solutions for Determining the Numerators for the SASS Private School (3B) Second-Stage Factors	Steven Kaufman
98-08	The Redesign of the Schools and Staffing Survey for 1999-2000: A Position Paper	Dan Kasprzyk
98-12	A Bootstrap Variance Estimator for Systematic PPS Sampling	Steven Kaufman
98-13	Response Variance in the 1994-95 Teacher Follow-up Survey	Steven Kaufman
98-14	Variance Estimation of Imputed Survey Data	Steven Kaufman
98-15	Development of a Prototype System for Accessing Linked NCES Data	Steven Kaufman
98-16	A Feasibility Study of Longitudinal Design for Schools and Staffing Survey	Stephen Broughman
1999-02	Tracking Secondary Use of the Schools and Staffing Survey Data: Preliminary Results	Dan Kasprzyk
1999-04	Measuring Teacher Qualifications	Dan Kasprzyk
1999-07	Collection of Resource and Expenditure Data on the Schools and Staffing Survey	Stephen Broughman
1999-08	Measuring Classroom Instructional Processes: Using Survey and Case Study Fieldtest Results to Improve Item Construction	Dan Kasprzyk
1999-10	What Users Say About Schools and Staffing Survey Publications	Dan Kasprzyk
1999-12	1993-94 Schools and Staffing Survey: Data File User's Manual, Volume III: Public-Use Codebook	Kerry Gruber
1999-13	1993-94 Schools and Staffing Survey: Data File User's Manual, Volume IV: Bureau of Indian Affairs (BIA) Restricted-Use Codebook	Kerry Gruber
1999-14	1994-95 Teacher Followup Survey: Data File User's Manual, Restricted-Use Codebook	Kerry Gruber
1999-17	Secondary Use of the Schools and Staffing Survey Data	Susan Wiley
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meetings	Dan Kasprzyk
2000-10	A Research Agenda for the 1999-2000 Schools and Staffing Survey	Dan Kasprzyk
2000-13	Non-professional Staff in the Schools and Staffing Survey (SASS) and Common Core of Data (CCD)	Kerry Gruber
2000-18	Feasibility Report: School-Level Finance Pretest, Public School District Questionnaire	Stephen Broughman
Third International Mathematics and Science Study (TIMSS)		
2001-01	Cross-National Variation in Educational Preparation for Adulthood: From Early Adolescence to Young Adulthood	Elvira Hausken
2001-05	Using TIMSS to Analyze Correlates of Performance Variation in Mathematics	Patrick Gonzales
2001-07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein

Listing of NCES Working Papers by Subject

No.	Title	NCES contact
Achievement (student) - mathematics		
2001-05	Using TIMSS to Analyze Correlates of Performance Variation in Mathematics	Patrick Gonzales
Adult education		
96-14	The 1995 National Household Education Survey: Reinterview Results for the Adult Education Component	Steven Kaufman
96-20	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-22	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
98-03	Adult Education in the 1990s: A Report on the 1991 National Household Education Survey	Peter Stowe
98-10	Adult Education Participation Decisions and Barriers: Review of Conceptual Frameworks and Empirical Studies	Peter Stowe
1999-11	Data Sources on Lifelong Learning Available from the National Center for Education Statistics	Lisa Hudson
2000-16a	Lifelong Learning NCES Task Force: Final Report Volume I	Lisa Hudson
2000-16b	Lifelong Learning NCES Task Force: Final Report Volume II	Lisa Hudson
Adult literacy—see Literacy of adults		
American Indian – education		
1999-13	1993-94 Schools and Staffing Survey: Data File User's Manual, Volume IV: Bureau of Indian Affairs (BIA) Restricted-Use Codebook	Kerry Gruber
Assessment/achievement		
95-12	Rural Education Data User's Guide	Samuel Peng
95-13	Assessing Students with Disabilities and Limited English Proficiency	James Houser
97-29	Can State Assessment Data be Used to Reduce State NAEP Sample Sizes?	Larry Ogle
97-30	ACT's NAEP Redesign Project: Assessment Design is the Key to Useful and Stable Assessment Results	Larry Ogle
97-31	NAEP Reconfigured: An Integrated Redesign of the National Assessment of Educational Progress	Larry Ogle
97-32	Innovative Solutions to Intractable Large Scale Assessment (Problem 2: Background Questions)	Larry Ogle
97-37	Optimal Rating Procedures and Methodology for NAEP Open-ended Items	Larry Ogle
97-44	Development of a SASS 1993-94 School-Level Student Achievement Subfile: Using State Assessments and State NAEP, Feasibility Study	Michael Ross
98-09	High School Curriculum Structure: Effects on Coursetaking and Achievement in Mathematics for High School Graduates—An Examination of Data from the National Education Longitudinal Study of 1988	Jeffrey Owings
2001-07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein
2001-11	Impact of Selected Background Variables on Students' NAEP Math Performance	Arnold Goldstein
2001-13	The Effects of Accommodations on the Assessment of LEP Students in NAEP	Arnold Goldstein
2001-19	The Measurement of Home Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Graders to Questionnaire Items and Parental Assessment of the Invasiveness of These Items	Arnold Goldstein
Beginning students in postsecondary education		
98-11	Beginning Postsecondary Students Longitudinal Study First Follow-up (BPS:96-98) Field Test Report	Aurora D'Amico
2001-04	Beginning Postsecondary Students Longitudinal Study: 1996-2001 (BPS:1996/2001) Field Test Methodology Report	Paula Knepper

No.	Title	NCES contact
Civic participation		
97-25	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler
Climate of schools		
95-14	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
Cost of education indices		
94-05	Cost-of-Education Differentials Across the States	William J. Fowler, Jr.
Course-taking		
95-12	Rural Education Data User's Guide	Samuel Peng
98-09	High School Curriculum Structure: Effects on Coursetaking and Achievement in Mathematics for High School Graduates—An Examination of Data from the National Education Longitudinal Study of 1988	Jeffrey Owings
1999-05	Procedures Guide for Transcript Studies	Dawn Nelson
1999-06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson
Crime		
97-09	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
Curriculum		
95-11	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
98-09	High School Curriculum Structure: Effects on Coursetaking and Achievement in Mathematics for High School Graduates—An Examination of Data from the National Education Longitudinal Study of 1988	Jeffrey Owings
Customer service		
1999-10	What Users Say About Schools and Staffing Survey Publications	Dan Kasprzyk
2000-02	Coordinating NCES Surveys: Options, Issues, Challenges, and Next Steps	Valena Plisko
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meetings	Dan Kasprzyk
2001-12	Customer Feedback on the 1990 Census Mapping Project	Dan Kasprzyk
Data quality		
97-13	Improving Data Quality in NCES: Database-to-Report Process	Susan Ahmed
2001-11	Impact of Selected Background Variables on Students' NAEP Math Performance	Arnold Goldstein
2001-13	The Effects of Accommodations on the Assessment of LEP Students in NAEP	Arnold Goldstein
2001-19	The Measurement of Home Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Graders to Questionnaire Items and Parental Assessment of the Invasiveness of These Items	Arnold Goldstein
Data warehouse		
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meetings	Dan Kasprzyk
Design effects		
2000-03	Strengths and Limitations of Using SUDAAN, Stata, and WesVarPC for Computing Variances from NCES Data Sets	Ralph Lee
Dropout rates, high school		
95-07	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings

No.	Title	NCES contact
Early childhood education		
96-20	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-22	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
97-24	Formulating a Design for the ECLS: A Review of Longitudinal Studies	Jerry West
97-36	Measuring the Quality of Program Environments in Head Start and Other Early Childhood Programs: A Review and Recommendations for Future Research	Jerry West
1999-01	A Birth Cohort Study: Conceptual and Design Considerations and Rationale	Jerry West
2001-02	Measuring Father Involvement in Young Children's Lives: Recommendations for a Fatherhood Module for the ECLS-B	Jerry West
2001-03	Measures of Socio-Emotional Development in Middle School	Elvira Hausken
2001-06	Papers from the Early Childhood Longitudinal Studies Program: Presented at the 2001 AERA and SRCD Meetings	Jerry West
Educational attainment		
98-11	Beginning Postsecondary Students Longitudinal Study First Follow-up (BPS:96-98) Field Test Report	Aurora D'Amico
2001-15	Baccalaureate and Beyond Longitudinal Study: 2000/01 Follow-Up Field Test Methodology Report	Andrew G. Malizio
Educational research		
2000-02	Coordinating NCES Surveys: Options, Issues, Challenges, and Next Steps	Valena Plisko
Eighth-graders		
2001-05	Using TIMSS to Analyze Correlates of Performance Variation in Mathematics	Patrick Gonzales
Employment		
96-03	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
98-11	Beginning Postsecondary Students Longitudinal Study First Follow-up (BPS:96-98) Field Test Report	Aurora D'Amico
2000-16a	Lifelong Learning NCES Task Force: Final Report Volume I	Lisa Hudson
2000-16b	Lifelong Learning NCES Task Force: Final Report Volume II	Lisa Hudson
2001-01	Cross-National Variation in Educational Preparation for Adulthood: From Early Adolescence to Young Adulthood	Elvira Hausken
Employment – after college		
2001-15	Baccalaureate and Beyond Longitudinal Study: 2000/01 Follow-Up Field Test Methodology Report	Andrew G. Malizio
Engineering		
2000-11	Financial Aid Profile of Graduate Students in Science and Engineering	Aurora D'Amico
Enrollment – after college		
2001-15	Baccalaureate and Beyond Longitudinal Study: 2000/01 Follow-Up Field Test Methodology Report	Andrew G. Malizio
Faculty – higher education		
97-26	Strategies for Improving Accuracy of Postsecondary Faculty Lists	Linda Zimbler
2000-01	1999 National Study of Postsecondary Faculty (NSOPF:99) Field Test Report	Linda Zimbler
Fathers – role in education		
2001-02	Measuring Father Involvement in Young Children's Lives: Recommendations for a Fatherhood Module for the ECLS-B	Jerry West
Finance – elementary and secondary schools		
94-05	Cost-of-Education Differentials Across the States	William J. Fowler, Jr.

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96-19	Assessment and Analysis of School-Level Expenditures	William J. Fowler, Jr.
98-01	Collection of Public School Expenditure Data: Development of a Questionnaire	Stephen Broughman
1999-07	Collection of Resource and Expenditure Data on the Schools and Staffing Survey	Stephen Broughman
1999-16	Measuring Resources in Education: From Accounting to the Resource Cost Model Approach	William J. Fowler, Jr.
2000-18	Feasibility Report: School-Level Finance Pretest, Public School District Questionnaire	Stephen Broughman
2001-14	Evaluation of the Common Core of Data (CCD) Finance Data Imputations	Frank Johnson
Finance – postsecondary		
97-27	Pilot Test of IPEDS Finance Survey	Peter Stowe
2000-14	IPEDS Finance Data Comparisons Under the 1997 Financial Accounting Standards for Private, Not-for-Profit Institutes: A Concept Paper	Peter Stowe
Finance – private schools		
95-17	Estimates of Expenditures for Private K-12 Schools	Stephen Broughman
96-16	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
97-07	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-22	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman
1999-07	Collection of Resource and Expenditure Data on the Schools and Staffing Survey	Stephen Broughman
2000-15	Feasibility Report: School-Level Finance Pretest, Private School Questionnaire	Stephen Broughman
Geography		
98-04	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.
Graduate students		
2000-11	Financial Aid Profile of Graduate Students in Science and Engineering	Aurora D'Amico
Graduates of postsecondary education		
2001-15	Baccalaureate and Beyond Longitudinal Study: 2000/01 Follow-Up Field Test Methodology Report	Andrew G. Malizio
Imputation		
2000-04	Selected Papers on Education Surveys: Papers Presented at the 1998 and 1999 ASA and 1999 AAPOR Meeting	Dan Kasprzyk
2001-10	Comparison of Proc Impute and Schafer's Multiple Imputation Software	Sam Peng
2001-14	Evaluation of the Common Core of Data (CCD) Finance Data Imputations	Frank Johnson
2001-16	Imputation of Test Scores in the National Education Longitudinal Study of 1988	Ralph Lee
2001-17	A Study of Imputation Algorithms	Ralph Lee
2001-18	A Study of Variance Estimation Methods	Ralph Lee
Inflation		
97-43	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
Institution data		
2000-01	1999 National Study of Postsecondary Faculty (NSOPF:99) Field Test Report	Linda Zimbler
Instructional resources and practices		
95-11	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
1999-08	Measuring Classroom Instructional Processes: Using Survey and Case Study Field Test Results to Improve Item Construction	Dan Kasprzyk
International comparisons		
97-11	International Comparisons of Inservice Professional Development	Dan Kasprzyk
97-16	International Education Expenditure Comparability Study: Final Report, Volume I	Shelley Burns
97-17	International Education Expenditure Comparability Study: Final Report, Volume II, Quantitative Analysis of Expenditure Comparability	Shelley Burns

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2001-01	Cross-National Variation in Educational Preparation for Adulthood: From Early Adolescence to Young Adulthood	Elvira Hausken
2001-07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein
International comparisons – math and science achievement		
2001-05	Using TIMSS to Analyze Correlates of Performance Variation in Mathematics	Patrick Gonzales
Libraries		
94-07	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
97-25	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler
Limited English Proficiency		
95-13	Assessing Students with Disabilities and Limited English Proficiency	James Houser
2001-11	Impact of Selected Background Variables on Students' NAEP Math Performance	Arnold Goldstein
2001-13	The Effects of Accommodations on the Assessment of LEP Students in NAEP	Arnold Goldstein
Literacy of adults		
98-17	Developing the National Assessment of Adult Literacy: Recommendations from Stakeholders	Sheida White
1999-09a	1992 National Adult Literacy Survey: An Overview	Alex Sedlacek
1999-09b	1992 National Adult Literacy Survey: Sample Design	Alex Sedlacek
1999-09c	1992 National Adult Literacy Survey: Weighting and Population Estimates	Alex Sedlacek
1999-09d	1992 National Adult Literacy Survey: Development of the Survey Instruments	Alex Sedlacek
1999-09e	1992 National Adult Literacy Survey: Scaling and Proficiency Estimates	Alex Sedlacek
1999-09f	1992 National Adult Literacy Survey: Interpreting the Adult Literacy Scales and Literacy Levels	Alex Sedlacek
1999-09g	1992 National Adult Literacy Survey: Literacy Levels and the Response Probability Convention	Alex Sedlacek
1999-11	Data Sources on Lifelong Learning Available from the National Center for Education Statistics	Lisa Hudson
2000-05	Secondary Statistical Modeling With the National Assessment of Adult Literacy: Implications for the Design of the Background Questionnaire	Sheida White
2000-06	Using Telephone and Mail Surveys as a Supplement or Alternative to Door-to-Door Surveys in the Assessment of Adult Literacy	Sheida White
2000-07	"How Much Literacy is Enough?" Issues in Defining and Reporting Performance Standards for the National Assessment of Adult Literacy	Sheida White
2000-08	Evaluation of the 1992 NALS Background Survey Questionnaire: An Analysis of Uses with Recommendations for Revisions	Sheida White
2000-09	Demographic Changes and Literacy Development in a Decade	Sheida White
2001-08	Assessing the Lexile Framework: Results of a Panel Meeting	Sheida White
Literacy of adults – international		
97-33	Adult Literacy: An International Perspective	Marilyn Binkley
Mathematics		
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1999-08	Measuring Classroom Instructional Processes: Using Survey and Case Study Field Test Results to Improve Item Construction	Dan Kasprzyk
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2001-11	Impact of Selected Background Variables on Students' NAEP Math Performance	Arnold Goldstein

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Parental involvement in education		
96-03	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
97-25	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler
1999-01	A Birth Cohort Study: Conceptual and Design Considerations and Rationale	Jerry West
2001-06	Papers from the Early Childhood Longitudinal Studies Program: Presented at the 2001 AERA and SRCD Meetings	Jerry West
2001-19	The Measurement of Home Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Graders to Questionnaire Items and Parental Assessment of the Invasiveness of These Items	Arnold Goldstein
Participation rates		
98-10	Adult Education Participation Decisions and Barriers: Review of Conceptual Frameworks and Empirical Studies	Peter Stowe
Postsecondary education		
1999-11	Data Sources on Lifelong Learning Available from the National Center for Education Statistics	Lisa Hudson
2000-16a	Lifelong Learning NCES Task Force: Final Report Volume I	Lisa Hudson
2000-16b	Lifelong Learning NCES Task Force: Final Report Volume II	Lisa Hudson
Postsecondary education – persistence and attainment		
98-11	Beginning Postsecondary Students Longitudinal Study First Follow-up (BPS:96-98) Field Test Report	Aurora D'Amico
1999-15	Projected Postsecondary Outcomes of 1992 High School Graduates	Aurora D'Amico
Postsecondary education – staff		
97-26	Strategies for Improving Accuracy of Postsecondary Faculty Lists	Linda Zimble
2000-01	1999 National Study of Postsecondary Faculty (NSOPF:99) Field Test Report	Linda Zimble
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96-16	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
97-07	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-22	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman
2000-13	Non-professional Staff in the Schools and Staffing Survey (SASS) and Common Core of Data (CCD)	Kerry Gruber
2000-15	Feasibility Report: School-Level Finance Pretest, Private School Questionnaire	Stephen Broughman
Projections of education statistics		
1999-15	Projected Postsecondary Outcomes of 1992 High School Graduates	Aurora D'Amico
Public school finance		
1999-16	Measuring Resources in Education: From Accounting to the Resource Cost Model Approach	William J. Fowler, Jr.
2000-18	Feasibility Report: School-Level Finance Pretest, Public School District Questionnaire	Stephen Broughman
Public schools		
97-43	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
98-01	Collection of Public School Expenditure Data: Development of a Questionnaire	Stephen Broughman
98-04	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.
1999-02	Tracking Secondary Use of the Schools and Staffing Survey Data: Preliminary Results	Dan Kasprzyk

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2000-12	Coverage Evaluation of the 1994-95 Public Elementary/Secondary School Universe Survey	Beth Young
2000-13	Non-professional Staff in the Schools and Staffing Survey (SASS) and Common Core of Data (CCD)	Kerry Gruber
Public schools – secondary		
98-09	High School Curriculum Structure: Effects on Coursetaking and Achievement in Mathematics for High School Graduates—An Examination of Data from the National Education Longitudinal Study of 1988	Jeffrey Owings
Reform, educational		
96-03	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
Response rates		
98-02	Response Variance in the 1993-94 Schools and Staffing Survey: A Reinterview Report	Steven Kaufman
School districts		
2000-10	A Research Agenda for the 1999-2000 Schools and Staffing Survey	Dan Kasprzyk
School districts, public		
98-07	Decennial Census School District Project Planning Report	Tai Phan
1999-03	Evaluation of the 1996-97 Nonfiscal Common Core of Data Surveys Data Collection, Processing, and Editing Cycle	Beth Young
School districts, public – demographics of		
96-04	Census Mapping Project/School District Data Book	Tai Phan
Schools		
97-42	Improving the Measurement of Staffing Resources at the School Level: The Development of Recommendations for NCES for the Schools and Staffing Survey (SASS)	Mary Rollefson
98-08	The Redesign of the Schools and Staffing Survey for 1999-2000: A Position Paper	Dan Kasprzyk
1999-03	Evaluation of the 1996-97 Nonfiscal Common Core of Data Surveys Data Collection, Processing, and Editing Cycle	Beth Young
2000-10	A Research Agenda for the 1999-2000 Schools and Staffing Survey	Dan Kasprzyk
Schools – safety and discipline		
97-09	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
Science		
2000-11	Financial Aid Profile of Graduate Students in Science and Engineering	Aurora D'Amico
2001-07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein
Software evaluation		
2000-03	Strengths and Limitations of Using SUDAAN, Stata, and WesVarPC for Computing Variances from NCES Data Sets	Ralph Lee
Staff		
97-42	Improving the Measurement of Staffing Resources at the School Level: The Development of Recommendations for NCES for the Schools and Staffing Survey (SASS)	Mary Rollefson
98-08	The Redesign of the Schools and Staffing Survey for 1999-2000: A Position Paper	Dan Kasprzyk
Staff – higher education institutions		
97-26	Strategies for Improving Accuracy of Postsecondary Faculty Lists	Linda Zimbler

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Staff – nonprofessional		
2000–13	Non-professional Staff in the Schools and Staffing Survey (SASS) and Common Core of Data (CCD)	Kerry Gruber
State		
1999–03	Evaluation of the 1996–97 Nonfiscal Common Core of Data Surveys Data Collection, Processing, and Editing Cycle	Beth Young
Statistical methodology		
97–21	Statistics for Policymakers or Everything You Wanted to Know About Statistics But Thought You Could Never Understand	Susan Ahmed
Statistical standards and methodology		
2001–05	Using TIMSS to Analyze Correlates of Performance Variation in Mathematics	Patrick Gonzales
Students with disabilities		
95–13	Assessing Students with Disabilities and Limited English Proficiency	James Houser
2001–13	The Effects of Accommodations on the Assessment of LEP Students in NAEP	Arnold Goldstein
Survey methodology		
96–17	National Postsecondary Student Aid Study: 1996 Field Test Methodology Report	Andrew G. Malizio
97–15	Customer Service Survey: Common Core of Data Coordinators	Lee Hoffman
97–35	Design, Data Collection, Interview Administration Time, and Data Editing in the 1996 National Household Education Survey	Kathryn Chandler
98–06	National Education Longitudinal Study of 1988 (NELS:88) Base Year through Second Follow-Up: Final Methodology Report	Ralph Lee
98–11	Beginning Postsecondary Students Longitudinal Study First Follow-up (BPS:96–98) Field Test Report	Aurora D’Amico
98–16	A Feasibility Study of Longitudinal Design for Schools and Staffing Survey	Stephen Broughman
1999–07	Collection of Resource and Expenditure Data on the Schools and Staffing Survey	Stephen Broughman
1999–17	Secondary Use of the Schools and Staffing Survey Data	Susan Wiley
2000–01	1999 National Study of Postsecondary Faculty (NSOPF:99) Field Test Report	Linda Zimbler
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2001–04	Beginning Postsecondary Students Longitudinal Study: 1996–2001 (BPS:1996/2001) Field Test Methodology Report	Paula Knepper
2001–07	A Comparison of the National Assessment of Educational Progress (NAEP), the Third International Mathematics and Science Study Repeat (TIMSS-R), and the Programme for International Student Assessment (PISA)	Arnold Goldstein
2001–09	An Assessment of the Accuracy of CCD Data: A Comparison of 1988, 1989, and 1990 CCD Data with 1990–91 SASS Data	John Sietsema
2001–11	Impact of Selected Background Variables on Students’ NAEP Math Performance	Arnold Goldstein
2001–13	The Effects of Accommodations on the Assessment of LEP Students in NAEP	Arnold Goldstein
2001–19	The Measurement of Home Background Indicators: Cognitive Laboratory Investigations of the Responses of Fourth and Eighth Graders to Questionnaire Items and Parental Assessment of the Invasiveness of These Items	Arnold Goldstein
Teachers		
98–13	Response Variance in the 1994–95 Teacher Follow-up Survey	Steven Kaufman
1999–14	1994–95 Teacher Followup Survey: Data File User’s Manual, Restricted-Use Codebook	Kerry Gruber
2000–10	A Research Agenda for the 1999–2000 Schools and Staffing Survey	Dan Kasprzyk
Teachers – instructional practices of		
98–08	The Redesign of the Schools and Staffing Survey for 1999–2000: A Position Paper	Dan Kasprzyk

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Teachers – opinions regarding safety		
98–08	The Redesign of the Schools and Staffing Survey for 1999–2000: A Position Paper	Dan Kasprzyk
Teachers – performance evaluations		
1999–04	Measuring Teacher Qualifications	Dan Kasprzyk
Teachers – qualifications of		
1999–04	Measuring Teacher Qualifications	Dan Kasprzyk
Teachers – salaries of		
94–05	Cost-of-Education Differentials Across the States	William J. Fowler, Jr.
Training		
2000–16a	Lifelong Learning NCES Task Force: Final Report Volume I	Lisa Hudson
2000–16b	Lifelong Learning NCES Task Force: Final Report Volume II	Lisa Hudson
Variance estimation		
2000–03	Strengths and Limitations of Using SUDAAN, Stata, and WesVarPC for Computing Variances from NCES Data Sets	Ralph Lee
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Violence		
97–09	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
Vocational education		
95–12	Rural Education Data User’s Guide	Samuel Peng
1999–05	Procedures Guide for Transcript Studies	Dawn Nelson
1999–06	1998 Revision of the Secondary School Taxonomy	Dawn Nelson