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National Household Education Surveys of 2003

Data File User's Manual, Volume I



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July 2004

Mary Hagedorn
Jill Montaquila
Nancy Vaden-Kiernan
Kwang Kim
Westat

Christopher Chapman
National Center for Education Statistics

U.S. Department of Education

Rod Paige
Secretary

Institute of Education Sciences

Grover J. Whitehurst
Director

National Center for Education Statistics

Robert Lerner
Commissioner

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U.S. Department of Education
1990 K Street, NW
Washington, DC 20006-5650

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Contact:

Christopher Chapman
(202) 502-7414
(e-mail) nhes@ed.gov

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1. INTRODUCTION

The National Household Education Surveys Program (NHES) was developed by the National Center for Education Statistics (NCES) to collect information on important educational issues through random digit dial (RDD) telephone surveys of households in the United States. The 2003 administration (NHES:2003) was conducted by Westat, a social science research firm, from January 2 through April 13, 2003. In the NHES:2003 Screener, household members were enumerated and demographic and educational information that determined eligibility for the two topical surveys was collected. The NHES:2003 surveys are:

- The Parent and Family Involvement in Education Survey (PFI-NHES:2003), which addressed homeschooling, school choice, types and frequency of family involvement in children's schools, school practices to involve and support families, learning activities with children outside of school, and the involvement of nonresidential parents; and
- The Adult Education for Work-Related Reasons Survey (AEWR-NHES:2003), which collected information about participation in college and university degree or certificate programs taken for work-related reasons, postsecondary vocational/technical diploma or degree programs taken for work-related reasons, apprenticeships, work-related courses, and work-related informal learning. In addition, the survey explored factors associated with participation or nonparticipation in adult education activities.

The populations of interest in the NHES:2003 surveys were:

- PFI: Children enrolled in kindergarten through 12th grade, in regular school or homeschool; and
- AEWR: Adults age 16 or older who were not enrolled in grade 12 or below, not institutionalized, and not on active duty in the U.S armed forces.

The *National Household Education Surveys of 2003: Data File User's Manual* provides documentation and guidance for users of the PFI and AEWR public-use data files of NHES:2003. Information about the purposes of the study, the data collection instruments, the sample design, and data collection and data processing procedures is included in Volume I. The data collection instruments and a chart summarizing weighting and sample variance estimation variables for all NHES surveys are contained in appendixes to Volume I. Volumes II and III of the manual each address one data file, the PFI and AEWR files, respectively. They each contain a guide to the data file, a discussion of data considerations and anomalies and, in appendixes, the file layout, derived variable specifications, and the codebook for the file.

The data files contain the following:

- The PFI-NHES:2003 file includes data from interviews completed with parents of 12,426 children and youth in kindergarten through 12th grade, including 5,671 students enrolled in kindergarten through 5th grade, 2,952 students enrolled in 6th through 8th grade, and 3,803 students enrolled in 9th through 12th grade. Of the 12,426 children, 262 were being homeschooled for at least part of their instruction.

- The AEW-NHES:2003 file contains data from interviews with 12,725 adult respondents, of whom 6,153 were participants in formal educational activities for work-related reasons and 6,572 were not.¹

1.1 Background of Study

NHES was developed by NCES to complement its institutional surveys. This program is the principal mechanism for addressing topics that cannot be addressed in institutional data collections. By collecting data directly from households, NHES enables NCES to gather data on a wide range of issues, such as early childhood care and education, children's readiness for school, parent perceptions of school safety and discipline, before- and after-school activities of school-age children, participation in adult and continuing education, parent involvement in education, and civic involvement. NHES uses RDD and computer-assisted telephone interviews (CATI) and has been conducted by Westat in the winter and spring of 1991, 1993, 1995, 1996, 1999, 2001, and 2003. As shown in table 1-1, each administration has included more than one survey.

Table 1-1. National Household Education Surveys Program (NHES) selected survey topics: 1991 through 2003

Survey topics	NHES survey administration						
	1991	1993	1995	1996	1999 ¹	2001	2003
Early childhood education/program participation.....	√		√		√	√	
Adult education/lifelong learning.....	√		√		√	√	√
School readiness		√			√		
School safety and discipline		√					
Parent and family involvement in education				√	√		√
Civic involvement.....				√	√		
Before- and after-school programs and activities			√ ²		√	√	
Household and library use				√			

¹NHES:1999 was a special end-of-decade administration that measured key indicators from the surveys fielded during the 1990s. See text below for further explanation.

²These items were only asked about children in grades 1 through 3.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Education Survey of the National Household Education Surveys Program (NHES), 1991; Adult Education Survey of NHES, 1991; School Readiness Survey of NHES, 1993; School Safety and Discipline Survey of NHES, 1993; Early Childhood Program Participation Survey of NHES, 1995; Adult Education Survey of NHES, 1995; Parent and Family Involvement in Education and Civic Involvement Survey of NHES, 1996; Youth Civic Involvement Survey of NHES, 1996; Adult Civic Involvement Survey of NHES, 1996; Household and Library Use Survey of NHES, 1996; Parent Survey of NHES, 1999; Adult Education Survey of NHES, 1999; Early Childhood Program Participation Survey of NHES, 2001; Adult Education and Lifelong Learning Survey of NHES, 2001; Before- and After-School Programs and Activities Survey of NHES, 2001; Parent and Family Involvement in Education Survey of NHES, 2003; and Adult Education for Work-Related Reasons Survey of NHES, 2003.

The first test of the NHES design was a large field test conducted in the fall of 1989. This effort, which included the screening of about 15,000 households, included surveys on the following two topics: school dropouts (interviews were conducted with adult household respondents and 14–21 year-olds) and

¹ Formal educational activities include college or university degree or certificate programs, vocational or technical diploma or degree programs, apprenticeships leading to journeyman status in a trade or profession, and work-related training or courses.

early childhood education (interviews were conducted with parents/guardians² of 3- to 5-year-olds). The design of the field test and the results of the field test data collection activities are described in an *Overview of the NHES Field Test* (Brick et al. 1992).

The following sections provide more detailed information on the topical areas addressed in the full-scale NHES administrations and the survey populations associated with each topic.

1.1.1 Early Childhood Education/Program Participation

The nonparental care and education of preschool children has been an important recurring topic for NHES and was the subject of the 1991 Early Childhood Education Survey (ECE-NHES:1991) and the Early Childhood Program Participation Surveys of 1995 and 2001 (ECPP-NHES:1995 and ECPP-NHES:2001). In addition, selected items about nonparental care were included in the 1999 Parent Survey (Parent-NHES:1999). The ECPP surveys have provided cross-sectional, national estimates of participation in early care and education programs for children in varying age groups, depending on the specific research questions addressed in a given survey. Estimates can be computed for White, Black, and Hispanic children for subgroups composed of 2- to 3-year age groups or two to three grades in school, depending on the survey year. In addition, the surveys were designed to support the analysis of change in early childhood care and education over time.

In ECE-NHES:1991, parents of children ages 3 through 8 (and 9-year-olds in first or second grade) completed interviews about their children's early childhood education, including participation in nonparental care by relatives, nonrelatives, or in center-based programs (including Head Start). They also answered questions about early school experiences, including delayed kindergarten entry and grade retention, and activities children engaged in with parents and other family members inside and outside the home. For ECPP-NHES:1995, the population was expanded to include children newborn through third grade. Parents were again asked detailed questions about their children's participation in nonparental care and education programs. Other items captured information about early school experiences of school-age children and home and out-of-home family activities with children. ECPP-NHES:2001 focused on children from birth through age 6 who were not yet enrolled in kindergarten. In addition to obtaining the same in-depth information on relative care, nonrelative care, center-based program participation, and participation in Early Head Start and Head Start, questions designed to capture continuity of care, parents' perceptions of the quality of care, and reasons for choosing parental over nonparental care were included.

Information on early childhood care and program participation for preschool children was also gathered in Parent-NHES:1999, which collected data on key indicators that had been measured in previous NHES collections in order to provide the U.S. Department of Education (ED) with end-of-decade estimates for important education issues. Parent-NHES:1999 was administered to parents of children from birth through grade 12. Detailed information about children's health and disability status and parent and family characteristics has also been obtained in all NHES ECPP surveys, as well as in Parent-NHES:1999.

1.1.2 Adult Education

Adult educational activities capture the interest of educational researchers and policymakers interested in the phenomenon of learning over the lifetime. Adult Education Surveys were conducted in 1991, 1995, and 1999 (AE-NHES:1991, AE-NHES:1995, AE-NHES:1999); the Adult Education and

² Respondents need not have been parents or legal guardians. The household member most knowledgeable about the child's care and education was identified by the Screener respondent and selected to respond to the survey. The respondent was usually, but not always, a parent.

Lifelong Learning Survey was administered in 2001 (AELL-NHES:2001); and the Adult Education for Work-Related Reasons Survey was conducted in 2003 (AEWR-NHES:2003). Each of the surveys provided cross-sectional, national estimates of educational participation for noninstitutionalized persons 16 years and older who were not enrolled in grade 12 or below and not on active duty in the U.S. armed forces, as well as estimates for White, Black, and Hispanic adults. The 1995 and 2001 surveys provided estimates for adults who did not have a high school diploma or its equivalent. The surveys were also designed to permit the analysis of change over time in educational participation.

In the 1991, 1995, 1999, and 2001 administrations, respondents were asked about their participation in basic skills courses, English as a second language (ESL) courses, postsecondary credential (degree or diploma) programs, apprenticeships, work-related courses, courses taken for personal development or personal interest, and in AELL-NHES:2001, informal learning at work. Adults participating in programs or courses provided details about those programs or courses, such as subject matter, duration, cost, location and sponsorship, and employer support. In AE-NHES:1991 and AE-NHES:1995, adults who had not participated in selected types of adult education were asked about their interest in educational activities and the barriers that they perceived to participation in educational activities. A battery of personal background, employment, and household questions was also asked in each adult education survey.

The AEWR-NHES:2003, described further in section 1.2, was the first administration of an NHES survey focusing specifically on work-related education and training. Information was collected on college and vocational/technical programs taken for work-related reasons, apprenticeships, work-related courses, and informal learning related to a job or career.

1.1.3 School Readiness

The School Readiness Survey was conducted in 1993 (SR-NHES:1993); a subset of key items was also included in Parent-NHES:1999. Adopting a broad approach to assessing children's readiness for entering school, the survey encompassed a range of items related to learning. Parents of 3- to 7-year-olds who were in second grade or below (and children ages 8 and 9 who were still in first or second grade) completed interviews about their children's developmental accomplishments and difficulties, including emerging literacy and numeracy, center-based program participation, educational activities with family members, and health and nutrition status. Parents of children in elementary school were also asked about school adjustment, early school experiences, and feedback from teachers on children's school adjustment. Information about family stability and other risk factors was collected along with parent and household characteristics. SR-NHES:1993 provided cross-sectional, national estimates for the population of interest; for White, Black, and Hispanic subgroups; and for preschoolers (children ages 3 to 5 and not yet in kindergarten) and students in early elementary grades (K-2).

School Readiness items addressing emerging literacy and numeracy were also administered to parents in Parent-NHES:1999 and ECPP-NHES:2001.

1.1.4 School Safety and Discipline

In 1993, NHES included the School Safety and Discipline Survey (SSD-NHES:1993). Interviews were conducted with parents of students in grades 3 through 12 and with youth in grades 6 through 12. Parents and youth were asked about the school learning environment, discipline policy, safety at school, victimization, availability and use of alcohol and drugs, and alcohol and drug education. Youth were also asked about peer norms for achievement and behavior in school and substance use. The survey addressed parents' contributions to their children's learning environment through questions about

parental expectations for academic achievement and good behavior at school, parental efforts to educate and protect their children, and parental involvement in the school. Parent and family characteristics were also elicited. SSD-NHES:1993 provided national estimates of the topics above for the full population of interest; for White, Black, and Hispanic children; and for children in grades 3 through 12.

1.1.5 Parent and Family Involvement in Education and Civic Involvement

The Parent and Family Involvement in Education and Civic Involvement Survey was conducted in 1996 (PFI/CI-NHES:1996). Key family involvement items were incorporated in Parent-NHES:1999 as well, and NHES:2003 included a survey focusing specifically on parent and family involvement (PFI-NHES:2003). PFI/CI-NHES:1996 focused on parents' participation in educational activities at home as well as participation in various capacities at the programs or schools their children attended. The population of interest was children age 3 through children enrolled in 12th grade. Questions for parents whose children attended school or a center-based program addressed specific ways the family was involved in the school/program, communication with teachers and other school practices to involve families, and parent involvement with children's homework. Parents of all children responded to questions about parent and family involvement with their children in educational activities outside of school. Children's contact with nonresidential parents and the involvement of those parents with school was also captured. An additional topic for parents of preschoolers was support and training received for parenting.

The civic involvement of parents of students in grades 6 through 12 and that of the students themselves, as well as a separate random sample of adults, was addressed in PFI/CI-NHES:1996 and in two other 1996 surveys, the Youth Civic Involvement Survey (YCI-NHES:1996) and the Adult Civic Involvement Survey (ACI-NHES:1996). The topic of community service was expanded for inclusion in the end-of-decade 1999 Youth Survey (Youth-NHES:1999). Questions related to the diverse ways that parents and other adults may socialize children for informed civic participation. The surveys were intended to provide an assessment of the opportunities that youth have to develop the personal responsibility and skills that would facilitate their taking an active role in civic life, such as through exposure to information about politics or national issues, through discussion of politics and national issues, and by the example of adults who participate in community or civic life. Questions about attitudes that relate to democratic values and knowledge about government were also included. In Youth-NHES:1999, special emphasis was placed on the opportunities youth had for participation in community service and the extent of school efforts to support youth community involvement.

PFI/CI-NHES:1996 and Parent-NHES:1999 provided cross-sectional national estimates of the topics described earlier for all children in the population of interest; for White, Black, and Hispanic children; for preschoolers; and for three-grade groupings. YCI-NHES:1996 and Youth-NHES:1999 provide national estimates for 6th through 8th graders and 9th through 12th graders. ACI-NHES:1996 provides estimates that can be used to compare adults in households without children age 3 through 12th grade to adults in households with children in this age/grade range.

The PFI-NHES:2003, described further in section 1.2, focused on children and youth in kindergarten through grade 12 and included questions about parent and family involvement in school, involvement in schoolwork outside of school, and involvement in nonschool activities.

1.1.6 Before- and After-School Programs and Activities

The ways that parents arrange for supervision and enrichment during the out-of-school hours for children who are enrolled in kindergarten through eighth grade were introduced as a topic in Parent-

NHES:1999. It was the focus of the 2001 Before- and After-School Programs and Activities Survey (ASPA-NHES:2001). Interviews were conducted with parents who reported on the before- and after-school arrangements in which their children participated, including care by relatives or nonrelatives in a private home, before- or after-school programs in centers and in schools, activities that might provide adult supervision in the out-of-school hours, and children's self-care. Items also addressed continuity of care arrangements, parental perceptions of quality, reasons for choosing parental care, and obstacles to participation in nonparental arrangements. The child's health and disability status and characteristics of the parents and household were also collected. ASPA-NHES:2001 provided cross-sectional estimates of participation in various types of arrangements for White, Black, and Hispanic children, and for those in kindergarten through fifth grade and sixth through eighth grade.

1.1.7 Household and Library Use

The Household and Library Use Survey of 1996 (HHL-NHES:1996) examined public library use by household members. This brief survey was administered to every household screened in 1996. The items tapped the ways that household members used public libraries (e.g., borrowing books, attending lectures, attending story hours) and the purposes for using public libraries (e.g., for school assignments, enjoyment, work-related projects). HHL-NHES:1996 provided cross-sectional, national estimates of household characteristics and library use for all households in the United States as well as estimates by state.

1.2 NHES:2003 Surveys

Two surveys were conducted in the NHES:2003 administration: Parent and Family Involvement in Education (PFI-NHES:2003) and Adult Education for Work-Related Reasons (AEWR-NHES:2003).

PFI-NHES:2003 focused on children and youth in kindergarten through 12th grade and addressed school experiences, family participation in schools, school practices to involve and support families, family involvement in schoolwork, and family involvement outside of school. Homeschooling parents were asked about their reasons for choosing homeschooling and resources for doing so. The involvement of nonresidential parents was also addressed, when applicable. In addition, information was collected on the child's or youth's health and disability status, and on child and parent demographic characteristics. A total of 12,426 interviews were completed with parents of eligible children and youth.

AEWR-NHES:2003 collected information on participation in four types of formal educational activities in the previous 12 months: participation in college and university degree or certificate programs for work-related reasons; participation in vocational/technical school diploma or degree programs for work-related reasons; apprenticeships; and work-related courses. In addition, adults were asked about participation in less formal learning activities related to a job or career. The interview included questions about reasons for participation and the outcomes of participation. Employer support for educational activities was also a key area of interest in this survey. A new series of items developed for this survey addressed factors associated with participation or nonparticipation in work-related adult education activities. Interviews were completed with 12,725 adults, of whom 6,153 were participants in formal educational activities for work-related reasons during the previous 12 months and 6,572 were not.

1.3 Overview of Design

The PFI and AEWR surveys were developed to provide reliable national estimates. Two surveys were conducted simultaneously because of the high costs associated with screening large numbers of

households in order to meet the sample size requirements for precise estimates. By addressing more than one topic in NHES:2003, the cost of screening households to find those eligible could be partitioned over the two surveys. This strategy is key to the NHES design.

Another feature of NHES, within-household sampling, was developed in response to concerns about the burden placed upon households in which the same household member would be eligible to respond to multiple surveys and/or more than one household member could be sampled. A Screener was used to collect information on household composition and interview eligibility, and to reduce burden, no more than three persons were sampled in a single household. In households with one or two eligible children or youth, they were selected for PFI for with certainty; if there were more than two eligible children/youth, then two were sampled with equal probability. Only a subsample of households was selected for the enumeration and possible sampling of adults for AEW. Also, adults were sampled at a lower rate in households that contained eligible children, further reducing respondent burden. No more than one adult was selected in a household. (See chapter 3 for a detailed discussion of precision requirements and sampling procedures for NHES:2003.)

Even though sampling methods reduced the number of interviews per household, the length of the interview was considered to be a critical factor in obtaining good response rates and reliable estimates. Therefore, the number of items included in the NHES:2003 surveys was limited in order to help improve response rates and reduce the demands made on survey respondents. The overall average administration time for the Screener was 3.5 minutes. The average administration time was 3.1 minutes for Screeners in households with no members selected for interviews, 4.1 minutes for Screeners in households with only PFI subjects sampled, 3.1 minutes in households with only an AEW subject sampled, and 5.0 minutes in households with both PFI and AEW subjects sampled. The average administration time for the PFI interview was 24.1 minutes. The AEW interview took an average of 16.8 minutes overall; the administration time was 22.6 minutes for adult education participants and 11.3 minutes for nonparticipants.

Because of the requirement to reduce respondent burden, the complex sampling techniques employed, and the need for quick and accurate administration, NHES:2003 was conducted using CATI technology. Some of the advantages of CATI include improved project administration, online sampling and eligibility checks, scheduling of interviews according to a priority scheme to improve response rates, managing data quality by controlling skip patterns and checking responses online for range and consistency, and an online help function to assist interviewers in answering respondents' questions. Items within each of the NHES:2003 instruments were programmed so that the appropriate items appeared on the interviewer's computer screen according to the respondent's answers to previous questions.

Table 1-2 summarizes the number of completed interviews and gives weighted unit response and overall unit response rates for the Screener and the PFI and AEW surveys. Table 1-3 gives unweighted unit response and overall unit response rates for the Screener and the PFI and AEW surveys.³ More details on the computation of these rates, including a discussion of the uses of weighted and unweighted response rates, are given in chapter 4.

³ In previous NHES publications, the unit response rate was referred to as the "completion rate" and the overall unit response rate was referred to as simply the "response rate."

Table 1-2. Number of completed interviews and weighted unit response and overall unit response rates, by interview type: 2003

Interview type	Number of completed interviews	Unit response rate ¹	Overall unit response rate ²
Screener	32,049	64.6	64.6
PFI survey	12,426	83.3	53.8
AEWB survey	12,725	76.2	49.2

¹The unit response rate is the percentage of completed interviews for a specific stage of the survey (i.e., the Screener, PFI, or AEWB interview). It is a ratio of the number of completed interviews to the number of units (e.g., households, household members) sampled for the interviews. For many telephone numbers sampled for the Screener interview, no contact was ever made. Based on results of the survival method calculations (discussed in Section 4.2.1), 19.7 percent of these numbers were assumed to be residential and were added to the denominator for the calculation of the Screener unit response rate.

²The overall unit response rate indicates the percentage of possible interviews that have been completed, taking all sampling stages into account. The unit response rate and overall unit response rate are identical for the first stage of sampling and interviewing (i.e., the Screener). For the PFI and AEWB surveys, the overall unit response rate is the product of the Screener unit response rate and the interview unit response rate (e.g., for the PFI survey, the calculation for the overall unit response rate is $100 \times 0.646 \times 0.833 = 53.8$).

NOTE: PFI is the Parent and Family Involvement in Education Survey and AEWB is the Adult Education for Work-Related Reasons Survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2003; and Adult Education for Work-Related Reasons Survey of NHES, 2003.

Table 1-3. Number of completed interviews and unweighted unit response and overall unit response rates, by interview type: 2003

Interview type	Number of completed interviews	Unit response rate ¹	Overall unit response rate ²
Screener	32,049	64.7	64.7
PFI survey	12,426	83.9	54.3
AEWB survey	12,725	80.5	52.1

¹The unit response rate is the percentage of completed interviews for a specific stage of the survey (i.e., the Screener, PFI, or AEWB interview). It is a ratio of the number of completed interviews to the number of units (e.g., households, household members) sampled for the interviews. For many telephone numbers sampled for the Screener interview, no contact was ever made. Based on results of the survival method calculations (discussed in Section 4.2.1), 19.7 percent of these numbers were assumed to be residential and were added to the denominator for the calculation of the Screener unit response rate.

²The overall unit response rate indicates the percentage of possible interviews that have been completed, taking all sampling stages into account. The unit response rate and overall unit response rate are identical for the first stage of sampling and interviewing (i.e., the Screener). For the PFI and AEWB surveys, the overall unit response rate is the product of the Screener unit response rate and the interview unit response rate (e.g., for the PFI survey, the calculation for the overall unit response rate is $100 \times 0.647 \times 0.839 = 54.3$).

NOTE: PFI is the Parent and Family Involvement in Education Survey and AEWB is the Adult Education for Work-Related Reasons Survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2003; and Adult Education for Work-Related Reasons Survey of NHES, 2003.

1.4 Flow of the Interviews

Figure 1-1 shows the flow of the NHES:2003 interviews. Each household contact began with a Screener to obtain information used to sample adults and children for extended interviews.

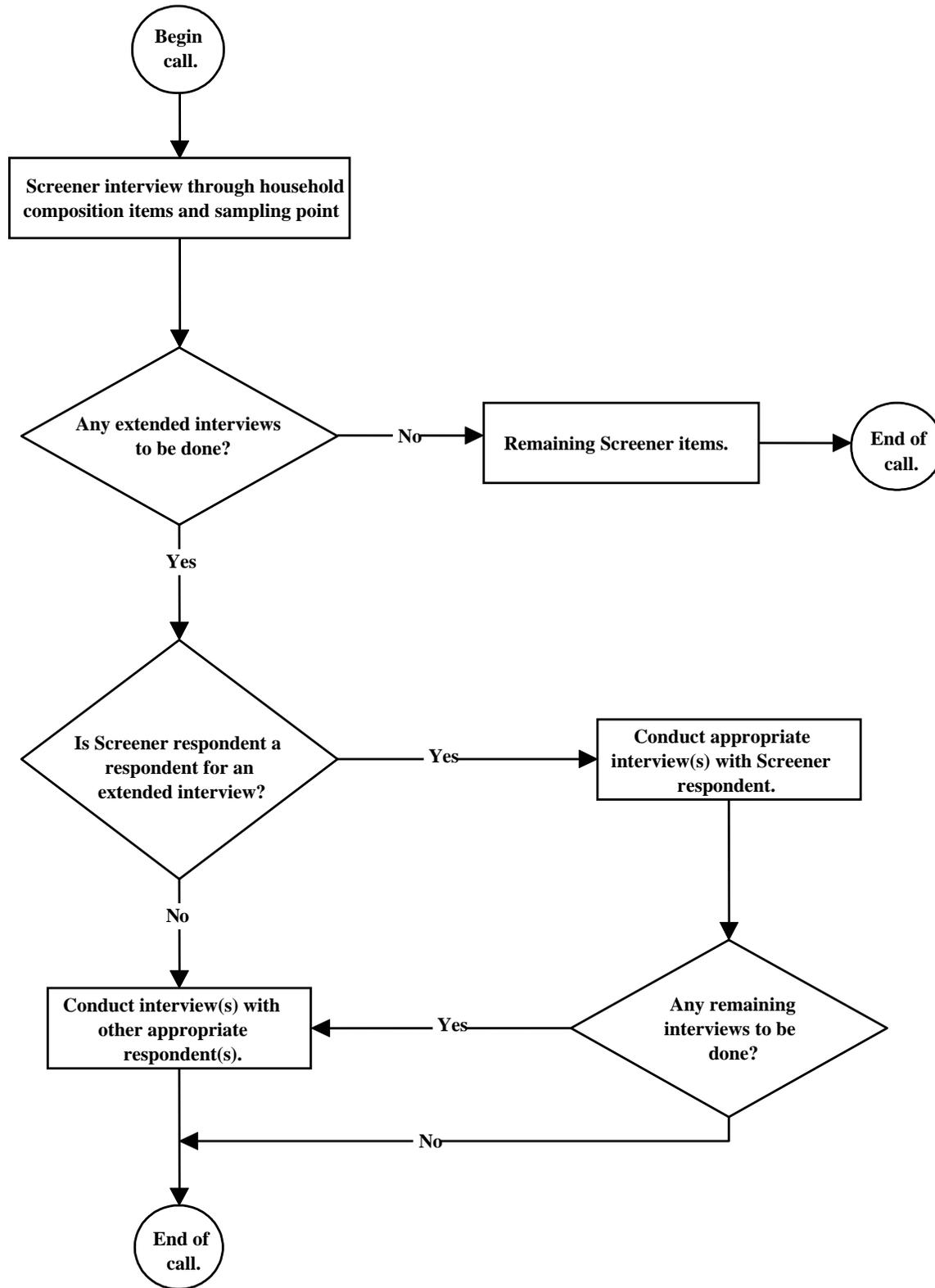
If the household contained any children or youth in kindergarten through 12th grade, up to two interviews were conducted with the parent or guardian most knowledgeable about each child's/youth's care and education. Up to one adult was sampled in each household for an AEWB interview. (See chapter 3 for additional details about the sample.)

Whenever possible, all interviews with household members were conducted during the same telephone call as the Screener. Followup calls were made to complete interviews that were not completed during the initial contact.

1.5 Contents of Manual

The chapters that follow in Volume I provide additional information about the survey instruments (chapter 2), the sample design and estimation procedures (chapter 3), data collection and response rates (chapter 4), and data preparation (chapter 5). Appendix A provides a copy of the Screener and the PFI and AEWB questionnaires. Appendix B contains a summary of weighting and sample variance estimation variables. Volumes II and III of the *NHES:2003 Data File User's Manual* provide information on the PFI and AEWB data files, respectively. Each contains a guide to the relevant data file and codebook, a discussion of data considerations and anomalies, and, in appendixes, the file layout, derived variable specifications, and the codebook for the relevant data file from NHES:2003.

Figure 1-1. Flow of the NHES:2003 interviews



SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2003; and Adult Education for Work-Related Reasons Survey of NHES, 2003.

2. DESCRIPTION OF DATA COLLECTION INSTRUMENTS

The sections that follow describe the instruments used to collect data contained in the Parent and Family Involvement in Education Survey (PFI) and Adult Education for Work-Related Reasons Survey (AEWR) data files of the 2003 National Household Education Surveys Program (NHES:2003). In addition to the Screener, through which eligibility was determined, PFI and AEWR questionnaires were used to collect data on the topical areas of interest. Appendix A contains a copy of each instrument.

2.1 The NHES:2003 Screener

The screening interview (Screener) in NHES:2003 was used to determine whether sampled telephone numbers belonged to households, gather the information needed to sample children to be PFI interview subjects, select the appropriate parent/guardian respondent for PFI interviews, select the appropriate adult for AEWR interviews, and administer some household items in households in which no one was sampled for an extended interview. The Screener was designed to accomplish these tasks efficiently, placing minimum burden on the respondent.

The first series of questions in the Screener determined whether the telephone number was residential and whether the person on the telephone was eligible to answer the questions. If it was determined that the telephone number was used for business only, the call was terminated. The survey continued for numbers that were for household use or for both household and business use.

If the person who answered the telephone was not a household member or was a household member under 18 years of age, an appropriate Screener respondent was requested. If no member of the household was 18 years old or older, a person designated as the male or female head of household was eligible to be the Screener respondent.

The order of subsequent Screener questions varied depending upon whether the household contained any members age 20 or younger and whether the household had been designated for an AEWR interview. In households not designated for an AEWR interview and in which there were children or youth age 20 or younger, only those members age 20 and younger were enumerated (i.e., the name, age, and sex of each person was collected). Screener questions directly following the enumeration determined whether they could be sampled for the study. The questions asked whether household members age 4 through 20 were attending school or being homeschooled and the grade or year of school in which they were enrolled. If a child/youth was sampled for a PFI interview, the parent/guardian most knowledgeable about his/her education was selected as the respondent.

In households designated for possible sampling for an AEWR interview, all household members were enumerated in the Screener. Participation in any educational activities during the past 12 months was determined for all household members age 16 or older and not currently enrolled in grade 12 or below. Following selection of an adult for the extended interview, eligibility was determined by asking whether the sampled adult was currently serving on active duty in the U.S. Armed Forces. Active duty military personnel were not eligible for an AEWR interview. When appropriate, contact information was gathered for sampled adults living in school-sponsored housing.

If no child or youth was sampled for a PFI interview and no adult was sampled for an AEWR interview, the Screener respondent was asked whether the home was owned or rented and whether there were other telephone numbers in the household for home use. This information was used for weighting and nonresponse adjustment. Then the interview was terminated.

2.2 The Parent and Family Involvement in Education Survey

In PFI-NHES:2003, data were collected about children and youth enrolled in kindergarten through 12th grade and age 20 or younger as of December 31, 2002. The respondent for the PFI interview was the adult living in the household who was the most knowledgeable about the child's care and education. Typically, this was the mother of the child; however, the respondent could be a father, stepparent, adoptive parent, foster parent, grandparent, another relative, or nonrelative designated as the most knowledgeable household member. For simplicity, when referring to the most knowledgeable respondent in the manual, this person will be called the parent/guardian.

In the PFI interview, subjects were routed to one of four questionnaire paths: elementary (kindergarten through 5th grade), middle/junior high school (6th through 8th grades), senior high school (9th through 12th grade), or home school (kindergarten through 12th grade). The elementary, middle/junior high school, and senior high school paths all included items about parent and family involvement at school, involvement in schoolwork, and involvement outside of school. Parents of homeschoolers were asked a special set of questions about their reasons for homeschooling and the resources they use in doing so. In addition, parents of homeschoolers who receive instruction in a school for 9 or more hours each week were asked about their involvement in the school and schoolwork. Irrespective of the questionnaire path, parents were asked basic demographic questions about the child, questions about the child's health and disability status, questions about parent/guardian characteristics, and questions about household characteristics. If applicable, information about the involvement of a nonresidential parent was collected. The PFI interview also included a set of questions about participation in the free- and reduced-price lunch program designed in conjunction with the U.S. Department of Agriculture. To avoid redundancy and greater response burden, household information was collected only during the first interview conducted in each household. Similarly, parent/guardian information was collected only once per household, unless sampled children in the same household had different parents.

2.3 The Adult Education for Work-Related Reasons Survey

AEWR-NHES:2003 was designed to provide national estimates of participation in adult education activities taken for work-related reasons. Adults age 16 and older on December 31, 2002, who were not enrolled in grade 12 or below, not institutionalized, and not on active duty in the military were eligible for this survey. The AEWR respondent was the selected adult him/herself.

Respondents were asked about their participation in four types of formal educational activities: college or university degree or certificate programs, vocational or technical diploma or degree programs, apprenticeships, and career- or job-related training or courses. In addition, adults were asked about less formal learning activities related to a job or career. Participants were asked about their work-related reasons for participating and the work-related outcomes of participation. Information about employer support for educational activities was obtained. A series of questions addressing factors associated with participation or nonparticipation was administered to all adults regardless of their participation status. Other items gathered demographic, household, and detailed employment information.

3. SAMPLE DESIGN AND IMPLEMENTATION

This chapter describes the sample design for the 2003 National Household Education Surveys Program (NHES:2003), including a number of special features of the design. Also presented are the procedures for weighting, variance estimation, and imputation for items that had missing values. For a more detailed discussion of these topics, see the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn, Montaquila, Kim, Li, Vaden-Kiernan, and Chapman forthcoming).

3.1 Precision Requirements for NHES:2003

The number of telephone numbers required for NHES:2003 was determined by the precision requirements for the estimates from the Parent and Family Involvement in Education Survey (PFI) and the Adult Education for Work-Related Reasons Survey (AEWR). The general precision requirement for both surveys was the ability to detect a 10 to 15 percent relative change for an estimate of between 30 and 60 percent. However, because some key estimates (described below) were expected to fall outside the 30 to 60 percent range (e.g., participation in work-related courses), the sample size was increased above that needed for the general precision requirement to support estimation for those key estimates.

In NHES:2003, the overall screening sample was largely determined by the need to produce precise estimates of indicators for children and youth enrolled kindergarten through 12th grade. For the PFI survey, the key estimates considered in designing the sample were the percentage of children whose parents participate in 3 or more activities in the child's school, the percentage of children whose parents report that school practices⁴ are done very well, and the percentage of children whose parents participated in four or more home learning activities;⁵ the key analytic subgroups were race/ethnicity (the White, non-Hispanic; Black, non-Hispanic; and Hispanic subgroups), 2-year grade groups, parents' educational attainment (high school diploma or below, beyond high school diploma), school type (public, private), and school size (under 300; 300–599; 600–999; 1,000 or more). These estimates were chosen because they are key estimates of parental involvement in education and school practices. These subgroups were chosen because they are key subgroups used in analyses of NHES data for children. As a result, a target of about 12,850 completed PFI interviews was established.

For the AEWR survey, the key estimates considered in designing the sample were the percentage of adults who participate in AEWR, the percentage of adults who participate in employer-provided AEWR, and the percentage of adults who participate in employer-supported AEWR; the key analytic subgroups were race/ethnicity (the White, non-Hispanic; Black, non-Hispanic; and Hispanic subgroups), employment status (employed, unemployed but looking for work), and educational attainment (less than high school diploma, high school diploma or above). These estimates were chosen because they are key characteristics pertaining to work-related adult education. These subgroups were chosen because they are among the subgroups most frequently used by analysts in the analysis of NHES data for adults. Based on these requirements, a target of about 15,000 completed AEWR interviews was established. Adult education participants were sampled at a higher rate than nonparticipants in order to improve the precision of estimates of characteristics of participants.

⁴ The school practices considered were the following: School tells family how child is doing in school; school helps family understand child's development; school tells about chances to volunteer; school advises about home learning; and school gives information about community services.

⁵ The home learning activities considered were the following: Telling the child a story; teaching the child letters, words, or numbers; teaching the child songs or music; working on arts or crafts with the child; taking the child along on errands; involving the child in household chores; taking the child to the library; taking the child to a play, concert, or other live show; taking the child to an art gallery, museum, or historical site; taking the child to a zoo or aquarium; talking with the child about his/her family history or ethnic heritage or related issues; or attending an event sponsored by a community, ethnic, or religious group.

Taking into account all stages of sampling and expected response, a goal of screening about 34,000 households was established. However, a lower than expected residency rate (i.e., the proportion of telephone numbers that are assigned to households) and a lower than expected unit response rate⁶ caused a revision of the targets for screened households and numbers of completed extended interviews. The effect on the precision of the estimates was examined and found to be minimal. For instance, for AEWR, the original expectation was to detect a change of 1.4 percent in the overall work-related adult education participation rate, a relative change of 6 percent. The revised targets were expected to allow detection of a change of 1.5 percent in the participation rate, a relative change of 7 percent. As shown in tables 1-2 and 1-3, the final numbers of completed interviews were 32,049 Screeners, 12,426 PFI interviews, and 12,725 AEWR interviews.

3.2 Sampling Households

Different methods have been developed over the years for selecting random samples of telephone households. The Mitofsky-Waksberg method of random digit dialing (RDD) as described in Waksberg (1978) is among the best known of the methods. For NHES:1991 and NHES:1993, a modified Mitofsky-Waksberg method described by Brick and Waksberg (1991) was used.

Since NHES:1995, a different approach to RDD sampling, called a list-assisted method, described by Casady and Lepkowski (1993), has been used for the NHES surveys. This method reduces the number of unproductive calls due to nonworking or nonresidential numbers (compared with simple random sampling of all numbers), produces a self-weighting sample, is a single stage and unclustered sample and eliminates the sequential difficulties⁷ associated with the Mitofsky-Waksberg method. With the list-assisted method, an equal-probability random sample of telephone numbers is selected from all telephone numbers that are in 100-banks (numbers in a 100-bank have the same first 8 digits of the 10-digit telephone number) in which there is at least one residential telephone number listed in the white pages directory (the listed stratum). Both listed and unlisted telephone numbers are included in the listed stratum. Telephone numbers in 100-banks with no listed telephone numbers (the zero-listed stratum) were not sampled.

The sampling frame for NHES:2003 was all telephone numbers in 100-banks with one or more listed telephone numbers as of September 2002. A stratified list-assisted sample was used in order to support design goals for national-level and subdomain statistics for the PFI and AEWR surveys of NHES:2003.

Because NHES is a telephone survey, undercoverage bias resulting from differences between telephone and nontelephone households is a concern. Undercoverage bias is the average difference between the survey estimate and the population parameter being estimated that results from some members of the inference population being excluded from the sampling frame. For example, while NHES is conducted using a sample of telephone households, the inference population includes both telephone and nontelephone households, so undercoverage bias could result from the exclusion of persons in nontelephone households. Various studies have been undertaken to examine the undercoverage bias for key subgroups in NHES. Brick, Burke, and West (1992) looked at undercoverage bias for 3- to 5-

⁶ The final unweighted residency and Screener unit response rates for NHES:2003 were 45 percent and 65 percent, respectively. These are lower than the expected rates of 49 percent and 70 percent, respectively.

⁷ With the Mitofsky-Waksberg method, primary sampling units (PSUs) comprising sets of telephone numbers having the same first 8 digits (i.e., 100-banks) are created and sampled. Within each sampled PSU, a single telephone number (called the prime number) is selected. The telephone number is dialed, and if it is found to be residential, the PSU is retained in the sample and an additional k telephone numbers are selected from the PSU; otherwise, the PSU is discarded and no telephone numbers are sampled from the PSU. In order to obtain a fixed number of telephone numbers in the sample, PSUs cannot be selected in one step but must be selected sequentially as the telephone numbers are dialed, since the number of PSUs in which the prime number is residential is unknown at the time of PSU selection.

year-olds and 14- to 21-year-olds. Brick (1996) examined undercoverage bias for 0- to 2-year-olds and adults. Undercoverage bias for 3- to 7-year-olds was examined by Brick et al. (1997). Undercoverage bias for estimates of characteristics of households and for adults was investigated by Montaquila, Brick, and Brock (1997). The undercoverage bias for most subgroups is not likely to be a major problem after the raking adjustment.⁸ (The studies cited above found that with very few exceptions, the adjusted weights after raking yielded estimates with absolute telephone coverage bias of 2 percent or less.) Results from these studies suggest that undercoverage bias is not a significant problem in NHES. However, the undercoverage bias for smaller subgroups could be more problematic and requires additional research. When dealing with a small subgroup that is likely to be differentially undercovered, data users should consider the possible impact of different sources of error. Both sampling errors and nonsampling errors from undercoverage bias are likely to be relatively large for small subgroups.

Another potential source of undercoverage bias in telephone surveys that use the list-assisted method is the fact that not all telephone households are included in the sampling frame. Households in the zero-listed stratum have no chance of being included in the sample. Empirical findings were presented by Brick et al. (1995) to address the question of undercoverage bias due to the exclusion of telephone numbers in the zero-listed stratum. These results show that the percentage of telephone numbers in the zero-listed stratum that are residential is very small (about 1.4 percent), and that about 3 to 4 percent of all telephone households are in the zero-listed stratum. The findings also show that the bias resulting from excluding the zero-listed stratum is generally small.

In NHES:2003, a two-phase stratification was used to select telephone numbers in order to produce more reliable national estimates from the extended interviews for subdomains defined by race and ethnicity. In the first phase, a sample of 144,294 telephone numbers was drawn, with telephone numbers in areas with high percentages of Black and Hispanic residents sampled at higher rates than those in areas with low percentages of Black and Hispanic residents. The sampling frame used in the study contained the Census 2000 counts of persons in the area by race and ethnicity. A 100-block was classified in the high minority concentration stratum if its population was either at least 20 percent Black or at least 20 percent Hispanic. The blocks that did not meet this requirement were classified in the low minority concentration stratum. The sampling rate in the high minority concentration stratum was nearly twice that of the low minority stratum.

In the second phase, within each minority stratum, the sampled telephone numbers were classified as mailable or nonmailable according to whether they could be matched to a mailing address in the white pages telephone directory or from other databases. Mailable status was used because it has been found to improve the efficiency of the sample by facilitating the oversampling of mailable numbers (which are more likely to be residential). Within each of the four strata defined by the combinations of minority concentration and mailable status, telephone numbers were subsampled at different rates. In the low minority stratum, telephone numbers in the mailable substratum were sampled at a rate about 47 percent higher than numbers in the nonmailable substratum; in the high minority stratum, telephone numbers in the mailable substratum were sampled at a rate about 63 percent higher than numbers in the nonmailable substratum.

In this manner, a sample of 109,800 telephone numbers was selected for NHES:2003. (The remaining 34,494 telephone numbers from the first phase sample of 144,294 were held in reserve. The reserve sample was not used.) Assuming that 49 percent of the telephone numbers would belong to

⁸ See section 3.4.2 for further details about the raking adjustment that was applied in creating the survey weights.

households and assuming a Screener unit response rate of 69 percent,⁹ it was expected that about 37,000 screening interviews would be completed. However, the actual unweighted residency rate was 45 percent, and the Screener unit response rate was 65 percent. The number of households with completed screening interviews was 32,049.

3.3 Sampling Within Households

To limit burden on respondents, a within-household sampling scheme was developed to control the number of persons sampled for extended interviews in each household. In all households with children and youth ages 20 or younger, children/youth were enumerated. To determine whether adults would be enumerated, the sample of telephone numbers was randomly divided into three groups. The first group (63,615 telephone numbers or approximately 44 percent of the sample) was designated for adult enumeration. The second group (63,730 telephone numbers or about 44 percent of the sample) was designated for adult enumeration only if there were no eligible children/youth in the household. The third group (16,949 telephone numbers or about 12 percent of the sample) was designated for no adult enumeration.

Once the enumeration of the appropriate household members was completed in the Screener, the sampling of household members for the extended interviews was done by computer. The PFI interviews were conducted with parents/guardians of sampled children/youth in kindergarten through 12th grade with a maximum age of 20. If there were one or two eligible children/youth, then all eligible children were selected with certainty. In households with more than two eligible children/youth, two were selected with equal probability. The sampling of adults was conducted using an algorithm designed to attain the sampling rates required to meet the target sample sizes while minimizing the number of interviews per household. The within-household sample size was limited to two eligible children and one eligible adult. This sampling algorithm was designed to limit the amount of time required to conduct interviews with parents in households with a large number of eligible children. Table 3-1 gives the expected and actual overall unit response rates and numbers of completed interviews for each of the NHES:2003 surveys.

Estimates from the October 1999 Current Population Survey (CPS) indicated that about 29 percent of all households have at least one child enrolled in kindergarten through 12th grade and no older than 20 years of age. Using the within-household sampling algorithm developed for NHES:2003, 34,000 screened households should have yielded a sample size of 14,947 children in kindergarten through 12th grade. Assuming a PFI interview unit response rate of 86 percent, the expected number of completed PFI interviews was 12,854. The actual number of completed PFI interviews was 12,426. The difference between the expected and actual numbers of completed interviews was mainly due to the completion of fewer Screeners than expected.¹⁰

The AEWI interview may be used to generate estimates for all civilian, noninstitutionalized persons age 16 or older on December 31, 2002, not enrolled in grade 12 or below, and not on active duty in the U.S. Armed Forces. Based on the sampling algorithm, the 34,000 screened households were expected to yield 19,872 sampled adults. Assuming an AEWI interview unit response rate of 76 percent, the expected number of completed AEWI interviews was 15,042, which was revised to 13,753 to reflect the lower than expected Screener residency and unit response rates found during data collection. The actual number of completed AEWI interviews was 12,725. The difference between the expected and

⁹ These assumed rates are based on the final allocation of the sample of telephone numbers to the minority by mailable strata. Prior to determining the final stratification and allocation, the expected residency rate was 40 percent and the expected Screener unit response rate was 70 percent. However, because of differences in residency and unit response rates among strata and differential sampling rates used in the different strata, the expected residency and unit response rates were revised based on the final allocation.

¹⁰ The actual unit response rate for the PFI survey was 83 percent, compared to the expected rate of 86 percent. Expected unit response rates were based on experiences in previous NHES collections.

observed numbers of interviews was due primarily to the lower than expected number of completed Screeners.¹¹ Another contributing factor affecting the sample yield for adults was a lower than expected proportion of adults reported to have participated in adult education activities based on the question in the Screener.¹²

Table 3-1. Expected and actual numbers of completed interviews and weighted overall unit response rates for the NHES:2003 Screener and extended interviews

Interview	Expected			Actual	
	Original expected number of completed interviews	Revised number of completed interviews	Original expected overall unit response rate (percent)	Number of completed interviews	Overall unit response rate (percent)
Screener	34,000	31,086	70	32,049	65
PFI survey	12,854	11,752	60	12,426	54
AEWB survey	15,042	13,753	53	12,725	49

NOTE: PFI is the Parent and Family Involvement in Education Survey and AEWB is the Adult Education for Work-Related Reasons Survey. PFI and AEWB overall unit response rates are the products of the Screener unit response rate and the extended interview (PFI or AEWB) unit response rate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2003; and Adult Education for Work-Related Reasons Survey of NHES, 2003.

Although the sample yield for children/youth and adults was lower than expected, the lower yield did not affect the ability to detect differences between 1999 and 2003 in key statistics beyond the thresholds that were used to design the sample. (The key statistics for PFI were parental participation in school and home learning activities and parental satisfaction with school practices, by race/ethnicity, by 2-year grade group, by parents' educational attainment, by school type, and by school size. For adults, the key statistics were participation in adult education for work-related reasons, participation in employer-provided AEWB, and participation in employer-supported AEWB, by race/ethnicity, by employment status, and by level of educational attainment.) However, the reduction in sample size may affect the ability to detect differences in other statistics that were not used to design the sample.

3.4 Weighting Procedures

The objective of NHES:2003 is to make inferences about the entire civilian, noninstitutionalized population for the domains of interest. Although only telephone households were sampled, the estimates were adjusted to totals of persons living in both telephone and nontelephone households derived from the October 2001 and March 2002 CPS files to achieve this goal. Beginning in 1994, the CPS weights were adjusted to population totals that were adjusted to account for the undercoverage from the 1990 Decennial Census. The March 2002 CPS weights were adjusted to population totals from the 2000 Decennial Census. Any additional undercoverage in the census of special populations, such as the homeless, remains in the totals obtained from the CPS. The weighting procedures are described briefly below. More complete

¹¹ The actual unit response rate for the AEWB survey was 76 percent, matching the expected rate of 76 percent.

¹² The expected adult education participation rate from the Screener question was 44 percent, based on results from NHES:1999. The actual participation rate from the Screener observed in NHES:2003 was 35 percent. Since adult education participants were sampled at higher rates than nonparticipants, this lower than expected participation rate affected the sample yield for adults.

details are presented in the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming).

3.4.1 Household-Level Weights

The primary purpose of the Screener in NHES:2003 was to provide information required to assess the eligibility of household members for an extended interview. Household-level information that is of analytic interest was also collected during the extended interview. Since no data intended for analyses were collected at the household level only, household-level weights were calculated solely for use as a basis for computing person-level weights for the analysis of the extended interview data. In computing household weights, a household base weight was developed to account for the RDD sampling of telephone numbers, including the sampling rate differences by minority concentration stratum and mailable substratum.¹³ This weight was adjusted for Screener nonresponse and then adjusted for households that had more than one telephone number, hence more than one chance of being included in the sample. A Chi-Square Automatic Interaction Detection (CHAID) analysis was run to identify characteristics most associated with Screener nonresponse.¹⁴ These characteristics, which were primarily geographic characteristics associated with the telephone exchange, were used to form the cells for nonresponse adjustment of the household weights. The final adjustment was a poststratification adjustment to the household weights. The primary purpose of the poststratification adjustment was to account for undercoverage resulting from the sampling of telephone households only. Poststratification ensures that survey weights sum to known population totals. The characteristics used in poststratification were census region (Northeast/South/Midwest/West) and presence of children less than 18 years of age. Table 3-2 presents the control totals used for poststratifying the household-level weights. The variables used in poststratification were chosen to address differences in coverage rates with respect to region in which the household is located and presence of children in the household.

3.4.2 Person-Level Weights

The next weighting procedures resulted in person-level weights (i.e., weights used to estimate the number of persons and to produce estimates of characteristics of persons). The household-level weight was used as the base weight, and the weighting procedures included the adjustment of the estimates to independent totals from the CPS.

Person Weights for the PFI Interview

As described in section 3.3, a sampling algorithm was used to limit the number of persons sampled in each household while maintaining the sampling rates required to attain the target sample sizes. The sampling was based on information collected in the Screener interview from the adult household member who responded to the Screener, and the eligibility of the sampled children was later verified or updated when the parent/guardian most knowledgeable about the child/youth responded to the PFI

¹³ For more information, see the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming).

¹⁴ Chi-Square Automatic Interaction Detection (CHAID) is a categorical search algorithm that identifies characteristics associated with response propensity. For more details about CHAID, see the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming).

Table 3-2. Control totals for poststratifying the NHES:2003 household-level weights by poststratification cell

Characteristics used in poststratification (Census region ¹ , presence of children)	Control total
Total	109,388,768
Northeast	
No children under 18 in household	13,956,671
Children under 18 in household	7,214,238
South	
No children under 18 in household	25,185,003
Children under 18 in household	13,974,310
Midwest	
No children under 18 in household	16,695,013
Children under 18 in household	9,094,717
West	
No children under 18 in household	14,363,843
Children under 18 in household	8,904,973

¹ The following states and the District of Columbia are in each census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2002.

interview. Because sampling eligibility was defined in terms of the data collected in the Screener, the weighting procedures were developed with possible misclassification of children according to grade—resulting in a change in interview path—taken into account so that the estimates would not incur bias due to misclassification.

The first step in developing the person weights for the PFI survey was to account for the probability of sampling the child/youth in the given household. The application of this adjustment to the household weight created a person-level base weight for the PFI interviews.

The next step involved adjusting the person-level base weight for nonresponse to the PFI interview. In order to account for slight differences in response propensities, nonresponse adjustment cells were created using individual year of grade for grades kindergarten through 12. Enrolled children with no grade equivalent were included in the cell containing the modal grade for their age; that is, they were assigned to the grade in which most children their age are enrolled. For each cell, the ratio of the weighted number of eligible sampled children to the weighted number of responding children was then computed. This ratio was multiplied by the person-level base weight to create the nonresponse-adjusted person-level PFI interview weight.

The final stage of weighting for the PFI interview was a raking adjustment. Raking was proposed by Deming and Stephan (1940) as a way to ensure consistency between complete counts and sample data from the 1940 U.S. Census. The raking procedure typically improves the reliability of survey estimates and also corrects for the bias due to households or persons not covered by the survey (e.g., households without telephones and households with unlisted telephone numbers belonging to zero-listed telephone banks). The raking procedure is carried out in a sequence of adjustments. First, the weights are adjusted to sum to the totals on one marginal distribution (or dimension) and then the adjusted weights are further adjusted to sum to the totals on the second marginal distribution, and so on. One sequence of

adjustments to the marginal distributions is known as a cycle or iteration. The procedure is repeated until convergence of weighted totals is achieved.

The raking procedure for the PFI weights involved raking the nonresponse-adjusted person-level weights to national totals obtained using the percentage distributions from the October 2001 CPS and the total number of children from the March 2002 CPS. The October 2001 CPS contains variables not available on the March 2002 CPS, but the totals in the latter are more current and more reliable due to the augmented sample used for the March CPS. In the procedure used in NHES:2003, the control total for a raking cell is the proportion in that cell from the October 2001 CPS multiplied by the estimate of the total number of children from the March 2002 CPS. The three raking dimensions used for the PFI interview weights were a cross between race/ethnicity of the child (Black, non-Hispanic/Hispanic/other) and household income categories (\$10,000 or less/\$10,001–\$25,000/\$25,001 or more), a cross of census region (Northeast/South/Midwest/West) and urbanicity (urban/rural), and a cross of home tenure (rent/own or other) and grade of child (with those enrolled in school but having no grade equivalent assigned to the modal grade for their age). These raking dimensions were used because they include important analysis variables (e.g., grade) and characteristics that have been shown to be associated with telephone coverage (e.g., race/ethnicity). Table 3-3 shows the control totals used for raking the PFI interview weights.

Person Weights for the AEWI Interview

Four adjustments were made to the household-level weight to compute the person-level weight for the AEWI interview. The first adjustment accounted for the probability of sampling adults in the household. As described in section 3.3, a sampling algorithm was used to limit the number of persons sampled in each household while maintaining the sampling rates required to attain the target sample sizes. For example, if there were no eligible children in the household and there were three eligible adults—one adult education participant and two adult education nonparticipants—then with probability 0.5887, the adult education participant was selected; with probability 0.2943, one of the adult education nonparticipants was selected; and with probability 0.1170, no adult was selected in the household. In such an example, if an adult education nonparticipant was sampled, then the domain sampling adjustment factor for the participant was 3.3979 [=1/0.2943]. The second adjustment was used to account for the probability of selecting the adult from among all adults in the household in the sampled participation domain (e.g., adult education nonparticipants). This adjustment depended upon the number of eligible adults in the domain. In the above example, the factor for sampling one of the two adult education nonparticipants was 2 [=1/0.5]. The application of these two adjustments to the household weight created a person-level base weight for the AEWI interview.

The third adjustment for the AEWI interview person-level weights was the nonresponse adjustment. Four variables were used to create the nonresponse adjustment cells: the first was an indicator of whether the sampled adult was the Screener respondent, the second was the adult education participation status of the adult (as reported by the Screener respondent), the third was whether the adult had worked in the past 12 months (as reported by the Screener respondent), and the fourth was the sex of the adult. These variables were used because they are available for all sampled adults (both respondents and nonrespondents) and were associated with AEWI interview response propensity. Within each cell, the ratio of the weighted number of sampled adults to the weighted number of responding adults was computed and used to create the nonresponse-adjusted person-level weight.

The nonresponse-adjusted weight was adjusted in the final step to national totals using a raking procedure. (Refer to the earlier subsection “Person Weights for the PFI Interview” for a general description of the raking methodology.) The control totals for raking the AEWI weights were obtained from the March 2002 CPS. The four dimensions for the raking cells were a cross of the adult’s race/ethnicity (Black, non-Hispanic/Hispanic/other) and household income (\$10,000 or less/\$10,001–\$25,000/\$25,001 or more), a cross of age (16–29 years/30–49 years/50 years or more) and sex, a cross of census region

(Northeast/South/Midwest/West) and urbanicity (urban/rural), and a cross of home tenure (rent/own or other) and highest educational attainment (less than high school diploma/high school diploma or equivalent/some college). These raking dimensions were used because they include important analysis variables (e.g., educational attainment) and characteristics that have been shown to be associated with telephone coverage (e.g., race/ethnicity). The control totals used for raking the AEWI interview person-level weights are given in table 3-4.

Table 3-3. Control totals for raking the PFI-NHES:2003 person-level interview weights by raking dimension

Characteristics used in raking	Control total
Total	52,581,643
Race/ethnicity of child by household income	
Black, non-Hispanic	
\$10,000 or less	1,503,128
\$10,001–\$25,000	2,298,595
\$25,001 or more.....	4,429,731
Hispanic	
\$10,000 or less	939,371
\$10,001–\$25,000	2,635,341
\$25,001 or more.....	4,740,462
Other	
\$10,000 or less	1,326,698
\$10,001–\$25,000	4,115,416
\$25,001 or more.....	30,592,901
Census region¹ by urbanicity	
Northeast	
Urban	8,050,076
Rural	1,490,566
South	
Urban	13,043,631
Rural	4,865,466
Midwest	
Urban	9,317,537
Rural	3,156,449
West	
Urban	11,222,969
Rural	1,434,949

See notes at end of table.

Table 3-3. Control totals for raking the PFI-NHES:2003 person-level interview weights by raking dimension—Continued

Characteristics used in raking	Control total
Home tenure by grade of child	
Rent	
Transitional kindergarten/Kindergarten/Pre-1st grade.....	1,135,978
1st grade.....	1,399,282
2nd grade.....	1,264,219
3rd grade.....	1,157,948
4th grade.....	1,180,792
5th grade.....	1,179,709
6th grade.....	1,171,649
7th grade.....	1,155,406
8th grade.....	955,241
9th grade.....	1,096,590
10th grade.....	902,232
11th grade.....	839,000
12th grade.....	868,411
Own or other	
Transitional kindergarten/Kindergarten/Pre-1st grade.....	2,621,106
1st grade.....	2,868,810
2nd grade.....	2,655,058
3rd grade.....	2,752,887
4th grade.....	3,089,779
5th grade.....	3,077,685
6th grade.....	3,102,870
7th grade.....	2,969,573
8th grade.....	3,125,440
9th grade.....	3,000,653
10th grade.....	2,936,696
11th grade.....	2,998,484
12th grade.....	3,076,145

¹ The following states and the District of Columbia are in each census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

NOTE: PFI is the Parent and Family Involvement in Education Survey.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2002; October 2001.

Table 3-4. Control totals for raking the AEW-NHES:2003 person-level interview weights by raking dimension

Characteristics used in raking	Control total
Total	206,532,725
Race/ethnicity by household income	
Black, non-Hispanic	
\$10,000 or less	3,439,930
\$10,001–\$25,000	6,141,853
\$25,001 or more	13,398,416
Hispanic	
\$10,000 or less	2,841,732
\$10,001–\$25,000	6,688,542
\$25,001 or more	14,591,866
Other	
\$10,000 or less	8,613,582
\$10,001–\$25,000	26,070,784
\$25,001 or more	124,746,020
Age by sex	
16–29 years	
Male	21,399,269
Female	21,797,146
30–49 years	
Male	41,734,162
Female	43,425,942
50 years or more	
Male	35,659,409
Female	42,516,797
Census region¹ by urbanicity	
Northeast	
Urban	34,178,563
Rural	6,328,561
South	
Urban	53,017,679
Rural	19,776,369
Midwest	
Urban	35,550,925
Rural	12,043,388
West	
Urban	40,463,630
Rural	5,173,610

See notes at end of table.

Table 3-4. Control totals for raking the AEW-R-NHES:2003 person-level interview weights by raking dimension—Continued

Characteristics used in raking	Control total
Home tenure by educational attainment	
Rent	
Less than high school diploma.....	13,142,172
High school diploma or equivalent.....	28,405,164
Some college.....	14,269,625
Own or other	
Less than high school diploma.....	20,247,373
High school diploma or equivalent.....	77,981,077
Some college.....	52,487,314

¹ The following states and the District of Columbia are in each census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

NOTE: AEW-R is the Adult Education for Work-Related Reasons Survey.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, March 2002.

3.5 Computing Sampling Errors

In surveys with complex sample designs, such as NHES:2003, direct estimates of the sampling errors assuming a simple random sample will typically underestimate the variability in the estimates. The NHES:2003 sample design and estimation included procedures that deviate from the assumption of simple random sampling, such as oversampling in areas with higher concentrations of minorities, sampling persons within households with differential probabilities, and raking to control totals.

One method for computing sampling errors to reflect these aspects of the sample design and estimation is the replication method. Replication involves splitting the entire sample into a set of groups or replicates based on the actual sample design of the survey. The survey estimates can then be computed for each of the replicates by creating replicate weights that mimic the actual sample design and estimation procedures used in the full sample. The variation in the estimates computed from the replicate weights can then be used to estimate the sampling errors of the estimates from the full sample. Appendix B contains a summary of weighting and sample variance estimation variables for NHES:1991–2003.

A total of 80 replicates were defined for NHES:2003 based on the sampling of telephone numbers. This number was chosen to provide reliable estimates of sampling errors with reasonable data processing costs. The specific replication procedure used for NHES:2003 was a jackknife replication method (Wolter 1985). It involved dividing the sample into 80 random subsamples (replicates) for the computation of the replicate weights. Replicate weights were created for each of the 80 replicates using the same estimation procedures that were used for the full sample. These replicate weights are included in the PFI file as FPWT1 through FPWT80. In the AEW-R interview file, they are FAWT1 through FAWT80. The computation of the sampling errors using these replicate weights can be done easily using the Windows-based software packages WesVar Complex Samples Software, SUDAAN (Shah et al. 1995), or AM Statistical Software; in WesVar or SUDAAN, the replication method should be specified as JK1. The current version of WesVar Complex Samples (version 4) is available from Westat. Information can be obtained at <http://www.westat.com/wesvar>. A previous version of WesVarPC (version 2.12) is available free of charge at that Web site or by sending an e-mail message to wesvar@westat.com. Please note that version 2.12 of WesVarPC is no longer being updated or revised. Information on obtaining SUDAAN can be found at <http://www.rti.org/sudaan>, and the AM software is available at <http://am.air.org>.

Another approach to the valid estimation of sampling errors for complex sample designs is to use a Taylor-series approximation to compute sampling errors. To produce standard errors using a Taylor-series program, such as SUDAAN or the survey data analysis procedures (PROC SURVEYMEANS and PROC SURVEYREG) in SAS version 8, two variables are required to identify the stratum and the primary sampling unit (PSU). The stratum-level variable is the indicator of the variance estimation stratum from which the unit (telephone number or sampled person) was selected. The PSU is an arbitrary numeric identification number for the unit within the stratum. The PSU and stratum variables appear on each of the extended interview files. On the PFI interview file, the PSU and stratum variables are called PPSU and PSTRATUM, and on the AEWI interview file, they are APSU and ASTRATUM. These variables can be used in SUDAAN to produce standard errors by specifying that the design is a "with replacement" sample (DESIGN = WR) and that the sampling levels are given by the appropriate stratum and PSU variables. For example, for estimates from the PFI interview file, use PSTRATUM PPSU in the NEST statement. In the SAS version 8 survey procedures, the stratum and PSU variables are specified in the STRATA and CLUSTER statements, respectively. (Information on obtaining SAS version 8 can be found at <http://www.sas.com>.)

Stata, another software package that uses Taylor-series methods, also uses the PSU and stratum variables to define the units needed for computation. (Information on obtaining Stata is available at <http://www.stata.com>.) To specify the stratum, PSU and weight variables in Stata use the `svyset strata`, `svyset psu`, and `svyset pweight` commands. For example, for estimates from the PFI interview file, use the following commands to specify these design parameters:

```
svyset strata pstratum
svyset psu ppsu
svyset pweight fpwt
```

The full sample weight to be used for analysis of the PFI interview file is FPWT. For the AEWI interview file, the full sample weight is FAWT.

Data users should be aware that the use of different approaches or software packages in the calculation of standard errors may result in slightly different standard errors. Estimates of standard errors computed using the replication method and the Taylor-series method are nearly always very similar, but not identical. For a discussion of this issue see Broene and Rust (2000).

3.6 Approximate Sampling Errors

Although calculating the sampling errors using the methods described above is recommended for many applications, simple approximations of the sampling errors may be valuable for some purposes. One such approximation is discussed next.

Most statistical software packages compute standard errors of the estimates based upon simple random sampling assumptions. The standard error from this type of statistical software can be adjusted for the complexity of the sample design to approximate the standard error of the estimate under the actual sample design used in the survey. For example, the variance of an estimated proportion in a simple random sample is the estimated proportion (p) times its complement ($1-p$) divided by the sample size (n). The standard error is the square root of this quantity. This estimate can be adjusted to more closely approximate the standard error for the estimates from NHES:2003.

A simple approximation of the impact of the sample design on the standard errors of the estimates that has proved useful in previous NHES surveys and in many other surveys is to adjust the simple

random sample standard error estimate by the root design effect (DEFT). The DEFT is the ratio of the standard error of the estimate computed using the replication method discussed above to the standard error of the estimate under the assumptions of simple random sampling. An average DEFT is computed by estimating the DEFT for a number of estimates and then averaging. A standard error for an estimate can then be approximated by multiplying the simple random sample standard error estimate by the mean DEFT.

In complex sample designs, like NHES:2003, the DEFT is typically greater than 1 due to the clustering of the sample and the differential weights attached to the observations. In NHES:2003, both of these factors contributed to making the average DEFT greater than 1. A fuller description of these factors for the NHES:2003 surveys is given in the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming). (See also appendix B for the DEFT for each data file of NHES:1991–2003.)

The average DEFT computed for estimates in the PFI and AEWB survey ranged from 1.3 to 1.4. For the PFI file estimates, the average DEFT was 1.3 overall. For estimates by interview path, the average DEFT was 1.3. For estimates by race/ethnicity, the average DEFT was 1.4. Therefore, a DEFT of **1.3** is recommended to approximate the standard error of overall estimates in the PFI interview file. For estimates by interview path, a DEFT of **1.3** is also recommended; and for estimates by race/ethnicity, a DEFT of **1.4** is recommended.

For estimates from the AEWB file, the average DEFT is 1.3. For estimates by race/ethnicity, the average DEFT is 1.3 for non-Hispanic Whites and for non-Hispanic Blacks, and 1.4 for Hispanics. For estimates by work-related adult education participation status, the average DEFT is 1.4 for participants and 1.3 for non-participants. Therefore, a DEFT of **1.3** is recommended to approximate the standard error of overall estimates from the AEWB interview file. For estimates by race/ethnicity or by work-related adult education participation status, a DEFT of **1.3** is recommended, with the exception of estimates for Hispanics or for work-related adult education participants; for these two subgroups, a DEFT of **1.4** is recommended.

As stated earlier, the average DEFT can be used to approximate the standard error for an estimate. An example of how to do this on a **percentage** estimate derived using a statistical package like SAS¹⁵ or SPSS is as follows. If a weighted estimate of 40 percent is obtained for some characteristic in the AEWB file (suppose that 40 percent of adults participated in formal adult education activities for work-related reasons in the previous 12 months), then an approximate standard error can be developed in a few steps. First, obtain the simple random sample standard error for the estimate using the weighted estimate in the numerator and the unweighted sample size in the denominator: the standard error for this 40 percent statistic would be 0.43 percent (the square root of $(40 \times 60)/12,725$, where the weighted estimate (p) is 40 percent, 60 is 100 minus the estimated percent $(1-p)$, and the unweighted sample size (n) is 12,725). The approximate standard error of the estimate from NHES:2003 is this quantity (the simple random sample standard error) multiplied by the DEFT for the AEWB file estimates of 1.3. In this example, the estimated standard error would be 0.56 percent (1.3×0.43 percent).

The approximate standard error for a **mean** can be developed using a related procedure. The three steps required to do so are demonstrated using an example from the PFI file. First, the mean is estimated using the full sample weight and a standard statistical package like SAS or SPSS. Second, the simple random sample standard error is obtained through a similar, but unweighted, analysis. Third, the standard error from the unweighted analysis is multiplied by the mean DEFT for the PFI file estimates of 1.3 to approximate the standard error of the estimate under the NHES:2003 design. For example, suppose the average number of times in this school year the parents/adult household members of children enrolled in grades kindergarten through 12 in regular school have gone to meetings or participated in activities at the

¹⁵ Here, the reference to “SAS” applies to SAS version 6.12 or earlier versions, or the non-survey procedures in SAS version 8.

child's school is 7.5 and the simple random sampling standard error (unweighted) is 0.10. Then, the approximate standard error for the estimate would be 0.13 (0.10×1.3).

Users who wish to adjust the standard errors for estimates of **parameters in regression models** should follow a procedure similar to that discussed for means, above. Specifically, the estimates of the parameter in the model can be estimated using a weighted analysis in a standard statistical software package such as SAS¹² or SPSS. A similar, but unweighted, analysis will provide the simple random sample standard errors for these parameter estimates. The standard errors can then be multiplied by the DEFT to arrive at the adjusted standard error for the NHES:2003 design. For example, if a given parameter in a model involving items from the AEW file has a weighted estimate of 2.33 and an unweighted simple random sample standard error of 0.45, then the adjusted standard error would be $1.3 \times 0.45 = 0.59$.

Alternatively, the final weight can be adjusted to reflect the DEFT before the parameter estimates are calculated in a standard statistical software package such as SAS or SPSS. To do this, first sum the values of the final weights for the sample of interest. For instance, for an analysis of all children enrolled in grades kindergarten through 12, sum the final weights for all 12,426 cases on the PFI file. Second, divide this sum by the number of cases to generate an average final weight. (In the above example, the number of cases is 12,426). Third, multiply the average final weight by the square of the DEFT for the population of interest. (In the above example, the average final weight would be multiplied by the square of 1.3, or 1.69.) Fourth, divide the final weight by the adjusted average weight and save the quotient as a new final weight. (In the above example, the new final weight is equal to the final weight divided by the product of 1.69 and the average final weight.) Finally, weight the analysis by this new final weight. The standard errors generated in the analysis will approximate the standard errors correctly adjusted for design effects.

It should be noted that direct computation of the standard errors is always recommended when the statistical significance of statements would be affected by small differences in the estimated standard errors.

3.7 Imputation

In NHES:2003, as in most surveys, the responses to some data items are not obtained for all interviews. There are numerous reasons for item nonresponse. Some respondents do not know the answer to a question or do not wish to respond for other reasons. Some item nonresponse arises when an interview is interrupted and not continued later, leaving items at the end of the interview blank. Item nonresponse may also be encountered because responses provided by the respondent are not internally consistent, and this inconsistency is not discovered until after the interview is completed. In these cases, the items that were not internally consistent were set to missing.

For most of the data items collected in NHES:2003, the item response rate was very high. The median item response rate for items from the PFI interview was 99.31 percent, and for the AEW interview, 99.36 percent. The median total response rates for PFI and AEW were 53.93 percent and 51.77 percent, respectively. (Item response rates are discussed in more detail in chapter 4.) Despite the high item response rate, data items with missing data on the file were imputed. The imputations were done for two reasons. First, complete responses were needed for the variables used in developing the sampling weights. Second, users will be computing estimates employing a variety of methods and complete responses should aid their analysis.

A hot-deck procedure was used to impute missing responses (Kalton and Kasprzyk 1986). In this approach, the entire file was sorted into cells defined by characteristics of households or respondents that are likely to be associated with differences in response propensities. The variables used in the sorting

also included any variables involved in the skip pattern for the item. Many of these sort order variables are not on the data files.

The standard set of sort order variables for the household-level items collected in the PFI and AEWB surveys consisted of:

- CENREG—the census region in which the household was located;
- HINCOME or HINCMRNG—household income category (broad or specific, respectively);
- KIDINHH—a variable derived specifically for imputation from the age of household members, indicating whether or not children under age 18 resided in the household. This variable was derived from Screener AGE; and
- HOWNHOME—whether the home was rented versus owned or other arrangement.

The standard sort order variables for the person-level items on the PFI interview file were:

- ALLGRADR—a variable derived specifically for imputation that indicates the grade/grade equivalent of the sampled child;
- SEX—sex of the sampled child;
- PARGRADS—a variable derived specifically for imputation that indicates the highest education level attained by either parent in the household as less than high school diploma, high school diploma but no bachelor's degree (including vocational/technical education after high school or some college), or college graduate. This variable was derived from MOMGRADE, MOMDIPL, DADGRADE, and DADDIPL; and
- HHPARNS—a variable derived specifically for imputation from HHMOM and HHDAD indicating whether there were two parents in the household or not.

The standard sort order variables for the person-level items from the AEWB interview file were:

- EDUC—a variable derived specifically for imputation that indicates whether or not the adult has at least a high school diploma or the equivalent. This variable was derived from IBGRADE and IBDIPL;
- AGE2002—a variable derived specifically for imputation from respondent age, with the categories 16 through 29 years, 30 through 49 years, and 50 or older. This variable was derived from AAGE2002;
- ARACETH—a variable derived specifically for imputation that classifies the respondent as Black, non-Hispanic; Hispanic; or other. This variable was derived from ARACE and AHISPANI; and
- HINCOME—the household income range.

All of the observations were sorted into cells defined by the responses to the sort variables, and then divided into two classes within the cell depending on whether or not the item was missing. For an observation with a missing value, a value from a randomly selected donor (observation in the same cell but with the item completed) was used to replace the missing value. After the imputation was completed, edit programs were run to ensure the imputed responses did not violate skip patterns or edit rules. If any violations occurred, the program was adjusted and imputation was rerun, or if only a few cases were affected, they were manually imputed.

For items in repeating segments (i.e., nonresidential parent items such as NRSAW1-NRSAW2 on the PFI data file and course-level items such as WRCURR1-WRCURR4 on the AEW data file), the items were imputed without regard to the segment number. That is, all segments were combined prior to imputation. In the absence of a compelling reason to distinguish among segments, this approach allowed for a larger donor pool to be used.

For some items, the missing values were imputed manually rather than using the hot-deck procedure. In NHES:2003, hand imputation was done (1) to impute certain person-level demographic characteristics; (2) to impute whether a child is homeschooled, attends regular school for some classes, and the number of hours attending regular school; (3) to impute variables that involved complex relationships that would have required extensive programming to impute using a hot-deck procedure; (4) to correct for a small number of inconsistent imputed values; and (5) to impute for a few cases when no donors with matching sort variable values could be found.

For hand imputation of the person-level demographic items and of the homeschooling items, the following three sort variables were used to ensure that all household members were grouped together: state, the three-digit ZIP Code, and the person identification number.

After values had been imputed for all observations with missing values, the distribution of the item prior to imputation, (i.e., the respondents' distribution) was compared to the post-imputation distributions of the imputed values alone and of the imputed values together with the observed values. There were 33 items in the PFI file with item response rates of less than 90 percent, and 14 items in the AEW data file. The comparisons revealed similar item distributions pre- and post-imputation. This comparison is an important step in assessing the potential impact of item nonresponse bias and ensuring that the imputation procedure reduces this bias, particularly for items with relatively low item response rates (less than 90 percent).

For each data item for which any values were imputed, an imputation flag variable was created. If the response for the item was not imputed, the imputation flag was set equal to 0. If the response was imputed, the flag was set to either 1, 2, 3, or 4. The value of the imputation flag indicates the specific procedure used to impute the missing value. The assignment of these values is described below.

The procedure for hot-deck imputation only recognizes missing value codes as those that need to be replaced by imputed values. For NHES:2003, these missing codes were -7 = refused, -8 = don't know, and -9 = not ascertained. Therefore, in some cases, variables that originally had values of -1 (inapplicable) had to be recoded to a missing value code (i.e., -9 = not ascertained) for some cases prior to being imputed using the standard hot-deck approach. This was done so that data were consistent with the skip patterns of the questionnaire. For these cases the imputation flag was set to 2. For example, in the PFI file, if the value of SCHOICE (PC2) equaled -8 for a child, then SDISRCT (PC3) was never asked and thus equaled -1 (inapplicable). During the imputation process for this child, if SCHOICE was imputed to equal 2 (chosen), the SDISRCT had to first be recoded from -1 (inapplicable) to -9 (not ascertained) before the imputation procedure would recognize SDISRCT as a variable that should be imputed to equal either 1 (school is in assigned school district) or 2 (school is not in assigned school district). In this case, the imputation flag for SDISRCT would be set to 2. If an item was imputed manually, the flag was set to 3. The imputation flag was set to 4 if the reported value was "don't know" prior to imputation using the standard hot-deck approach. In all other cases in which an item was imputed, the imputation flag was set to 1.

The imputation flags were created to enable users to identify imputed values. Users can employ the imputation flag to delete the imputed values, use alternative imputation procedures, or account for the imputation in computation of the reliability of the estimates produced from the data set. For example, some users might wish to analyze the data with the missing values rather than the imputed values. If there is no imputation flag corresponding to the variable, no values for that variable were imputed. If the imputation

flag corresponding to the variable is equal to 1, 2, 3, or 4, the user can replace the imputed response with a missing value to accomplish this goal. This method could also be used to replace the imputed value with a value imputed by some user-defined imputation approach. Finally, if the user wishes to account for the fact that some of the data were imputed when computing sampling errors for the estimates, the missing values could be imputed using multiple imputation methods (Rubin 1987) or imputed so that the Rao and Shao (1992) variance procedures could be used.

4. DATA COLLECTION METHODS AND RESPONSE RATES

4.1 Data Collection Procedures

The following sections discuss the procedures used in the data collection phase of the 2003 National Household Education Surveys Program (NHES:2003), including the use of computer-assisted telephone interviewing (CATI), staff training, interviewer assignments and contact procedures, and quality control. More detailed descriptions of these topics can be found in the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming).

4.1.1 Special Precollection Procedures

Before the beginning of data collection, special procedures were implemented to remove business and nonworking telephone numbers from the sample, and specific subsampling was done that reduced the number of telephone numbers from the full sample of 144,294 telephone numbers originally drawn to the final sample of 109,800 telephone numbers that was fielded.¹⁶ In addition, an advance mailing was conducted.

Identification of business and nonworking numbers. The 144,294 telephone numbers in the full NHES:2003 sample were drawn by Genesys, a commercial firm that draws samples to specific requirements. The Genesys ID-PLUS utility was used prior to the start of data collection to identify business and nonworking telephone numbers. With the ID-PLUS utility, a telephone number is dialed and is allowed to ring up to two times. Through this process, nonworking numbers are identified. In all, 36,271 numbers were identified as nonworking through the ID-PLUS process; 22,394 of the telephone numbers in the final sample of 109,800 were assigned a final disposition code of nonworking as a result of the ID-PLUS process. The ID-PLUS process also includes matches to white and yellow pages listings. If a sampled telephone number was listed in the yellow pages but not in the white pages, it was classified as a business number. Additionally, numbers identified as “unlisted business” numbers through the ID-PLUS utility and having no matched address available were classified as business numbers and were not dialed in NHES:2003. A total of 13,634 of the 144,294 telephone numbers in the initial sample and 8,331 telephone numbers in the final sample of 109,800 were assigned a status of nonresidential as a result of the ID-PLUS process and matches to yellow pages and white pages listings.

Subsampling of telephone numbers. Two-phase stratification was used to select telephone numbers for the final NHES:2003 sample in order to produce more reliable national estimates. In the first phase, a sample of 144,294 telephone numbers was drawn, with telephone numbers in areas with high percentages of Black and Hispanic residents sampled at about twice the rates of those in areas with lower percentages¹⁷ of Black and Hispanic residents. In the second phase, within each minority stratum, the sampled telephone numbers were stratified as mailable or nonmailable according to whether they could be matched to a mailing address. Within each of the four strata defined by the combinations of minority concentration and mailable status, telephone numbers were subsampled at different rates. Within each of the minority strata, telephone numbers in the mailable substratum were sampled at rates roughly 50 percent higher than numbers in the nonmailable substratum. This process resulted in a sample of 109,800 telephone numbers for NHES:2003.

¹⁶ The difference between the 144,242 in the full sample and the 109,800 in the final sample is the reserve sample containing the 34,442 numbers selected into the Phase 1 sample but not selected in the final (Phase 2) sample.

¹⁷ High minority areas were defined as having a population that was 20 percent Black or 20 percent Hispanic, based on figures from Census 2000.

Advance mailing. The NHES:1996 field test showed that households receiving an advance letter were more likely to respond to the survey (Brick, Collins, and Chandler 1997). In an effort to increase Screener-level response, a mailing was planned for the households for which an address was obtained from either of two commercial firms. In all, 62,334 telephone numbers were matched with addresses; 59,365 telephone numbers with matched addresses were in the final NHES:2003 sample.¹⁸ To coordinate the arrival of the letter with the initial call into the household, the mailing was conducted in two waves, one in late December 2002 and one in mid-January 2003. The advance letters explained the purpose of NHES:2003 and encouraged participation in the study. The letters were printed on National Center for Education Statistics (NCES) letterhead and were sent in U.S. Department of Education envelopes.

Based upon the findings of previous studies that monetary incentives help to increase survey response (Singer, Van Hoewyk, and Maher 2000), a respondent incentive experiment was incorporated in the NHES:2003 mailing approach. The sample was divided into 10 groups, each of which was assigned to a different combination of advance mailing and refusal mailing conditions (table 4-1). About half of the advance letters included no incentive, about 40 percent included a \$2 cash incentive, and about 10 percent included a \$5 cash incentive. Two versions of the advance letter were prepared; the only difference between the two versions was that the letter to those who received cash incentives referred to an enclosed “token of our appreciation.” Additional information on the conduct of this experiment and its results will appear in the technical report, *Monetary Incentives and Mailing Procedures in a Federally Sponsored Telephone Survey* (Brick, Hagedorn, Montaquila, Roth, and Chapman forthcoming).

Table 4-1. NHES:2003 respondent incentive mailing conditions

Group	Advance mailing condition	Number	Refusal mailing condition ¹	Number ²
Total.....		109,800	Total	19,812
1	First class mail, no incentive, brochure.	5,765	First class mail, no incentive	2,124
2	First class mail, no incentive	5,700	First class mail, \$2 incentive	2,050
3	First class mail, no incentive	5,700	First class mail, \$5 incentive	1,981
4	First class mail, no incentive	6,850	Priority mail, no incentive	2,436
5	First class mail, no incentive	5,700	Priority mail, \$2 incentive	1,960
6	First class mail, \$2 incentive	6,850	First class mail, no incentive	2,135
7	First class mail, \$2 incentive	5,700	Priority mail, no incentive	1,804
8	First class mail, \$2 incentive	5,700	Priority mail, \$2 incentive	1,795
9	First class mail, \$5 incentive	5,700	First class mail, no incentive	1,694
10	First class mail, \$2 incentive	5,700	First class mail, \$2 incentive	1,833
†	No mailable address	50,435	†	†

† Not applicable.

¹ All refusal letters included an NHES project brochure.

² Counts given here are the numbers of cases in each incentive experiment group that were sent a Screener refusal letter.

NOTE: First class letters were mailed in U.S. Department of Education business envelopes. Priority Mail letters were sent in U.S. Postal Service Priority Mail mailers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program, 2003.

¹⁸ The remaining 2,969 telephone numbers with matched addresses were in the reserve sample that was not released.

4.1.2 CATI System Applications

The use of a CATI system for NHES:2003 included a number of applications that facilitated the implementation of the survey. Briefly, the most salient features of the CATI system for NHES:2003 were as follows:

- **Sampling:** The use of online sampling through CATI eliminated the need for separate screening and interviewing calls, reducing the cost and the burden on respondents.
- **Scheduling:** The CATI system was used to feed telephone numbers to the interviewers, maintain a schedule of callback appointments, and reschedule unsuccessful contact attempts to the appropriate day and time.
- **Skip patterns:** The CATI system was programmed to automatically guide interviewers through the complex skip patterns in the questionnaire, reducing the potential for interviewer error and shortening the questionnaire administration time.
- **Copying responses:** The CATI system was used to copy responses from one interview to another to prevent unnecessary repetition of questions. For example, when two children with the same parents were sampled in a household, the parent characteristics series and household information items were asked only once. This helped to reduce response burden.
- **Monitoring survey progress:** The CATI system was programmed to provide automatic status reports throughout data collection. This allowed ongoing monitoring of the survey's progress.
- **Online help:** The CATI system was programmed to provide an online help screen for each item in the Screener and extended interviews. These screens, which could be accessed with a keystroke by the interviewer, clarified terminology, explained the intent of questions, and helped the interviewer obtain correct information.

4.1.3 Interviewer Training

Interviewers were trained in groups of about 30. Groups were scheduled for training beginning in mid-December 2002 and continuing into mid-January 2003. Prior to the NHES:2003 project training, all interviewers had participated in a basic training in general interviewing techniques and the use of the CATI system that typically lasted 6 hours. In addition, a home study videotape was distributed to each trainee for viewing prior to attending the NHES training program. The video included an introduction to the study and demonstrations of the interviews; completion of an accompanying home study exercise was required. In total, 294 interviewers were trained for the study.

Interviewer classroom training was conducted using the CATI system. The trainees entered information in the CATI system during training presentations, providing them with hands-on experience prior to beginning data collection. The classroom training sessions included interactive lectures based on each of the survey questionnaires, details about survey procedures, and techniques for gaining respondent cooperation. In addition to the home study exercise, trainees were required to pass two in-class tests of study concepts and procedures. Prior to live interviewing, trainees practiced interviews in pairs using role-play scripts. Each training group had an assigned time for the first interviewing shift so that their work could be closely monitored.

The survey staff included 40 interviewers bilingual in English and Spanish. These interviewers received the same training in English as did all other interviewers. They were then trained to conduct the interviews in Spanish. All of the CATI screens were translated into Spanish, and these screens were

available to bilingual interviewers at a keystroke, so they could interview in either English or Spanish when placing a call into a household.

4.1.4 Interviewing Procedures

The CATI system scheduled cases automatically, based on an algorithm that was customized for NHES:2003. The system assigned cases to interviewers in the following order of priority:

- Cases that had specific appointments;
- Cases that had resulted in busy signals 15 minutes earlier;
- Cases that had resulted in noncontact at a scheduled appointment time;
- Initial cases, until they had received one day and one evening call attempt;
- Cases that had unspecified appointment/general callback times for the time period; and
- Cases that had not been contacted on previous attempts and had not been attempted during the time period.

At least seven initial attempts were made by NHES interviewers to screen households in order to determine the presence of household members eligible for extended interviews, that is, an eligible child or adult. These calls were staggered on different days of the week and at different times of the day over a period of at least 2 weeks. This included at least two daytime calls, three evening calls, and two weekend calls. In addition, nearly all cases for which this seven-call limit was reached were released at several points during data collection to receive additional calling attempts. Cases received up to 28 calls in this effort to complete screening interviews. Cases that were coded as problems were referred to a telephone supervisor to discuss appropriate methods of completing an interview (e.g., holding a case for some time and releasing it for additional attempts later in the data collection period). The following is an overview of the specific calling strategies used during NHES:2003 data collection and their results. Because most nonresponse in a random-digit-dial (RDD) survey occurs at the screening level, these procedures emphasized increasing the Screener response rate. Please see the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming) for a more detailed account of these procedures and their results.

Procedures for non-English speakers. NHES:2003 was conducted primarily in English, but provisions were made to interview persons who spoke only Spanish. As was noted earlier, the questionnaires were translated into Spanish, the Spanish versions of the CATI instruments were programmed, and bilingual interviewers were trained to complete the interview in either English or Spanish.

When the person answering the telephone was not able to speak English, and the interviewer was not bilingual and was not able to identify an English-speaking household member, the interviewer coded the case as a “language problem” and further specified the case as either “hearing/speech problem,” “Spanish,” or “language other than English or Spanish.” There were 328 Screeners that were classified by at least one interviewer as a hearing or speech problem; 119 of these cases were completed. In some cases, very experienced interviewers accustomed to handling difficult interviews were able to complete these cases with the respondent who had been coded as a hearing/speech problem; in other cases, another household member was contacted on a subsequent call.

Bilingual interviewers were the only ones who could access cases coded Spanish or another language for followup. If a bilingual interviewer encountered a Spanish-speaking respondent on an initial call into a household, the interviewer could immediately begin to conduct the interview in Spanish without ever coding the case as a language problem. A total of 2,392 Screeners were classified by the first

interviewer who made contact as Spanish-speaking. About 68 percent of all these cases were finalized as completes, and about 97 percent of these completed cases, or 66 percent of the total, were completed in Spanish. About 14 percent of the Screener cases identified as Spanish language were finalized as refusals, 2 percent as language problem cases, and about 16 percent were given other nonresponse status codes, such as maximum call.

About 11 percent of the 874 Screeners with respondents identified by the initial interviewer as speaking some language other than English or Spanish were completed. Most (73 percent) were completed in English; only about 27 percent of the completed cases were completed in Spanish. Sixty-nine percent of the households identified as non-English/non-Spanish were finalized as language problems and the rest were refusals (11 percent) or other nonresponse (9 percent).

Answering machines. Interviewers made at least seven initial attempts to reach households in which call attempts resulted in contact with an answering machine in order to complete the screening and determine whether any household members were sampled for interviews. The first time an answering machine was reached, the interviewer left a brief message explaining the nature of the call, providing the toll-free telephone number for the prospective respondent, and explaining that an interviewer would call again at a later time. A different message was left upon reaching an answering machine only if the case changed strategy, for instance, became a refusal or language problem case. Nonresponse cases were released for additional call attempts. In 10,465 households with a completed Screener (33 percent), one message was left. In 5,830 households (18 percent), two or three messages were left. Fifty-nine households with completed Screeners received four messages, four households received five, one received eight, and one received 10. At the end of the data collection period, additional messages may have been left in an attempt to gain the cooperation of the household.

4.1.5 Special Data Collection Procedures

Refusal conversion. Additional efforts to gain cooperation from households or individual respondents who had initially refused to complete an interview were also part of the data collection effort for NHES:2003. Unless an interviewer indicated that the initial refusal was “hostile” (e.g., profane or abusive), a refusal conversion attempt was made for each Screener or extended interview refusal. Cases classified as “hostile” were reviewed by a supervisor to determine whether another attempt should be made. For most of the field period, a 13-day hold was placed on initial refusals before a conversion attempt was made. This period was decreased near the end of data collection to facilitate survey closeout while maximizing response rates.

A strategy used in NHES:2003 to increase the likelihood of successful refusal conversion attempts at the Screener level was to send a letter to households for which addresses had been obtained from companies that match telephone numbers with published addresses. Because of the demonstrated effectiveness of refusal mailings in previous NHES collections, letters were sent to all refusal cases with mailable addresses, with the exception of hostile (profane or abusive) refusals that were not to be recontacted. The refusal mailings were incorporated in the incentive experiment cited earlier. Some of the letters were sent in U.S. Department of Education business envelopes and some were sent by Priority Mail in order to draw the attention of potential respondents to their importance; some contained cash incentives of \$2 or \$5, and some did not. The numbers of letters mailed in each of the 10 experimental mailing conditions is shown in table 4-1. A total of 19,812 refusal letters were mailed, and 43 percent of these cases (8,589) were completed, versus 27 percent of the 3,528 Screener refusal cases to which a letter was not mailed.

An additional refusal conversion attempt was made in a subset of cases that had twice refused to participate in the Screener interview. The cases included in this effort were those for which neither the first

nor second refusal received a code of "hostile." This effort resulted in the completion of 2,122 Screeners (or 7 percent of the total completed). All Screener refusals were considered to be final if a third refusal was received.

Refusal conversion efforts were successful at the extended interview level as well; 519 PFI interviews and 869 AEWI interviews were completed as a result of initial refusal conversion attempts (that is, conversion following a first refusal). In NHES:2003, an additional refusal conversion attempt was also made on selected extended interview cases for which two refusals had been received. Before calling, those cases with mailable addresses were sent a letter of explanation by Priority Mail, provided the household had not been sent a refusal conversion letter previously. This strategy was used for all eligible cases due to the success of such efforts in previous collections. These efforts also yielded completed interviews; a higher percentage of cases sent letters completed interviews as compared with cases with no mailable addresses. For instance, 24 percent of the PFI second refusal cases that had been mailed a letter were completed versus 13 percent that had not been mailed a letter. In sum, 149 PFI interviews were completed out of 938 refiled second refusal cases, and 302 AEWI interviews out of 1,557 refiled second refusal cases were completed. The total numbers of completed extended interviews resulting from both initial and second refusal conversion efforts were 668 for PFI and 1,171 for AEWI.

In summary, the refusal conversion activities for NHES:2003 were productive. Forty-three percent of the Screener refusal cases that were mailed a letter and 27 percent of the cases called after an initial refusal but not mailed a letter were completed, including 18 percent of the cases released for another call attempt after two refusals. Of the extended interviews released for a first refusal conversion attempt, 25 percent of PFI cases and 28 percent of AEWI cases were completed. In the following stage, 16 percent of PFI cases and 19 percent of AEWI cases refiled for a second refusal conversion attempt were completed. The unit response rate was higher for cases that had been mailed a Priority Mail letter. For more details, see the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming).

"Maximum call" cases. Other efforts to increase the Screener unit response rate focused on "maximum call" cases, in which a person had answered the telephone on at least one of the initial call attempts. These cases were released for additional call attempts after all telephone numbers in the sample had been attempted. This effort resulted in the completion of 2,115 additional Screeners, 24 percent of eligible cases refiled and 7 percent of all completed Screeners. Nearly all Screener cases that were finalized in maximum call status received 20 or more call attempts.

"No answer" calls. Numbers that had been answered only by answering machines and never by a person ("no answer, answering machine" cases) and numbers at which no answer was ever received during the seven initial contact attempts ("no answer" cases) have historically proved to be the least productive. Mailings sent to "no answer" cases during NHES:2001 did not yield appreciable increases in Screener completion rates, so no mailing was conducted during NHES:2003. Instead, "no answer" (NA) and "no answer, answering machine" (NM) cases were refiled in weekly batches for seven additional call attempts. Also, one-fifth of the previously refiled "no answer" cases were randomly sampled and refiled to receive an additional 14 call attempts (28 maximum attempts). This effort resulted in 216 completed Screeners (3 percent of all refiled NA cases; 0.7 percent of all completed Screeners). "No answer, answering machine" cases, which have proved slightly more productive in the past, were sampled for refiled based upon their mailable status. Half of the NM cases for which a household address had been obtained were randomly sampled to receive a maximum of 28 call attempts and half were sampled to receive a maximum of 21 call attempts. NM cases for which an address could not be obtained were sampled to receive a maximum of 21 or 14 total call attempts. Refiling of mailable NM cases resulted in 1,132 completed Screeners (21 percent of all mailable NMs refiled; 4 percent of all completed Screeners). Refiling of non-mailable NM cases resulted in 94 completed Screeners (2 percent of all nonmailable NMs refiled; 0.3 percent of all completed Screeners). As a result of refiled the NA and NM cases, 1,617 telephone numbers were identified as nonworking or nonresidential.

At the end of data collection, cases at which a person was never reached were allocated to residential or nonresidential status in order to calculate the final unit response rate for the study. The allocation was based on the statistical survival method, which takes into consideration the number of call attempts for each case as well as other characteristics of the telephone number (Brick, Montaquila, and Scheuren 2002).

4.1.6 Data Collection Quality Control

Data collection quality control efforts began during the CATI development period. As the CATI system was programmed, extensive testing of the system was conducted. This testing included review by project research staff, telephone interviewing staff, data preparation staff, statistical staff, and the programmers themselves. The testing by staff members representing different aspects of the project was designed to ensure that the system was working properly from all of these perspectives. Two field tests were conducted prior to data collection to ensure that the CATI system was working properly and the timing and flow of the instruments was as expected. In phase one, 319 households were screened and 103 PFI interviews and 77 AEWI interviews were completed. In phase two, 677 households were screened and 313 PFI interviews and 260 AEWI interviews were completed.

Quality control activities continued during training and data collection. During interviewer training, interviewers paired with one another conducted role-play interviews on telephones monitored by supervisors. When interviewers began actual data collection, they were monitored on an ongoing basis by telephone center supervisors. Project research staff also monitored the interviewers, especially during the beginning weeks of data collection. Data preparation staff reviewed the cases from the CATI system as they were completed and referred problems to the project staff for resolution. Interviewer memos were posted and distributed when any observations indicated that reminders to the interviewers were appropriate. Additional training or coaching was provided to interviewers as necessary.

Throughout data collection, supervisors and telephone monitors (experienced telephone interviewers who were trained for monitoring) listened for about 15 minutes at a time to the interviewers from either a monitoring room or from a carrel on the floor of the telephone center. The monitors completed a special monitoring form that covered five major areas of telephone interviewing:

- Voice quality and reading skills;
- Listening, probing, and clarifying skills;
- Technical skills;
- Gaining respondent cooperation; and
- Interview management.

The monitors recorded their impressions of the interviewers' skills and abilities along with suggestions for improvement. Interviewers were individually coached by supervisors, and any who had exhibited difficulty were intensively monitored to make sure the difficulties were resolved. If the problems continued, then the interviewers were released from the NHES:2003 interviewing pool. Over 16,000 monitoring sheets were completed for NHES:2003 interviewers.

At least once a week, the CATI management system produced computer-generated reports that displayed unit response rates, refusal rates, and refusal conversion rates for each NHES:2003 interviewer. These reports assisted telephone center supervisors in identifying differences in interviewer performance. Supervisors relied on both monitoring sheets and standard reports to make staff assignments. For example,

standard reports might have shown that some interviewers were more effective in refusal conversion and monitoring those interviewers could have revealed persons particularly skilled in gaining cooperation from the elderly who could be assigned to conduct refusal conversion on those cases.

4.2 Unit Response Rates in NHES:2003

A unit response rate is the ratio of the number of units with completed interviews (e.g., the units could be telephone numbers, households, or persons) to the number of units sampled and eligible for the interview. In some cases, these rates are easily defined and computed, while in other cases the numerator or denominator of the ratio must be estimated.

For reporting the results from NHES:2003, the overall unit response rate¹⁹ indicates the percentage of possible interviews completed taking all survey stages into account, while the unit response rate²⁰ measures the percentage of interviews completed for a specific stage of the survey. For example, household members were identified for interviews in a two-stage process. Screener interviews were conducted to enumerate and sample household members, and then questionnaires were administered for the sampled members. If the first-stage Screener was not completed, no members could be sampled for other interviews. Under this design, the unit response rate for the second stage is the percentage of sampled persons who completed the PFI or AEWB interviews. The overall unit response rate is the product of the first- and second-stage unit response rates.

Unit response rates can be either unweighted or weighted. The unweighted rate, computed using the raw number of cases, provides a useful description of the success of the operational aspects of the survey. The weighted rate, computed by summing the weights (usually the reciprocals of the probability of selecting the units) for both the numerator and denominator, gives a better description of the success of the survey with respect to the population sampled, since the weights allow for inference of the sample data (including response status) to the population level. Both rates are usually similar unless the probabilities of selection and the unit response rates in the categories with different selection probabilities vary considerably. All of the unit response rates discussed below are weighted unless noted specifically in the text.

Unit response rates and overall unit response rates are identical for the first stage of sampling and interviewing (i.e., the Screener). The next section discusses the unit response rate for the Screener and provides a profile of the characteristics of the respondents. The discussion of unit response rates and overall unit response rates for PFI and AEWB interviews are given in the sections that follow. Additional information on the NHES:2003 unit response rates, including the findings of additional nonresponse bias analyses, is included in the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming).

4.2.1 Screener Unit Response Rate

Table 4-2 shows the disposition of the 109,800 telephone numbers that were fielded in NHES:2003. The three major categories of residential status are those identified as numbers for residential households, those identified as nonresidential numbers (primarily nonworking and business telephone numbers), and those numbers that, despite numerous attempts, could not be classified as either residential or nonresidential. Calculation of unit response rates is complex because of the possible ways residential status can be assigned to these numbers.

¹⁹ In previous NHES publications, this was referred to as simply the "response rate."

²⁰ In previous NHES publications, this was referred to as the "completion rate."

As shown in table 4-3, the first weighted unit response rate of 64.6 percent for the Screener was calculated using the survival analysis method (Brick, Montaquila, and Scheuren 2002). The survival analysis method uses information about cases for which no contact was made in the estimation of their residency rate. Specifically, the listed status, interviewers' coding of answering machine call attempts, and the total number of call attempts are used in the estimation of the residency rate based on survival analysis methods. Estimates based on the survival method suggest that 19.7 percent of telephone numbers with undetermined residency status in NHES:2003 are residential. Therefore, the denominator of the survival method unit response rate is the weighted total number of residential telephone numbers plus the 19.7 percent of the weighted total of numbers with unknown residential status that are estimated to be residential. The numerator is the weighted number of telephone numbers in households that participated in the survey. Both the numerator and the denominator have been weighted by the probabilities of selecting the telephone numbers and weighted for the subsampling for extensive followup of no-answer telephone numbers that were not refiled.

Table 4-2. Number and percentage of telephone numbers dialed, by residential status: 2003

Screener response category	Number	Percentage of all numbers	Percentage of residential numbers
Total	109,800	100.0	†
Identified as residential			100.0
Responded.....	32,049	29.2	67.2
Did not respond.....	15,646	14.2	32.8
Identified as nonresidential.....	52,952	48.2	†
Unknown residential status.....	9,153	8.3	†

† Not applicable.

NOTE: Details may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program, 2003.

Table 4-3. Weighted and unweighted Screener unit response rates: 2003

Estimated Screener unit response rates ¹	Weighted rate (percent)	Unweighted rate (percent)
Survival analysis unit response rate.....	64.6	64.7
Business office method unit response rate	61.7	62.3
CASRO unit response rate	61.7	62.4
Conservative unit response rate.....	54.8	56.4
Liberal unit response rate.....	67.5	67.2

¹ All of the unit response rates use the weighted number of responding households (for weighted rates) or the unweighted number of responding households (for unweighted rates) as the numerator. The denominators vary but are all estimated totals. For the survival analysis method unit response rate, the proportion of unknown residential status numbers included in the denominator was estimated using survival analysis methods that incorporate information about the cases (including listed status, interviewers' coding of answering machine call results, and the number of call attempts the telephone number received). For the estimated unit response rate using the business office method, the proportion of unknown residential status numbers included in the denominator was based upon the proportion identified in checks with telephone business offices. For the Council of American Survey Research Organizations (CASRO) unit response rate, the proportion of unknown residential status numbers included in the denominator was based upon the residency rate for the numbers with known residential status. For the conservative unit response rate, all of the unknown residential status numbers were included. For the liberal unit response rate, none of the unknown residential status numbers were included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program, 2003.

Other estimates of the unit response rates were computed by allocating different proportions of the numbers with unknown residency status into the residential category. (The footnote to table 4-3 explains five different schemes for estimating the unit response rate.) It is reasonable to say that the Screener unit response rate is between 55 and 68 percent. The variability in the estimates arises because it is not possible to identify precisely the residential status for each telephone number. Through the NHES:1999 surveys, the unit response rate calculated by the business office method was traditionally reported as the NHES unit response rate. However, some research suggests that the business office approach may be inaccurate due to reporting practices of phone companies (Shapiro, Battaglia, Camburn, Massey, and Tompkins 1995). The survival method unit response rate is believed to be more accurate because it uses data about the sampled telephone numbers in the estimation of the residency rate. Using this approach, the best estimate for the NHES:2003 Screener unit response rate is 65 percent.

The right part of table 4-3 also shows unweighted Screener unit response rates calculated using each of the approaches described earlier. If the raw count of telephone numbers had not been weighted, the Screener unit response rate using the survival analysis method would have been 64.7 percent.

Table 4-4 presents the Screener unit response rate by selected geographic area characteristics and characteristics of telephone numbers. These characteristics were considered because they are available for all telephone numbers and are sometimes associated with response propensity. The unit response rate for listed residential telephone numbers was higher than for telephone numbers that were not listed. [#1] The unit response rate was also higher for telephone numbers with mailable addresses than for those without mailable addresses. [#2] The Screener unit response rate also varied somewhat by region of the country, with the unit response rate for the West North Central division higher than the unit response rate in each other census division, and the unit response rates in the East North Central and Mountain divisions higher than the rates in each other census division except the West North Central and East South Central divisions. [#3-5] Areas with lower median home values had higher unit response rates than those with higher median home values. [#6] Areas with lower proportions of college graduates had higher unit response rates than those with higher proportions. [#7] Screener unit response rates also vary by incentive experiment group, with those receiving an incentive generally having higher unit response rates. A complete analysis of the results of the incentive experiment will be provided in *Monetary Incentives and Mailing Procedures in a Federally Sponsored Telephone Survey* (Brick et al. forthcoming).

Table 4-4. Number of telephone numbers dialed in the Screener according to response status and residential status, and weighted unit response rate, by selected characteristics: 2003

Characteristic	Total	Residential		Non-residential	Unknown residential status	Estimated unit response rate (percent) ¹
		Responded	Did not respond			
Total	109,800	32,049	15,646	52,952	9,153	64.6
Census division						
Alaska/Hawaii	593	120	83	356	34	56.6
New England	4,558	1,378	737	2,041	402	61.8
Middle Atlantic	15,208	4,278	2,649	6,624	1,657	59.3
East North Central	16,327	4,845	1,960	8,232	1,290	68.7
West North Central	6,513	1,981	653	3,524	355	73.2
South Atlantic	22,588	6,592	3,345	10,733	1,918	63.3
East South Central	6,048	1,888	840	2,935	385	66.6
West South Central	13,546	3,768	1,809	7,021	948	65.0
Mountain	7,141	2,042	816	3,734	549	68.8
Pacific	17,278	5,157	2,754	7,752	1,615	62.1

See notes at end of table.

Table 4-4. Number of telephone numbers dialed in the Screener according to response status and residential status, and weighted unit response rate, by selected characteristics: 2003–Continued

Characteristic	Total	Residential		Non-residential	Unknown residential status	Estimated unit response rate (percent) ¹
		Responded	Did not respond			
Listed status						
Not listed	58,932	10,435	6,262	35,398	6,837	57.2
Listed residential	42,537	21,614	9,384	9,223	2,316	68.9
Business number	8,331	0	0	8,331	0	†
Mailable status						
Mailable address	59,365	29,196	13,487	12,259	4,423	67.6
No mailable address	50,435	2,853	2,159	40,693	4,730	49.3
Answering machine message indicator						
No message left	78,773	15,689	5,817	50,168	7,099	69.3
One message left	20,773	10,465	5,742	2,512	2,054	61.8
Two messages left	8,981	4,676	4,036	269	0	53.5
Three or more messages left	1,273	1,219	51	3	0	96.2
Incentive experiment group²						
Not in incentive experiment	50,435	2,853	2,159	40,693	4,730	49.3
1 (\$0 brochure / First Class \$0)	5,765	2,678	1,450	1,191	446	64.1
2 (\$0 / First Class \$2)	5,700	2,792	1,314	1,176	418	67.3
3 (\$0 / First Class \$5)	5,700	2,856	1,231	1,182	431	69.4
4 (\$0 / Priority Mail \$0)	6,850	3,204	1,732	1,428	486	63.6
5 (\$0 / Priority Mail \$2)	5,700	2,769	1,335	1,157	439	66.7
6 (\$2 / First Class \$0)	6,850	3,354	1,532	1,426	538	67.9
7 (\$2 / Priority Mail \$0)	5,700	2,874	1,253	1,142	431	68.9
8 (\$2 / Priority Mail \$2)	5,700	2,860	1,232	1,202	406	69.1
9 (\$5 / First Class \$0)	5,700	2,897	1,210	1,195	398	69.7
10 (\$2 / First Class \$2)	5,700	2,912	1,198	1,160	430	69.9
Minority stratum						
High minority	55,378	15,574	8,533	26,780	4,491	61.3
Low minority	54,422	16,475	7,113	26,172	4,662	66.2
Percent White						
Less than 20 percent	6,214	1,677	1,198	2,892	447	55.9
20 to 29 percent	5,615	1,421	945	2,817	432	57.0
30 to 39 percent	5,614	1,469	935	2,692	518	58.1
40 to 49 percent	8,017	2,199	1,172	3,952	694	61.1
50 to 59 percent	10,326	2,863	1,493	5,107	863	62.1
60 to 69 percent	13,590	3,749	2,030	6,606	1,205	60.8
70 to 79 percent	13,966	4,090	1,893	6,780	1,203	63.4
80 to 89 percent	14,393	4,278	2,007	6,790	1,318	64.2
90 percent or more	32,065	10,303	3,973	15,316	2,473	68.9
Median home value						
1st through 6th deciles	65,683	19,798	8,640	32,642	4,603	67.6
7th through 10th deciles	44,117	12,251	7,006	20,310	4,550	60.3

See notes at end of table.

Table 4-4. Number of telephone numbers dialed in the Screener according to response status and residential status, and weighted unit response rate, by selected characteristics: 2003–Continued

Characteristic	Total	Residential		Non-residential	Unknown residential status	Estimated unit response rate (percent) ¹
		Responded	Did not respond			
Percent college graduates						
Less than 20 percent	41,993	12,671	5,828	20,738	2,756	67.1
20 percent or more	67,807	19,378	9,818	32,214	6,397	63.1

† Not applicable.

¹ The estimated unit response rate is the survival method unit response rate (i.e., the number of completed interviews divided by the sum of the number of completed interviews, nonresponses, and 19.7 percent of telephone numbers with an unknown residency status, weighted by the probability of selection).

² The category descriptions for the incentive experiment groups are formatted as “Category number (advance letter mailing incentive condition/refusal conversion incentive condition).” It should be noted that for all incentive groups, advance letters were sent via First Class mail and all refusal letters included an NHES project brochure. For example, all households in category 5 were mailed an advance letter with no incentive (\$0) via First Class mail, and all refusing households in this category were mailed a refusal conversion letter with a \$2 incentive via Priority Mail.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program, 2003.

4.2.2 Extended Interview Unit Response Rates

The number of persons enumerated and sampled, and those with completed interviews for each survey of NHES:2003, are given in table 4-5. Of the enumerated 17,102 children eligible for the PFI interview, a sample of 14,942 children was selected. About 0.9 percent of the sampled children were classified as ineligible because they were enumerated in error (i.e., were not household members at the time of screening) or were not actually in the age and grade range eligible for the survey according to the reports of the PFI interview respondents. Completed PFI interviews were obtained for 12,426 of the sampled children for an estimated 83 percent completion rate and a response rate of 54 percent. The bulk of the unit nonresponse for the PFI interview was due to refusal of the parent/guardian to respond (47.1 percent of nonresponse). Other reasons for PFI interview unit nonresponse were inability to make contact with the parent/guardian (33.4 percent of nonresponse), language problems (2.6 percent of nonresponse), and other miscellaneous reasons such as the parent/guardian being unavailable for an interview during the field period (16.9 percent of nonresponse).

The lower section of table 4-5 gives the numbers of adults enumerated and sampled, and the final status of the AEWI interview for sampled adults. Adults were enumerated in only a subsample of households. Of the 41,264 enumerated adults, 16,004 were sampled for AEWI interviews. A total of 12,725 adults completed the AEWI interview. The estimated unit response rate for the AEWI interview is 76 percent and the overall unit response rate is 49 percent. Almost all of those sampled were eligible for the interview; those classified as ineligible were either enumerated in error or on active duty in the military. For the AEWI interview, the bulk of the nonresponse was due to refusal of the sampled adult to respond (51.6 percent of nonresponse). Other reasons for AEWI interview nonresponse were inability to make contact with the sampled adult (26.9 percent of nonresponse), language problems with the sampled adult (4.7 percent of nonresponse), and other miscellaneous reasons such as the sampled adult being unable to respond due to illness (16.8 percent of nonresponse).

Table 4-5. Number of enumerated children and adults, completed interviews, and weighted unit response and overall unit response rates, by type of extended interview: 2003

Type of interview	Number	Estimated unit response rate (percent)	Estimated overall unit response rate (percent) ¹
Parent and Family Involvement in Education Survey (PFI) interview			
Enumerated	17,102	†	†
Sampled	14,942	†	†
Ineligible	137	†	†
Did not respond	2,379	†	†
Complete.....	12,426	83.3	53.8
Adult Education for Work-Related Reasons Survey (AEWR) interview			
Enumerated	41,264	†	†
Sampled	16,004	†	†
Ineligible	204	†	†
Did not respond	3,075	†	†
Complete.....	12,725	76.2	49.2

† Not applicable.

¹ The estimated overall unit response rate is computed by multiplying the Screener unit response rate of 64.6 percent by the appropriate extended interview unit response rate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program, 2003; and Adult Education for Work-Related Reasons Survey of NHES, 2003.

The unit response rates for the PFI and AEWR interviews can only be examined by variables available for both respondents and nonrespondents. For persons sampled for extended interviews in the NHES:2003 surveys, such variables are those available on the sampling frame and those available from the Screener. The variables shown for the PFI interview are Census region (based on the telephone number); grade (collected in the Screener); and type of schooling (regular or home school, also collected in the Screener). Table 4-6 shows the number of sampled children by response status and unit response rate for each of these variables. There are slight differences in unit response rates by Census region, with the highest unit response rate in the Midwest (86 percent) and the lowest in the South (81 percent). [#8-9] There is little variation in the unit response rates by grade for students whose grade is known. [#10]

For the AEWR interview, five variables were considered in examining the response profile: Census region (based on the telephone number), sex (from the Screener), adult education participation status (as reported by the Screener respondent), whether the adult worked in the past 12 months (as reported by the Screener respondent), and an indicator of whether the sampled adult was the Screener respondent (from the Screener) (table 4-7). The unit response rates vary somewhat by region, with the highest unit response rate in the Midwest (80 percent) and the lowest in the Northeast and South (75 percent). [#11-12] The unit response rate for females is higher than that for males [#13], and the unit response rate for adults reported by the Screener respondent to be adult education participants is higher than the unit response rate for those reported to be nonparticipants (80 percent vs. 74 percent). [#14] Sampled adults who were the Screener respondents completed the AEWR interview at a higher rate (88 percent) than those who were not the Screener respondents (63 percent). [#15] There was no difference detected between unit response rates by whether the adult was reported by the Screener respondent to have worked in the past 12 months. [#16]

Table 4-6. Number of sampled PFI interviews according to response status, and weighted unit response rates, by selected characteristics: 2003

Characteristic	Total	Responded	Did not respond	Ineligible	Estimated unit response rate
Total.....	14,942	12,426	2,379	137	83.3
Census region					
Northeast	2,558	2,144	391	23	84.2
South.....	5,483	4,441	993	49	81.1
Midwest.....	3,135	2,716	396	23	85.9
West.....	3,766	3,125	599	42	83.2
Grade of child ¹					
Kindergarten.....	1,121	925	178	18	83.7
1st grade	1,124	945	171	8	84.2
2nd grade	1,143	962	177	4	83.7
3rd grade.....	1,148	945	195	8	82.6
4th grade	1,085	914	164	7	84.5
5th grade	1,162	982	177	3	84.2
6th grade	1,133	939	187	7	82.2
7th grade	1,202	981	214	7	81.1
8th grade	1,188	1,015	168	5	85.8
9th grade	1,180	987	186	7	83.8
10th grade.....	1,141	964	168	9	83.8
11th grade.....	1,106	927	165	14	83.0
12th grade.....	1,127	913	195	19	81.8
Other/unknown ²	82	27	34	21	42.6
School ¹					
Regular school.....	14,612	12,159	2,321	132	82.4
Homeschool.....	316	261	50	5	78.6
Unknown	14	6	8	0	44.2

¹ Data collected in the Screener.

² Other included ungraded and special education.

NOTE: PFI is the Parent and Family Involvement in Education Survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program, 2003.

Table 4-7. Number of sampled AEWB interviews according to response status, and weighted unit response rates, by selected characteristics: 2003

Characteristic	Total	Responded	Did not respond	Ineligible	Estimated unit response rate (percent)
Total	16,004	12,725	3,075	204	76.2
Census region					
Northeast	2,852	2,261	568	23	74.6
South.....	6,131	4,788	1,244	99	74.6
Midwest.....	3,417	2,837	557	23	80.4
West.....	3,604	2,839	706	59	76.0
Sex ¹					
Female	8,833	7,286	1,481	66	79.1
Male.....	7,171	5,439	1,594	138	73.0
Adult education participation status ¹					
Adult education participant.....	8,264	6,738	1,391	135	79.9
Adult education nonparticipant.....	7,740	5,987	1,684	69	74.1
Screener respondent					
Sampled adult.....	9,763	8,617	1,051	95	87.6
Person other than sampled adult	6,241	4,108	2,024	109	63.1
Worked in past 12 months ¹					
Worked in past 12 months	11,193	8,870	2,154	169	76.2
Did not work in past 12 months.....	4,794	3,855	905	34	76.7
Unknown	17	0	16	1	0.0

¹ Data collected in the Screener.

NOTE: AEWB is the Adult Education for Work-Related Reasons Survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education for Work-Related Reasons Survey of the National Household Education Surveys Program, 2003.

4.3 Item Response Rates

For most of the data items collected in the NHES:2003 surveys, the item response rates were very high. The tables in this section show the item response rates for a representative group of items from each interview. The items included were selected to represent key items considered in the sample design and to represent the range of item response rates. The number of cases for which each item was attempted and the percentage of cases for which a valid response was obtained are shown.

Table 4-8 shows the item response rates and total response rates for a representative group of items from the PFI interview. AEWB interview item response rates and total response rates for selected items are presented in table 4-9. For the PFI and AEWB surveys, the median item response rates were 99.31 percent and 99.38 percent, respectively, and the median total response rates were 53.93 and 51.77, respectively. For items that are rarely asked (e.g., the items pertaining to the fourth work-related course in the AEWB interview), a small number of missing values could result in a low item response rate. For more details, including a complete listing of all item response rates, see the *National Household Education Surveys of 2003: Methodology Report* (Hagedorn et al. forthcoming).

Table 4-8. Item response rates and total response rates for selected items in the PFI interview: 2003

Item	Number attempted	Item response rate	Total response rate ¹
Demographic characteristics			
Relationship to child—person 1	10,809	99.87	54.33
Language child speaks most at home	12,426	99.94	54.27
Child's race.....	12,426	99.40	53.97
Current school status			
Child enrolled/attending school	12,426	100.00	54.30
Child being schooled at home.....	12,426	99.99	54.29
Any of child's home instruction taught by tutor/teacher.....	262	100.00	54.30
School characteristics			
Child attends public/private school.....	12,179	99.79	54.19
Allowed to choose school in any school district	11,973	88.79	48.21
Number of students at child's school.....	12,179	93.97	51.03
Student experiences			
Child's grades across all subjects.....	12,179	98.37	53.41
Child enrolled in advanced classes	12,179	98.45	53.46
Family/school involvement and school practices			
Attend general school meeting.....	12,179	99.93	54.26
Number of hours volunteering/fundraising	8,514	92.19	50.06
Family involvement in schoolwork			
How often homework done outside school	12,179	99.60	54.08
Family involvement outside of school			
Times read to child in past week.....	3,780	99.79	54.19
Visited zoo/aquarium in past month	12,426	99.91	54.25
Health and disability			
Rating of child's health	12,426	99.98	54.29
Household worked with school to develop IEP	841	96.91	52.62
Parent/guardian characteristics			
Mother's marital status.....	11,911	99.70	54.14
Age when mother moved to U.S.....	2,355	97.79	53.10
Father has vocational/technical diploma.....	1,357	94.33	51.22
Receipt of free or reduced-price school lunches			
Child ever received free or reduced-price lunch at school	12,179	99.39	53.97
Free or reduced-price lunches served at school.....	8,484	90.71	49.26
Involvement of the nonresidential parent			
Time since nonresidential parent lived in household (NR 1).....	3,900	95.28	51.74
Nonresidential parent and child visited library (NR 1)	2,197	88.62	48.12
Nonresidential parent and child visited museum (NR 2)	169	83.43	45.30
Household characteristics			
Worried about neighborhood	12,426	99.45	54.00
Received Food Stamps in past month.....	12,426	99.44	54.00
Total household income range	12,426	90.12	48.94
Exact household income/nearest \$1,000.....	2,154	68.52	37.21

¹ The total response rate is the product of the overall response rate and the item response rate.

NOTE: PFI is the Parent and Family Involvement in Education Survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program, 2003.

Table 4-9. Item response rates and total response rates for selected items in the AEWWR interview: 2003

Item	Number attempted	Item response rate	Total response rate ¹
Background			
Highest grade/year of school completed.....	12,725	99.33	51.75
Work at job in past 12 months	12,725	99.93	52.06
Highest grade father completed	12,725	82.01	42.73
Use Lifetime Learning tax credit	1,586	91.68	47.77
Amount of earnings.....	8,908	82.68	43.08
College or university degree programs for work-related reasons			
Enrolled in college or university degree program in past 12 months.....	12,725	99.98	52.09
Taken for work-related reasons—first program reported.....	1,594	99.44	51.81
Program taken to get/keep certificate/license	1,345	98.74	51.44
Total credit hours enrolled	1,345	90.04	46.91
Worked while taking credential program	1,158	99.31	51.74
Vocational or technical diploma programs for work-related reasons			
Enrolled in vocational/technical program in past 12 months	12,725	99.91	52.05
Major field of study in vocational/technical program	307	99.35	51.76
Total credit hours enrolled	307	70.68	36.82
Instruction by Internet/WWW	307	99.67	51.93
Apprenticeship programs			
In formal apprenticeship program in past 12 months.....	12,725	99.87	52.03
Labor union sponsored program	132	97.73	50.92
Apprenticeship program completion year	132	91.67	47.76
Work-related trainings or courses			
Took any work-related courses in past 12 months	12,725	99.92	52.06
Type of instruction provider—Course 1.....	5,231	98.91	51.53
Took course during work hours—Course 1	4,455	99.55	51.87
Factors in participation in work-related educational activities			
Interest in taking training courses	12,725	99.80	52.00
Employer offers tuition reimbursement benefits	8,063	95.86	49.94
Work-related less formal learning activities			
Received supervised training	8,908	99.73	51.96
Brown-bag or informal presentations	12,725	99.55	51.87
Household characteristics			
Own, rent home/other arrangement	12,725	98.28	51.20
Have computer or laptop at home.....	12,725	99.00	51.58
Total household income range	12,725	80.16	41.76
Exact household income/nearest \$1,000.....	1,440	53.26	27.75

¹ The total response rate is the product of the overall response rate and the item response rate.

NOTE: AEWWR is the Adult Education for Work-Related Reasons Survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education for Work-Related Reasons Survey of the National Household Education Surveys Program, 2003.

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5. DATA PREPARATION

5.1 Disclosure Risk Analysis

Central to the mission of the National Center for Education Statistics (NCES) is a commitment to protecting the identity of respondents to its various data collections. Surveys that make up the National Household Education Surveys Program (NHES) are designed to protect respondent identity. This design includes an extensive respondent disclosure risk analysis. As in past NHES collections, results from this analysis led to modifications to some data included on the data files. These confidentiality edits modify respondent data in order to prevent positive identification of individual respondents. Tests on the modified data were conducted to assure that the data remain accurate and useful. Wrongful disclosure of respondent identity by users of the data can result in penalties of up to 5 years in prison and up to \$250,000 in fines (see section 9007, as amended, of Title 20 of the United States Code).

5.2 Coding and Editing Specifications

Most of the NHES:2003 interview data were coded by the interviewers during the interview using the computer-assisted telephone interviewing (CATI) system. As the interviewers entered the number of the response option given by the respondent, this number was written to the data file. Range and logic edits were developed for relevant items to maximize coding accuracy.

5.2.1 Range Specifications

The ranges of most of the items were determined by the codes available for responses (closed-ended responses). However, some items such as age did not have predefined response codes and required an entry by the interviewer (open-ended responses). To help assure that reasonable entries were made for open-ended responses, reasonable ranges were defined.

Range edits included both hard- and soft-range edits. A “soft range” is one that represents the reasonable expected range of values but does not include all possible values. Responses outside the soft range were confirmed with the respondent and had to be entered a second time. For example, the number of hours each week a child spent doing homework had a soft range of 1 to 14. A value outside this range could be entered and confirmed as correct by the interviewer as long as it was within the hard range of values (1 to 36). “Hard ranges” are those that have a finite set of parameters for the values that can be entered into the CATI system. Out-of-hard-range values for either open- or closed-ended questions were not accepted. If the respondent insisted that a response outside the hard range was correct, the interviewer could enter the information in a comments data file. These comments were reviewed by data preparation and project staff. Out-of-hard-range values were accepted if the comments supported the response. Otherwise, the values were left as missing and later imputed.

After data collection was completed, range edits were rerun against the entire database to ensure that no outliers were inadvertently introduced during the post-data-collection updating process or during imputation. Therefore, any outliers that exist in the data files were reviewed during the data preparation process and originated from information entered into the comments data file.

5.2.2 Consistency Checks (Logic Edits)

Consistency or logic checks examine the relationships between responses to ensure that they do not conflict with one another or that the response to one item does not make the response to another unlikely. Logic specifications for the NHES:2003 interviews were contained within the CATI system. For example, the CATI system was programmed to control skip patterns so that inappropriate items were not asked. Additional consistency (logic) checks for the NHES:2003 interviews also were included. For example, a parent/guardian may have reported that a child was attending a grade that was outside the normal range of grades for his age. If the logic check was violated, an error message appeared that explained that the response was out of the soft range and allowed the interviewer to enter a correction. If the interviewer passed through the error screen once and information was still outside the soft range, but within the hard range, the interviewer was asked to re-verify the information. After the second attempt, the inconsistent information was accepted. However, if an initial response was outside the hard range, the error message appeared and continued to reappear unless a response within the hard range was entered. If the respondent confirmed an answer outside of a hard range, the interviewer entered it as a comment. These verified responses were allowed in the data file. At several points during data collection, logic edits were also checked against the entire database. Cases violating the edits were examined by data preparation and project staff and either the information violating the edit was kept or it was coded to “not ascertained” and later replaced with imputed data. Data were kept in circumstances where the data were judged to be plausible even though they violated the edit (e.g., an inconsistency between a child’s age and his/her grade in school). In such circumstances, there was supporting information available in the comments data file.

5.2.3 Structural Edits

Because of the surveys’ complexity, the CATI database was a highly complex, hierarchical file. The relationships of database records were often dependent on values of variables contained in other database records; therefore, structural edit specifications were developed to check the structural integrity of the database. This ensured that all variables that should exist did exist and those that should not exist did not exist in the database. For example, if there was a completed Parent and Family Involvement in Education (PFI) interview for a child, the data record that contained the child items must be in the database. Structural edits were run against the entire database during the data preparation.

5.2.4 Frequency and Cross-Tabulation Review

The frequencies of responses to all data items (both individually and in conjunction with related data items) were reviewed to ensure that appropriate skip patterns were followed. Members of the data preparation team checked each item to make sure the correct number of responses was represented for all items. If a discrepancy was discovered, the problem case was identified and reviewed. If necessary, the audit trail for the interview, which provided a keystroke-by-keystroke record of an interview, was retrieved to determine the appropriate response. If the audit trail revealed no additional information, a call back was made to the household to obtain the information or the item was coded as “not ascertained” and later imputed.

5.2.5 Review of “Other, specify” Items

Most “other, specify” text responses were reviewed to determine if they should be coded into one of the existing code categories. When a respondent selected an “other” response, the interviewer entered text into a “specify” overlay that appeared on the screen. The “specify” responses were reviewed by the data preparation staff and, where appropriate, coded into one of the existing response categories.

Review of the open-ended text responses revealed that with few exceptions, no particular text item occurred frequently enough to warrant the creation of a new response category. However, some additions were made. For PFI item PG11, concerning out-of-school activities, two new variables were added: FOARTS, for arts-related activities such as dance, and FOSPORUK, for sports activities for which adult supervision was unknown or unspecified. In the Adult Education for Work-Related Reasons Survey (AEWR) additional provider and location types were included in three of the response categories of AE5, WRPRTYP(n), and AE6, WRPRLOC(n). Specifically, the category originally specified as elementary, junior high, or high school was expanded to include school districts and adult learning centers; the category originally specified as business or industry was expanded to include hospitals (except public); and the category originally specified as professional association/organization was expanded to include industry/trade association/organization and union.

The response categories and open-ended items that were added appear in italics on the questionnaires. Verbatim strings of “other, specify” items do not appear on the public-use data files. However, verbatim strings do appear on the restricted-use data file. See sections 6.3 of Volume II and Volume III for a discussion of the restricted-use files.

For some AEWR variables, the “other, specify” responses were not reviewed for coding into existing response categories, but for coding into new categorical variables. These items were those associated with reasons for participation (AB7, AC7, AD5, and AE7) and those associated with outcomes of participation (AB22, AC22, AD17, AE14, and AG6). See Volume III, section 7.1.6 for more detailed information.

5.2.6 Coding of Open-Ended Items

In the AEWR interview, open-ended items were coded that related to the industry and occupation of jobs reported by respondents and the major field of study for participants in credential programs. Codes for industry and occupation included in the public-use data file are FNAICS for industry and FSOC for occupation. Codes for major field of study are also included in the public-use data file (CRCIPF for college programs and VOCIPF for vocational/technical programs). Up to four work-related courses were also coded; the codes are WRCRS1-WRCRS4.

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APPENDIX A

**NHES:2003 Screener, Parent and Family Involvement
in Education Questionnaire, and Adult Education
for Work-Related Reasons Questionnaire**

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NHES:2003 Screener

SCRN

S1. Hello, this is (INTERVIEWER) and I'm calling about a research study sponsored by the United States Department of Education. Are you a member of this household and at least 18 years old?

* YES 1 (GO TO S4)
NO 2 (GO TO S2)
PROBABLE BUSINESS..... 3 (GO TO S4)
GO TO RESULTGT

S2. May I please speak with a household member who is at least 18 years old?

* AVAILABLE 1 (GO TO S1)
NOT AVAILABLE 2 (GO TO RESULT,
CALLBACK APPT.)
THERE ARE NONE 3 (GO TO S3A)
GO TO RESULTGT

S3A. May I please speak with the male or female head of this household?

* PERSON ON PHONE..... 1 (GO TO S4)
OTHER PERSON, AVAILABLE 2 (GO TO S3B)
OTHER PERSON, NOT AVAILABLE 3 (GO TO RESULT,
CALLBACK APPT.)
GO TO RESULTGT

S3B. Hello, this is (INTERVIEWER) and I'm calling about a research study sponsored by the United States Department of Education. Are you a head of this household?

* YES 1 (GO TO S4)
NO 2 (GO TO S3A)
GO TO RESULTGT

S4. Is this phone number used for...

* Home use, 1 (CONTINUE)
Home and business use, or 2 (CONTINUE)
Business use only? 3 (GO TO THANK1)
GO TO RESULTGT

SCRN_20. The U.S. Department of Education is conducting a voluntary research study about the educational experiences of both children and adults. Your responses are confidential and will be protected to the fullest extent allowable under law. Are any of the people who normally live in your household age 20 or younger?

* YES 1
NO 2
GO TO RESULTGT

NOTE: Response categories shown in mixed upper and lower case are read to the respondent by the interviewer. Those shown in upper case are not read.

Variables designated by /R appear on the restricted-use data file only. Those designated by * do not appear on either the public-use or the restricted-use data files. They were used for administrative, verification, or coding purposes only.

If SCR_N_20=1 (household has children) and household is designated for adult enumeration (HHADLT=1), go to S6 and enumerate all household members.

Else, if SCR_N_20=1 (household has children) and household is not designated for adult enumeration (HHADLT= -1 or 2), go to S6 and enumerate household members age 20 or younger.

Else, if SCR_N_20 NE 1 (household does not have children) and household is designated for adult enumeration (HHADLT=1 or 2), go to AINTRO.

Else, if SCR_N_20 NE 1 (household does not have children) and household is not designated for adult enumeration (HHADLT= -1), go to S19.

S6. I have a few questions to see if someone in your household qualifies for the study. They take about 3 to 4 minutes. Please tell me only the first names and ages of all the (people/children or young adults age 20 or younger) who normally live in your household. Let's start with (you/the oldest child).

What is [(your/his or her) first name/the name of the next (person/child)]? ¹	How old [are you/ is (he/she)]?	Is this (person/child) male or female?	SCREENER RESPONDENT
*	AGE1-AGE(n)	SEX1-SEX(n)	*

S6VERF1. [VERIFY THE NUMBER OF PEOPLE LISTED ON THE MATRIX.] Have we missed anyone (age 20 or younger) who usually lives here who is temporarily away from home or living in a dorm at school, or any babies or small children?

*

MATRIX CORRECT..... 1
 RETURN TO MATRIX..... 2
 GO TO RESULT GT

If the age of any household member is missing, show probe: "Is (PERSON) age 21 or older?".
If person is age 21 or older, set flag AGE21=1.
Else, if person is age 20 or younger, set AGE21=2.

¹ The questions shown in the matrix were not read verbatim. Rather, they are illustrative of the questions/probes used by interviewers to complete the matrix, after reading the question stem verbatim.

**If (AGE21 = 2) or AGE is missing, show probe:
 “Would you say (PERSON’s) age is... 3 or younger,
 4 to 8 years old, 9 to 15 years old, or 16 to 20 years old?”
 Set flag AGE20=1, 2, 3, or 4, respectively, for
 ages 0-3, 4-8, 9-15, or 16-20.**

**Ask S7 for each person age 4–20 or (AGE20=2,
 3 or 4). If all children are younger than 4,
 go to Child Sampling Point.**

S7. [Are you/Is (CHILD)] attending (or enrolled in) (school/preschool, kindergarten, or school)?

- * YES 1
- NO 2

**If AGE = 19-20, autocode S8A = 2 and go to box after S8A.
 If AGE=4–18, ask S8. If age is missing and AGE20=1, 2, 3,
 or 4, go to box after S8A.**

S8. [READ FIRST TIME: Some parents decide to educate their children at home rather than send them to school.] Is (CHILD) being schooled at home?

- * YES 1 (GO TO S8A)
- NO 2 (GO TO BOX AFTER S8A)

S8A. So (he/she) is being schooled at home instead of at school for at least some classes or subjects?

- * YES 1 (GO TO S8B)
- NO 2 (AUTOCODE S8 = 2 AND GO TO BOX)

**If S7=1 (child/person is enrolled in school), go to S9.
 Else, go to first box after S10.**

S8B. Is (CHILD) getting all of (his/her) instruction at home, or is (he/she) getting some at school and some at home?

- * ALL AT HOME 1 (GO TO S10)
- SOME AT SCHOOL & SOME AT HOME . 2 (GO TO S8C)

S8C. How many hours each week does (CHILD) usually go to a school for instruction? Please do not include time spent in extracurricular activities.

- *

		(GO TO BOX)
HOURS		

**If S8C >= 9 hours, then set HOMSCFLG = 1
(attends a school for at least 9 hours per week).
Else, HOMSCFLG= -1. Then, go to S10.**

S9. What grade or year of school [are you/is (CHILD)] attending?
[PROBE FOR T OR P: Is that before or after kindergarten?]

- * NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START. N (GO TO 1ST BOX AFTER S10)
- TRANSITIONAL KINDERGARTEN (BEFORE K)..... T (GO TO 1ST BOX AFTER S10)
- KINDERGARTEN..... K (GO TO 1ST BOX AFTER S10)
- PREFIRST GRADE (AFTER K)..... P (GO TO 1ST BOX AFTER S10)
- FIRST GRADE 1 (GO TO 1ST BOX AFTER S10)
- SECOND GRADE 2 (GO TO 1ST BOX AFTER S10)
- THIRD GRADE..... 3 (GO TO 1ST BOX AFTER S10)
- FOURTH GRADE..... 4 (GO TO 1ST BOX AFTER S10)
- FIFTH GRADE 5 (GO TO 1ST BOX AFTER S10)
- SIXTH GRADE 6 (GO TO 1ST BOX AFTER S10)
- SEVENTH GRADE..... 7 (GO TO 1ST BOX AFTER S10)
- EIGHTH GRADE 8 (GO TO 1ST BOX AFTER S10)
- NINTH GRADE/FRESHMAN IN HIGH SCHOOL 9 (GO TO 1ST BOX AFTER S10)
- TENTH GRADE/SOPHOMORE IN HIGH SCHOOL..... 10 (GO TO 1ST BOX AFTER S10)
- ELEVENTH GRADE/JUNIOR IN HIGH SCHOOL 11 (GO TO 1ST BOX AFTER S10)
- TWELFTH GRADE/SENIOR IN HIGH SCHOOL..... 12 (GO TO 1ST BOX AFTER S10)
- ABOVE TWELFTH GRADE 13 (GO TO 1ST BOX AFTER S10)
- UNGRADED ELEMENTARY/SECONDARY U (GO TO S10)
- SPECIAL EDUCATION..... S (GO TO S10)

[IF T: In this interview, we will be referring to that as "kindergarten."
IF P: In this interview, we will be referring to that as "prefirst grade."]

S10. (What grade would [you/(CHILD)] be in if (you/he/she) were attending a school with regular grades/What grade or year of school is (CHILD) attending?)
 [PROBE FOR T OR P: Is that before or after kindergarten?]

- * NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START. N
- * TRANSITIONAL KINDERGARTEN (BEFORE K)..... T
- KINDERGARTEN..... K
- PREFIRST GRADE (AFTER K)..... P
- FIRST GRADE 1
- SECOND GRADE 2
- THIRD GRADE..... 3
- FOURTH GRADE..... 4
- FIFTH GRADE..... 5
- SIXTH GRADE 6
- SEVENTH GRADE..... 7
- EIGHTH GRADE 8
- NINTH GRADE/FRESHMAN IN HIGH SCHOOL 9
- TENTH GRADE/SOPHOMORE IN HIGH SCHOOL..... 10
- ELEVENTH GRADE/JUNIOR IN HIGH SCHOOL 11
- TWELFTH GRADE/SENIOR IN HIGH SCHOOL..... 12
- ABOVE TWELFTH GRADE 13
- UNGRADED/NO EQUIVALENT U

[IF T: In this interview, we will be referring to that as "kindergarten."
 IF P: In this interview, we will be referring to that as "prefirst grade."]

After last child, go to next box.

Child Sampling Point:

Select child(ren) for PFI survey.

If any children are selected, ask S11 and S12 for each sampled child. If two children are sampled, for 2nd child, ask if the most knowledgeable parent for 1st child is also most knowledgeable parent for 2nd child. (If yes, copy name, age, and sex of parent respondent to 2nd child interview.)

If no children are selected, go to box before AINTRO.

ENUM

S11. We would like to ask some questions about (CHILD)'s education. (Who is/Are you) the parent or guardian in this household who knows the most about (CHILD)'s education?

What is (your/his/her) first name (and age)?

[IF CHILDREN ONLY HAVE BEEN ENUMERATED, RECORD FIRST NAME AND AGE AND VERIFY SEX OF PARENT INTERVIEW RESPONDENT.]

*

AGE(n)
SEX(n)

[X IF SCRNM RESP]

FIRST NAME _____ AGE _____ SEX _____ ()

*

[IF ALL HOUSEHOLD MEMBERS HAVE BEEN ENUMERATED, DISPLAY HOUSEHOLD MEMBERS AGE 12 AND OLDER. RECORD PERSON NUMBER OF RESPONDENT FOR PARENT INTERVIEW.]

____|____|
PERSON NUMBER

S12. What is [your/(PERSON)'s] relationship to (CHILD)? [VERIFY IF KNOWN]

- RESRELN** MOTHER (BIRTH/ADOPTIVE/STEP/FOSTER) 1
- FATHER (BIRTH/ADOPTIVE/STEP/FOSTER) 2
- BROTHER, INCLUDING STEP, ADOPTED, AND FOSTER..... 3
- SISTER, INCLUDING STEP, ADOPTED, AND FOSTER 4
- GRANDMOTHER..... 5
- GRANDFATHER..... 6
- AUNT..... 7
- UNCLE 8
- COUSIN 9
- OTHER RELATIVE 10
- RESRELOS/R** SPECIFY _____
- NONRELATIVE 11
- SPECIFY _____
- SAME SEX PARENT 12
- SPECIFY _____
- GIRLFRIEND OR PARTNER OF (CHILD)'S PARENT/
GUARDIAN 13
- BOYFRIEND OR PARTNER OF (CHILD)'S PARENT/
GUARDIAN 14

After a respondent for each PFI interview is selected, go to next box.

If household is sampled for adult enumeration, go to AINTRO. Else, if children are selected for a PFI interview only, go to HHSELECT screen to select interview. Else, go to S19.

AINTRO. We are also interested in learning about the educational activities of adults.

If SCR_N_20= 1 (children age 20 and younger in household; all members have been enumerated), go to box before S14. Else if SCR_N_20=2, ask S13.

S13. I have a few questions to see if someone in your household qualifies for the study. They take about 3 minutes. Please tell me only the first names and ages of all the people who normally live in your household. Let's start with you.

What is (your first name/the first name of the next person)? ²	How old [are you/is (he/she)]?	Is this adult male or female?	SCREENER RESPONDENT
*	AGE1-AGE(n)	SEX1-SEX(n)	*

S13VERF. [VERIFY THE NUMBER OF PEOPLE LISTED ON THE MATRIX.] Have we missed anyone who usually lives here who is temporarily away from home or living in a dorm at school, or any babies or small children?

MATRIX CORRECT 1
 RETURN TO MATRIX..... 2
 GO TO RESULTGT

If person is enrolled in grade 12 or below, ungraded elementary/secondary, or special education, he or she is ineligible for an AEWI interview. If person age is 16 to 20 or AGE20=4, is enrolled in school (SENROL=1) and grade is above 12th grade (SGRADE=13 or SGRADEQ=13), autocode S14=1 (participant) and go to S15. Ask S14 for each person age 20 and older or AGE21=1.

S14. During the past 12 months, [did you/did (PERSON)] take courses, classes, trainings, workshops, or seminars of any kind for any reason?

* YES 1
 NO 2

² The questions shown in the matrix were not read verbatim. Rather, they are illustrative of the questions/probes used by interviewers to complete the matrix, after reading the question stem verbatim.

S15. Did (you/PERSON) work at a job for pay or income at any time in the past 12 months?

* YES 1
NO 2

After last adult, go to next box.

Adult Sampling Point:
Select adult for AEWR interview. If an adult is selected, go to S16.
If no adult is selected, and no child was selected for a PFI interview, go to S19.
If no adult is selected and child(ren) were selected for a PFI interview, go to HHSELECT screen to select interview.

S16. Not counting the Reserves or National Guard, (are you/is PERSON) currently serving on active duty in the U.S. Armed Forces?

* YES 1 (INELIGIBLE. GO TO BOX AFTER S18)
NO 2 (GO TO BOX)

Ask S17 if sampled adult is not the Screener respondent and is age 16-25. Else, go to box after S18.

S17. Is (PERSON) living at home, in student housing, or somewhere else?

- * AT HOME 1 (GO TO BOX AFTER S18)
- STUDENT HOUSING [THIS INCLUDES ALL HOUSING OWNED, SPONSORED, OR LEASED BY THE SCHOOL SUCH AS A DORMITORY OR FRATERNITY OR SORORITY HOUSE.] 2 (GO TO S18)
- OTHER PRIVATE HOME OR APARTMENT..... 3 (INELIGIBLE. GO TO BOX AFTER S18)
- INSTITUTION OR GROUP QUARTERS [THIS INCLUDES A JAIL OR DETENTION CENTER, MEDICAL FACILITY, REHABILITATION CENTER, MENTAL HEALTH FACILITY, MILITARY BARRACKS, OR GROUP FOSTER CARE.]..... 4 (INELIGIBLE. GO TO BOX AFTER S18)

S18. Would you please give me (his/her) last name and telephone number so that we can call (him/her) to do a brief interview about (his/her) educational activities?

* LAST NAME _____
 PHONE _____

If selected adult is ineligible, and no child was selected for a PFI interview, go to S19. Else, go to HHSELECT screen to select interview.

HOME

S19. These next few questions are about your household. Do you...

- HOWNHOME**
- Own your home,..... 1
 - Rent your home, or 2
 - Have some other arrangement? 3

S20. Besides (PHONE NUMBER), do you have other telephone numbers in your household, not including cellular phones?

- HOTHNUM**
- YES 1 (GO TO S21)
 - NO 2 (GO TO S22)
 - NOT MY NUMBER..... 3 (GO TO S20A)

S24. Some households have telephone numbers that are used both for talking and for computer or fax lines. (Is the number/Are any of the numbers) used for (a) computer or fax line(s) ever answered for talking?

* YES 1 (GO TO BOX)
NO 2 (GO TO THANK2)

If S23 = 1 (only 1 other telephone number for computer or fax), autocode S25 =1, and go to THANK2. Else, ask S25.

S25. How many computer or fax telephone numbers are also answered for talking?

* |__|__| (GO TO THANK2)
NUMBER

THANK1. Thank you, but we are only interviewing in private residences.

THANK2. Those are all the questions I have about your household. Thank you for your time.

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**Parent and Family Involvement in Education Survey
of the 2003 National Household Education Surveys Program
(PFI-NHES:2003)**

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Parent and Family Involvement in Education (PFI-NHES:2003)

DEMO

INTRO. [IF R WAS NOT SCREENER R AND THIS IS THE FIRST OR ONLY INTERVIEW FOR R:
Hello, this is (INTERVIEWER). I'm calling for the U.S. Department of Education. We are
conducting a voluntary and confidential national study about the educational experiences of
children and young adults.]

I'd like to talk with you now about (CHILD). The interview is estimated to take (20/15) minutes or
less.

Demographic Characteristics

PA1. First, I'd like to confirm (CHILD)'s age. In what month and year was (he/she) born?

CDOBMM
CDOBY

|_|_|_| |_|_|_|_|_|_|_|_|
MONTH YEAR

- | | | | |
|---|----------|----|-----------|
| 1 | JANUARY | 7 | JULY |
| 2 | FEBRUARY | 8 | AUGUST |
| 3 | MARCH | 9 | SEPTEMBER |
| 4 | APRIL | 10 | OCTOBER |
| 5 | MAY | 11 | NOVEMBER |
| 6 | JUNE | 12 | DECEMBER |

**Calculate AGE2002 = child's age on December 31, 2002.
Calculate current age for display in PA2. If current
age does not match screener age or birth month is
current month, ask PA2. Else, go to box after PA2.**

PA2. That would mean that (CHILD) [is (AGE)/turns or turned (AGE) this month]. Is that right?

- * YES 1 (GO TO BOX)
 NO 2 (RETURN TO PA1)

**If AGE2002 is <4 or >20,
go to CLOSE1. Else, go to box before PA3.**

If the screener R is the MKR and the whole household was enumerated in the screener (HHADULT=1), go to RELINTRO. Else, if this is interview for CHILD2, go to RELINTRO. Else, if this is interview for CHILD1, go to PA3.

PA3. [SCREENER WAS COMPLETED ON (DATE)]
 Now I'd like to ask about all the people who live in your household with (CHILD). First, I need to verify the names and ages of all the people (you told me about earlier/who are already listed on my computer screen).

[What is (your first name/the first name of the next person?)]	[How old (are you/is (he/she))]?	[Is this person male or female?]	D TO DELETE
FNAME	AGE	SEX	MARKDEL

[AFTER VERIFICATION IS COMPLETE] Now, please tell me the first names and ages of all other people who normally live in your household.

PA3VER2. [VERIFY THE NUMBER OF HOUSEHOLD MEMBERS LISTED ON THE MATRIX.]
 Have we missed anyone else who usually lives here who is temporarily away from home or living in a dorm at school, or any babies or small children?

MATRIX CORRECT..... 1
 RETURN TO MATRIX..... 2

RELINTRO. Now I'd like to ask how all the people in your household are related to (CHILD).

If there are two children sampled in the household and they are siblings (RELATN[n]= 3,4) or cousins (RELATN[n]= 9), autocode the relationship (appropriately by sex for siblings) during the second child's interview and do not ask how CHILD1 is related to CHILD2. If the respondent is the child's mother/father or same sex parent (S12 = 1, 2, or 12), copy relationship from Screener into RELATN[n] and ask PA5/PA6, then ask PA4 for every other household member. If respondent is not the child's mother/father, copy relationship from Screener into RELATN[n] and ask PA4 for every other household member.

PA4. How is (PERSON) related to (CHILD)?
[VERIFY IF KNOWN.]

RELATN[n]	MOTHER (BIRTH/ADOPTIVE/STEP/FOSTER)	1 (GO TO PA5)
RELTOS[n]/R	FATHER (BIRTH/ADOPTIVE/STEP/FOSTER)	2 (GO TO PA6)
	BROTHER, INCLUDING STEP, ADOPTED, AND FOSTER	3 (GO TO BOX AFTER PA6)
	SISTER, INCLUDING STEP, ADOPTED, AND FOSTER	4 (GO TO BOX AFTER PA6)
	GRANDMOTHER	5 (GO TO BOX AFTER PA6)
	GRANDFATHER	6 (GO TO BOX AFTER PA6)
	AUNT	7 (GO TO BOX AFTER PA6)
	UNCLE	8 (GO TO BOX AFTER PA6)
	COUSIN	9 (GO TO BOX AFTER PA6)
	OTHER RELATIVE	10 (GO TO BOX AFTER PA6)
	SPECIFY _____	
	NONRELATIVE	11 (GO TO BOX AFTER PA6)
	SPECIFY _____	
	SAME SEX PARENT	12 (GO TO BOX)
	SPECIFY _____	
	GIRLFRIEND OR PARTNER OF (CHILD)'S PARENT/ GUARDIAN	13 (GO TO BOX AFTER PA6)
	BOYFRIEND OR PARTNER OF (CHILD)'S PARENT/ GUARDIAN	14 (GO TO BOX AFTER PA6)

If PA4 = 12 and sex=female (same sex parent/mother) go to PA5. If PA4 = 12 and sex = male (same sex parent/father), go to PA6. Ask PA4 for every other household member.

PA5. [Are you/Is (PERSON)] (CHILD)'s ...

MOMTYPE1	Birth mother,.....	1
MOMTYPE2	Adoptive mother,	2
	Stepmother,.....	3
	Foster mother, or.....	4
	Other parent or guardian?.....	5

PA6. [Are you/Is (PERSON)] (CHILD)'s...

DADTYPE1	Birth father,.....	1
DADTYPE2	Adoptive father,	2
	Stepfather,.....	3
	Foster father, or.....	4
	Other parent or guardian?.....	5

If more than one mother or father, use the lowest value of MOMTYPE1 or MOMTYPE2 or the lowest value of DADTYPE1 or DADTYPE2. If both same sex parents have the same value, use MOMTYPE1 or DADTYPE1.

Set HHMOM:
1 = birth/adoptive mother in household. 2 = step or foster mother, other parent/guardian. 3 = no mom and no dad, female R. 4 = else.

Set HHDAD:
1 = birth/adoptive father in household. 2 = step or foster father, other parent/guardian. 3 = no mom and no dad, male R. 4 = else.

PA7. What language does (CHILD) speak most at home?

CSPEAK	ENGLISH.....	1
	SPANISH.....	2
	ENGLISH AND SPANISH EQUALLY	3
	ENGLISH AND ANOTHER LANGUAGE EQUALLY	4
	(SPECIFY)_____	
	ANOTHER LANGUAGE.....	91
CSPEAKOS/R	(SPECIFY)_____	

If respondent is the same respondent who did an AEWI interview (see item AH7 in that interview, variable IBSPEAK), copy IBSPEAK into RESPEAK and go to box after PA8. If respondent is the same respondent who did a PFI interview previously, copy RESPEAK from Child1's interview into RESPEAK on Child2's interview and go to box after PA8. Else ask PA8.

PA8. How about you? What language do you speak most at home?

RESPEAK ENGLISH..... 1
 SPANISH..... 2
 ENGLISH AND SPANISH EQUALLY 3
 ENGLISH AND ANOTHER LANGUAGE EQUALLY 4
 (SPECIFY) _____
RESPEAOS/R ANOTHER LANGUAGE..... 91
 (SPECIFY) _____

Current School Status

If parent/guardian respondent was also the Screener respondent, copy responses to PB1 through PB7, and then go to box after PB7. Else, go to PB1.

PB1. Now I'd like to talk with you about (CHILD)'s school experiences. Is (CHILD) attending (or enrolled in) school?

ENROLL YES 1 (GO TO BOX)
 NO 2 (GO TO BOX)

If AGE2002 GE 19, code PB2 = 2 (not in home school), and go to PB6. Else, if AGE2002 => 4 and <= 18, ask PB2.

DEMO

PB2. Some parents decide to educate their children at home rather than send them to school. Is (CHILD) being schooled at home?

HOMESCHL YES 1 (GO TO PB3)
NO 2 (GO TO 2ND BOX AFTER PB5)

PB3. So (CHILD) is being schooled at home instead of at school for at least some classes or subjects?

* YES 1 (GO TO PB4)
NO 2 (AUTOCODE PB2= 2 AND
GO TO 2ND BOX AFTER PB5)

PB4. Is (CHILD) getting all of (his/her) instruction at home, or is (he/she) getting some at school and some at home?

HOMEALL ALL AT HOME 1 (GO TO PB7)
SOME AT SCHOOL & SOME AT HOME . 2 (GO TO PB5)

PB5. How many hours each week does (CHILD) usually go to a school for instruction? Please do not include time spent in extracurricular activities.

HOMSCHR |__| |__| (GO TO 1ST BOX BELOW)
HOURS

If PB5 >= 9 hours, then set HOMSCFLG = 1 (attends a school for at least 9 hours per week). Else, HOMSCFLG = -1. Then, go to PB7.

If PB1 = 1 (enrolled) and ((PB2 NE 1 or PB3 NE 1 (not in home school)), ask PB6. Else, if PB1 = 2 (not enrolled) and (PB2 NE 1 or PB3 NE 1 (not in home school)), go to CLOSE1.

PB6. What grade or year is (CHILD) attending?
 [PROBE FOR T OR P: Is that before or after kindergarten?]

GRADE	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START.	N (GO TO CLOSE 1)
	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T (GO TO FIRST BOX AFTER PB14)
	KINDERGARTEN.....	K (GO TO FIRST BOX AFTER PB14)
	PREFIRST GRADE (AFTER K).....	P (GO TO FIRST BOX AFTER PB14)
	FIRST GRADE	1 (GO TO FIRST BOX AFTER PB14)
	SECOND GRADE	2 (GO TO FIRST BOX AFTER PB14)
	THIRD GRADE.....	3 (GO TO FIRST BOX AFTER PB14)
	FOURTH GRADE.....	4 (GO TO FIRST BOX AFTER PB14)
	FIFTH GRADE	5 (GO TO FIRST BOX AFTER PB14)
	SIXTH GRADE	6 (GO TO FIRST BOX AFTER PB14)
	SEVENTH GRADE.....	7 (GO TO FIRST BOX AFTER PB14)
	EIGHTH GRADE	8 (GO TO FIRST BOX AFTER PB14)
	NINTH GRADE/FRESHMAN	9 (GO TO FIRST BOX AFTER PB14)
	TENTH GRADE/SOPHOMORE.....	10 (GO TO FIRST BOX AFTER PB14)
	ELEVENTH GRADE/JUNIOR	11 (GO TO FIRST BOX AFTER PB14)
	TWELFTH GRADE/SENIOR.....	12 (GO TO FIRST BOX AFTER PB14)
	ABOVE TWELFTH GRADE	13 (GO TO CLOSE1)
	UNGRADED	U (GO TO PB7)
	SPECIAL EDUCATION.....	S (GO TO PB7)
	[IF T: In this interview we will be referring to that as "kindergarten." IF P: In this interview, we will be referring to that as "prefirst grade."]	

PB7. (What grade would (CHILD) be in if (he/she) were attending (school/a school with regular grades) / What grade or year is (CHILD) attending)? [PROBE FOR T OR P: Is that before or after kindergarten?]

GRADEEQ	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START.	N (GO TO CLOSE 1)
	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T (GO TO BOX)
	KINDERGARTEN.....	K (GO TO BOX)
	PREFIRST GRADE (AFTER K).....	P (GO TO BOX)
	FIRST GRADE	1 (GO TO BOX)
	SECOND GRADE	2 (GO TO BOX)
	THIRD GRADE.....	3 (GO TO BOX)
	FOURTH GRADE.....	4 (GO TO BOX)
	FIFTH GRADE	5 (GO TO BOX)
	SIXTH GRADE	6 (GO TO BOX)
	SEVENTH GRADE.....	7 (GO TO BOX)
	EIGHTH GRADE	8 (GO TO BOX)
	NINTH GRADE/FRESHMAN	9 (GO TO BOX)
	TENTH GRADE/SOPHOMORE.....	10 (GO TO BOX)
	ELEVENTH GRADE/JUNIOR	11 (GO TO BOX)
	TWELFTH GRADE/SENIOR.....	12 (GO TO BOX)
	ABOVE TWELFTH GRADE	13 (GO TO CLOSE 1)
	UNGRADED, NO EQUIVALENT	U (GO TO BOX)
	[IF T: In this interview we will be referring to that as "kindergarten." IF P: In this interview, we will be referring to that as "prefirst grade."]	

SET PATH	
E =	[PB6/PB7 (grade/equivalent) = K, T, P, 1, 2, 3, 4, or 5 and PB2 NE 1 (not in home school)] or [PB7 (grade/equivalent) = U and AGE2002 >= 4 and <= 11 and PB2 NE1 (not in home school)] (elementary)
M =	[PB6/PB7 (grade/equivalent) = 6, 7, or 8 and PB2 NE 1 (not in home school)] or [PB7 (grade/equivalent) = U and AGE2002 = 12 or 13 and PB2 NE 1 (not in home school)] (middle school/junior high)
S =	[PB6/PB7 (grade/equivalent) = 9, 10, 11, or 12 and PB2 NE 1 (not in home school)] or [PB7 (grade/equivalent) = U and AGE2002 >= 14 and PB2 NE 1 (not in home school)] (upper school/senior high)
H =	AGE2002 >= 4 and <= 18 and PB2 = 1 (home school) and PB7 (grade equivalent) NE N.

If PATH = H, go to PB8.
Else, go to box after PB14.

PB8. Now, we'd like to ask you about sources of curriculum or books you use to home school (CHILD). Please tell us about all the sources that apply to you. In home schooling (CHILD), have you used curriculum or books

		<u>YES</u>	<u>NO</u>
HSCLIBR	a. From a public library?	1	2
HSCHSPUB	b. Have you used curriculum or books obtained directly from a homeschooling catalog, publisher, or individual who specializes in home schooling materials?.....	1	2
HSCEDPUB	c. How about any obtained directly from another educational publisher?	1	2
HSCORG	d. From a home schooling organization?	1	2
HSCCHUR	e. From a church, synagogue, or other religious organization?	1	2
HSCPUBL	f. From your local public school or school district?.....	1	2
HSCPRIV	g. From a private school?	1	2
HSCREL	h. From a retail bookstore or other store?	1	2
HSCOTH	i. From any other sources?	1	2

DEMO

PB9. For the next question, please also tell us about all answers that apply to you. In home schooling (CHILD), have you used other services or participated in other activities provided by...

		<u>YES</u>	<u>NO</u>
HSOLIBR	a. A public library?	1	2
HSOORG	b. A home schooling organization?	1	2
HSOCHUR	c. A church, synagogue, or other religious organization?	1	2
HSOPUBL	d. Your local public school or school district?	1	2
HSOPRIV	e. A private school?	1	2
HSOOTH	f. Any other sources?	1	2
HSOOTHOS/R	SPECIFY _____		

PB10. Is any of (CHILD)'s home instruction taught by a private tutor or teacher?

HSTUTOR	YES	1
	NO	2

PB11. Have any of the following been used in home schooling (CHILD)?

		<u>YES</u>	<u>NO</u>
HSCORR	a. A correspondence course by mail specifically designed for home schoolers?	1	2
HSWWW	b. A course or instruction provide over the Internet, e-mail, or World Wide Web?	1	2
HSTVVID	c. A course or instruction provided by television, video, or radio?	1	2

**If PB7 = T (grade equivalent is transitional kindergarten),
autocode PB12 as "T" and go to PB13.
Else, ask PB12. (Note: if current grade not given by
respondent explicitly in PB12, it will be autcoded by CATI).**

DEMO

PB12. Thinking about typical grade levels, for which grades was {CHILD} schooled at home for at least some classes or subjects?
 [DISPLAY GRADES THROUGH CHILD'S CURRENT GRADE.]
 [CODE ALL THAT APPLY.]
 [IF ANSWER IS "ALL GRADES INCLUDING KINDERGARTEN" (99), AUTOCODE ALL GRADES UP TO CHILD'S CURRENT GRADE.]
 [PROBE WHETHER KINDERGARTEN INCLUDED IF RESPONSE IS "ALL OF THE GRADES."]

	ALL GRADES INCLUDING KINDERGARTEN	99
HOMET	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T
HOMEK	KINDERGARTEN.....	K
HOMEP	PREFIRST GRADE (AFTER K).....	P
HOME1	FIRST GRADE	1
HOME2	SECOND GRADE	2
HOME3	THIRD GRADE.....	3
HOME4	FOURTH GRADE.....	4
HOME5	FIFTH GRADE	5
HOME6	SIXTH GRADE	6
HOME7	SEVENTH GRADE.....	7
HOME8	EIGHTH GRADE	8
HOME9	NINTH GRADE/FRESHMAN	9
HOME10	TENTH GRADE/SOPHOMORE.....	10
HOME11	ELEVENTH GRADE/JUNIOR	11
HOME12	TWELFTH GRADE/SENIOR.....	12

PB13. There are many different reasons that parents choose to home school their children. Please tell me if any of these reasons apply to you.

		<u>YES</u>	<u>NO</u>
HSSAFETY	a. You are concerned about the school environment, such as safety, drugs, or negative peer pressure?.....	1	2
HSDISSAT	b. You are dissatisfied with the academic instruction at other schools?	1	2
HSRELIGN	c. You prefer to teach (CHILD) at home so that you can provide religious or moral instruction?.....	1	2
HSDISABL	d. (CHILD) has a physical or mental health problem that has lasted six months or more?	1	2
HSILL	e. (CHILD) has a temporary illness that prevents (him/her) from going to school?	1	2
HSSPCLND	f. (CHILD) has other special needs that you feel the school can't or won't meet?	1	2
HSOTHER	g. You have another reason for home schooling your child?	1	2
HSOTHEOS/R	(SPECIFY_____)		

**If more than one reason a-g is chosen in PB13, ask PB14.
 Display all answers in PB14 that had "yes" answers
 in PB13 (if PB13a, b, c, d, e, f, or g = 1).
 Else, go to box under PB14.**

PB14. Of the reasons you just mentioned, which would you say is the most important?

- HSMOST**
- CONCERN ABOUT SCHOOL ENVIRONMENT..... 1
 - DISSATISFIED WITH ACADEMIC INSTRUCTION
AT OTHER SCHOOLS..... 2
 - TO PROVIDE RELIGIOUS OR MORAL INSTRUCTION 3
 - CHILD HAS A PHYSICAL OR MENTAL HEALTH PROBLEM..... 4
 - CHILD HAS A TEMPORARY ILLNESS..... 5
 - CHILD OTHER SPECIAL NEEDS 6
 - (DISPLAY OTHER SPECIFY STRING)..... 7

School Characteristics [PATH = E, M, S, H if HOMSCFLG = 1]

**If PATH = E, M, S, or (PATH=H and HOMSCFLG=1),
go to PCINTRO. Else, go to box after PD6.**

PCINTRO. Next let's talk about the school (CHILD) (goes to now/attends for some of (his/her) classes.)

**If this is the interview for CHILD2 and PC16 = 1 in CHILD1's
interview (both children attend same school) and
respondent is the same for both PFI interviews, copy
responses to PC1 – PC4, and PC9 – PC14 from
CHILD1's interview to CHILD2's interview and go
to PC5. Else, go to PC1.**

PC1. Does (he/she) go to a public or private school?

- SPUBLIC**
- PUBLIC 1 (GO TO PC2)
 - PRIVATE 2 (GO TO PC4)

PC7. Is the school (CHILD) attends the one you wanted most for (him/her), that is, your first choice?
 [PROBE: IF R SAYS IT WAS CHILD'S FIRST CHOICE, ASK: Was it also your first choice?]

S1STCHOI YES 1
 NO 2

PC8. Did you move to your current neighborhood so that (CHILD) would be eligible to go to (his/her) current school?

SNEIGHBR YES 1
 NO 2

If this is the interview for CHILD2 and PC16 = 1 in CHILD1's interview (both children attend the same school) and respondent is the same for both interviews, go to PC15. Else, if PC1 = 2 (private school), go to PC9. Else, go to PC11.

PC9. Is the school church-related or not church-related?

SRELGN CHURCH-RELATED 1 (GO TO PC10)
 NOT CHURCH-RELATED 2 (GO TO PC11)

PC10. Is it a Catholic school?

SCATHLIC YES 1
 NO 2

PC11. What is the lowest grade taught at (CHILD)'s school?

SLOW	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START.	N
	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T
	KINDERGARTEN.....	K
	PREFIRST GRADE (AFTER K)	P
	FIRST GRADE	1
	SECOND GRADE	2
	THIRD GRADE.....	3
	FOURTH GRADE.....	4
	FIFTH GRADE	5
	SIXTH GRADE	6
	SEVENTH GRADE.....	7
	EIGHTH GRADE	8
	NINTH GRADE/FRESHMAN	9
TENTH GRADE/SOPHOMORE.....	10	
ELEVENTH GRADE/JUNIOR	11	
TWELFTH GRADE/SENIOR.....	12	

PC12. What is the highest grade taught at (his/her) school?

SHIGH	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T
	KINDERGARTEN.....	K
	PREFIRST GRADE (AFTER K)	P
	FIRST GRADE	1
	SECOND GRADE	2
	THIRD GRADE.....	3
	FOURTH GRADE.....	4
	FIFTH GRADE	5
	SIXTH GRADE	6
	SEVENTH GRADE.....	7
	EIGHTH GRADE	8
	NINTH GRADE/FRESHMAN	9
	TENTH GRADE/SOPHOMORE.....	10
ELEVENTH GRADE/JUNIOR	11	
TWELFTH GRADE/SENIOR.....	12	

PC13. About how many students are enrolled in (CHILD)'s school? Would you say ...
 [IF RESPONDENT SAYS "DON'T KNOW," ASK: Do you know the number in (his/her) grade?]

SNUMSTUD	Under 300,.....	1 (GO TO PC14)
	300-599,	2 (GO TO PC14)
	600-999, or	3 (GO TO PC14)
	1,000 or more?	4 (GO TO PC14)
	NUMBER OF STUDENTS IN GRADE GIVEN	91 (GO TO PC13OV)

PC13OV. |_|_|_|_|
SNUMGRAD NUMBER OF STUDENTS IN GRADE

PC14. Does (CHILD) go to a school with a traditional schedule with most of the summer off or does (he/she) go to a school with a year-round schedule?

SSCHEDUL TRADITIONAL SCHEDULE SCHOOL ... 1
YEAR-ROUND SCHEDULE SCHOOL... 2

PC15. Since the beginning of this school year, has (he/she) been in the same school?

SSAMEFAL YES 1
NO 2

If this is the interview for CHILD1 and two children in grades K-12 have been sampled in the same household, check highest and lowest grade at CHILD1's school (PC11 and PC12) against grade of CHILD2 (reported in Screener). If it is possible that CHILD1 and CHILD2 attend the same school and the respondent for both the screener and PFI interviews is the same, ask PC16 (once per household). If not possible, autocode PC16 = -1 and go to PDINTRO. Else, go to PDINTRO.

PC16. Does (CHILD1) go to the same school as (CHILD2)?

SSAME YES 1
NO 2

Student Experiences [PATH = E, M, S, H]

**If PATH=H and HOMSCFLG = -1 then go to box after PD6.
Else, go to PDINTRO.**

PDINTRO. Now I have a few questions about (CHILD)'s experiences this school year at (his/her) current school.

If this is the interview for CHILD2 and PC16 = 1 in CHILD1's interview (2 sampled children attend the same school) and the respondent is the same for both children, ask PD1a-b, and copy response for CHILD1 to PD1c and d for CHILD2. Else, ask PD1a-d.

PD1. Please tell me whether you strongly agree, agree, disagree, or strongly disagree with the following statements:

	<u>SA</u>	<u>A</u>	<u>D</u>	<u>SD</u>
SECHALNG a. (CHILD) finds (his/her) school work challenging	1	2	3	4
SEENJOY b. (CHILD) enjoys school	1	2	3	4
SERESPCT c. In (CHILD)'s school, most students and teachers respect each other.....	1	2	3	4
SEEASY d. (CHILD)'s school makes it easy for my family to be involved there	1	2	3	4

PD2. Now I would like to ask you about (his/her) grades (during this school year/at the school (he/she) attends this year). Overall, across all subjects ((he/she) takes at school), does (he/she) get . . .

SEGRADES	Mostly A's,	1	(GO TO PD4)
	Mostly B's,	2	(GO TO PD4)
	Mostly C's,	3	(GO TO PD4)
	Mostly D's and lower, or.....	4	(GO TO PD4)
	Does (his/her) school not give these grades?.....	5	(GO TO PD3)

PD3. Would you describe (his/her) work at school as . . .

SEGRADEQ	Excellent,.....	1
	Above average,.....	2
	Average,.....	3
	Below average, or	4
	Failing?.....	5

PD4. Have any of (CHILD)'s teachers or (his/her) school contacted you (or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)) about any behavior problems (he/she) is having in school this year?

SEBEHAVR	YES	1
	NO	2

PD5. Have any of (his/her) teachers or (his/her) school contacted you (or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)) about any problems (he/she) is having with school work this year?

SESCHLWR	YES	1
	NO	2

If PA7 = 2 or 91 (child speaks language other than English), ask PD6a-b. Else, ask a of PD6.

PD6. Is (CHILD) currently enrolled in . . .

		<u>YES</u>	<u>NO</u>
SENRAPC	a. Honors, gifted or talented, or advanced placement classes?	1	2
SENRESL	b. An English as a second language program?	1	2

If PATH = H, and PB12 indicates that child has always been schooled at home (has been homeschooled for all grades up to child's current grade, including kindergarten but not necessarily including grades T or P) go to PD10. Else, if PATH = H and HOMSCFLG = 1 (home schooled but also attends school) or if HOMSCFLG = -1 (home schooled only) but PB12 indicates that child has not always been schooled at home, ask PD7. Else, ask PD7.

PD7. Since starting kindergarten, has (CHILD) repeated any grades?

- SEREPEAT** YES 1 (GO TO PD8)
 NO 2 (GO TO PD9)

PD8. What grade or grades did (he/she) repeat? [CODE ALL THAT APPLY]
 [DISPLAY RESPONSE OPTIONS ONLY UP TO CURRENT GRADE OR GRADE EQUIVALENT]

- SEREPTK** KINDERGARTEN..... K
SEREPT1 FIRST GRADE 1
SEREPT2 SECOND GRADE 2
SEREPT3 THIRD GRADE..... 3
SEREPT4 FOURTH GRADE..... 4
SEREPT5 FIFTH GRADE 5
SEREPT6 SIXTH GRADE 6
SEREPT7 SEVENTH GRADE..... 7
SEREPT8 EIGHTH GRADE 8
SEREPT9 NINTH GRADE/FRESHMAN 9
SEREPT10 TENTH GRADE/SOPHOMORE..... 10
SEREPT11 ELEVENTH GRADE/JUNIOR 11
SEREPT12 TWELFTH GRADE/SENIOR..... 12

PD9. Has (CHILD) had . . .

- | | | <u>YES</u> | <u>NO</u> |
|-----------------|--|------------|-----------|
| SESUSOUT | a. An out-of-school suspension? | 1 | 2 |
| SESUSPIN | b. An in-school suspension, not counting detentions? | 1 | 2 |
| SEEXPEL | c. Has (CHILD) ever been expelled? | 1 | 2 |

PD10. Now I have some questions about (CHILD)'s future education.

How far do you expect (him/her) to go in (his/her) education? Would you say you expect (him/her) . . .

SEFUTURE

- To receive less than a high school diploma, 1
- To graduate from high school, 2
- To attend a vocational or technical school after high school, 3
- To attend two or more years of college..... 4
- To finish a four- or five-year college degree, or 5
- To earn a graduate degree or professional degree beyond a bachelor's? 6

If [PATH = M, S, or [(PATH = H and ((GRADEEQ = 6 - 12) or (GRADEEQ = U & AGE2002 >=12)))] and PD10 NE 1 or 2 (expect child to continue education after high school), then go to PD11. Else, go to box before PEINTRO.

PD11. Do you or does anyone in your family plan to help (CHILD) pay for (his/her) education after high school, or have you not thought about it yet?

SEFAMPAY

- YES 1 (GO TO PD12)
- NO 2 (GO TO PD12)
- HASN'T THOUGHT ABOUT YET 3 (GO TO BOX ABOVE PEINTRO)

PD12. Do you feel you have enough information about the amount needed for college or vocational school to start planning how to pay for (his/her) education, or have you not thought about it yet?

SEAMTINF

- YES 1
- NO 2
- HASN'T THOUGHT ABOUT YET 3

Family/School Involvement and School Practices [PATH = E, M, S, H if HOMSCFLG = 1]

If PATH = H and HOMSCFLG = -1 (home schooled only), go to PGINTRO. Else, go to PEINTRO.

PEINTRO. Now I'd like to ask you about your family's involvement with (CHILD)'s school.

Ask PE1e if PE1d=1.

If this is an the interview for CHIL2 and PC16=1 in CHIL1's interview (2 sampled children attend the same school) and the respondent is the same for both children and both children have the same parenting situation, copy responses from PE1a, d, and f (including the overlays in PE1 for a and d, and the overlays in PE1OV for a and d) to CHIL2's interview and ask PE1b and c, and e (if PE1d=1) and the appropriate overlays. Else, if this is an the interview for CHIL2 and PC16=1 in CHIL1's interview (2 sampled children attend the same school) and the respondent is the same for both children, copy response from PE1f to CHIL2's interview and ask PE1a, b, c, and d, and e (if PE1d=1) and the appropriate overlays. Else, ask PE1a, b, c, d, e (if PE1d=1), and f (including all overlays).

PE1. Since the beginning of this school year, have you (or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/ grandmother/grandfather/ aunt/uncle/cousin) (or (the other adult(s) in your household))...

[IF YES TO PE1a-d AND THE RESPONDENT IS THE MOTHER OR FATHER AND HHMOM AND HHDAD = 1 OR 2 (TWO PARENTS): Did you do this, did (CHILD)'s (mother/stepmother/foster mother/father/stepfather/ foster father), (or) did both of you(, or did neither of you)?]

[ELSE IF YES TO PE1a-d and HHMOM AND HHDAD = 1 OR 2 (TWO PARENTS) AND THE RESPONDENT IS NOT THE MOTHER OR FATHER: Did (CHILD)'s (mother/stepmother/foster mother) do this, did (CHILD)'s (father/stepfather/foster father), did both of them, or did neither of them?]

		YES	NO	M	F	B	N
FSMEETNG (FSMEETNP)	a. Attended a general school meeting, for example, an open house, a back-to-school night or a meeting of a parent-teacher organization?	1	2	1	2	3	4
FSATCNFN (FSCFNP)	b. Gone to a regularly scheduled parent-teacher conference with (CHILD)'s teacher?.....	1	2	1	2	3	4
FSSPORT (FSSPORTP)	c. Attended a school or class event, such as a play, sports event, or science fair because of (CHILD)?	1	2	1	2	3	4
FSVOLNTR (FSVOLNTP)	d. Acted as a volunteer at the school or served on a committee?	1	2	1	2	3	4
FSVOLCLS	e. Served as a volunteer in (CHILD'S) classroom?.....	1	2				
FSFUNDRS	f. Participated in fundraising for the school?	1	2				

If PE1a, b, c, or d = 2 (did not go to a meeting, conference, event, or volunteer), ask PE1OV, else go to PE2.

PE1OV. Has (CHILD)'s school (had this type of meeting/had a school or class event that (he/she) was involved in/offered parents a chance to volunteer) this school year?

FSHADMEE YES 1
 FSHADCN NO 2
 FSHADSP0
 FSHADVOL

If this is the interview for CHILD2 and PC16=1 in CHILD1's interview (2 sampled children attend the same school) and the respondent is the same for both children, copy answer for PE2 and PE3 from CHILD1's interview to CHILD2 and go to PE4. Else, ask PE2.

PE2. During this school year, how many times have you (or (CHILD)'s (mother/stepmother/foster mother/father/ stepfather/foster father/grandmother/ grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)) gone to meetings or participated in activities at (CHILD)'s school?

FSFREQ TIMES.....

If PE1d = 1 or PE1f=1 (volunteered or participated in fundraising), ask PE3. Else, go to PE4.

PE3. Since the beginning of this school year, how many hours have you [(or (CHILD)'s (mother/ stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/ cousin) (or (the) other adult(s) in your household)] participated in (volunteering) (and) (fundraising) at (CHILD)'s school?

FSVOLHRS ||
 HOURS

School Practices

PE4. We're also interested in times the school contacted you without your having contacted them first. During this school year, have any of (CHILD)'s teachers or (his/her) (school/current school)...
 [IF YES TO PE4a-c: Have they done that 1 to 2 times or 3 or more?]

		YES	NO	1-2 TIMES	3+ TIMES
FSNOTES	a. Sent your family personal notes or E-mails specifically about (CHILD)?	1	2	1	2 (FSNOTEP)
FSMEMOS	b. Provided newsletters, memos or notices addressed to all parents?	1	2	1	2 (FSMEMOP)
FSPHONE	c. Called you on the phone?	1	2	1	2 (FSPHONEP)

If (PB6/PB7 (grade/equivalent) = T, K, P, or 1 through 5) or [(PB7 (grade equivalent) = U) and (AGE2002 >= 4 and <= 11)], ask a–g of PE5. Else, ask a–i of PE5.

PE5. For each statement that I read you, please tell me how well (CHILD)'s (school/current school) has been doing the following things during this school year:
 [IF NECESSARY, READ AFTER STATEMENTS FOLLOWING THE FIRST STATEMENT:
 Would you say (his/her) (school/current school) does this very well, just O.K., not very well, or doesn't do it at all.]
 [ACCEPT "DON'T KNOW" AS AN ANSWER.]³

		Does it very <u>well</u>	Just <u>O.K.</u>	Not very <u>well</u>	Doesn't do it <u>at all</u>	<u>DK</u>
FSSPPERF	a. Lets you know between report cards how (CHILD) is doing in school. Would you say (CHILD)'s (school/current school) does this very well, just O.K., not very well, or doesn't do it at all?	1	2	3	4	-8
FSSPCDEV	b. Helps you understand what children at (CHILD)'s age are like	1	2	3	4	-8
FSSPVOLN	c. Makes you aware of chances to volunteer at the school	1	2	3	4	-8
FSSPHOME	d. Provides workshops, materials, or advice about how to help (CHILD) learn at home.....	1	2	3	4	-8
FSSPSERV	e. Provides information on community services to help (CHILD) or your family	1	2	3	4	-8
FSSPHW	f. Provides information about how to help (CHILD) with (his/her) homework	1	2	3	4	-8
FSSPCOUR	g. Provides information about why (CHILD) is placed in particular groups or classes	1	2	3	4	-8
FSSPCOLL	h. Provides information on how to help (CHILD) plan for college or vocational school.....	1	2	3	4	-8
FSSPWORK	i. Provides information about how to help (CHILD) plan for work after (he/she) completes (his/her) education	1	2	3	4	-8

If this is the interview for CHILD1 and PA8 = 2 or 91 (respondent speaks language other than English), ask PE6. Else, if this is the interview for CHILD2 and PA8 = 2 or 91 (respondent speaks language other than English) and in CHILD1's interview PC16 = 1 (2 sampled children attend the same school) and the respondent for both children is the same, copy parent/guardian's CHILD1 response to PE6 and PE7 for CHILD2 and go to box after PE7. Else, if this is the interview for CHILD2 and PA8 = 2 or 91 (parent respondent speaks language other than English) and the respondent is not the same for both children, ask PE6. Else, go to box after PE7.

³ Interviewers were instructed to accept "don't know" as an answer because it was expected that some parents would not know whether a school had done a particular practice. To facilitate analysis and scaling of the variables, "don't know" answers were imputed. Imputation flags for each variable were set to 4 if "don't know" was the original answer provided by the respondent.

PE9. Do you have a say in decisions about (CHILD)'s placement in particular classes?

FEPLCMNT YES 1
 NO 2

PE10. Have you ever requested that (he/she) get or not get a particular teacher or course at (his/her) school?

FEPARTIC YES 1
 NO 2

If this is the interview for CHILD2 and PC16 = 1 in CHILD1's interview (both children attend same school, and the respondent is the same for both interviews), copy PE11a, c, and d in CHILD1's interview to CHILD2's interview and ask b. Else, ask a-d of PE11.

PE11. Would you say that you are very satisfied, somewhat satisfied, somewhat dissatisfied or very dissatisfied . . .
 [1 = VERY SATISFIED; 2 = SOMEWHAT SATISFIED; 3 = SOMEWHAT DISSATISFIED; 4 = VERY DISSATISFIED]

		<u>VERY</u>	<u>SOMEWHAT</u>	<u>SOMEWHAT</u>	<u>VERY</u>
		<u>SATISFIED</u>	<u>SATISFIED</u>	<u>DISSATISFIED</u>	<u>DISSATISFIED</u>
FC SCHOOL	a. With the school (CHILD) attends this year?	1	2	3	4
FC TEACHR	b. With the teachers (CHILD) has this year?	1	2	3	4
FC STDS	c. With the academic standards of the school?	1	2	3	4
FC ORDER	d. With the order and discipline at the school?	1	2	3	4

PF2. In an average week, how many hours does (CHILD) spend on homework outside of school?

FHWKHS

|_|_|_|
HOURS

LESS THAN AN HOUR BUT NOT ZERO..... 99

PF3. How do you feel about the amount of homework (CHILD) is assigned? Would you say...

FHAMOUNT

The amount is about right, 1
It's too much, or..... 2
It's too little? 3

PF4. Is there a place in your home that is set aside for (him/her) to do homework?

FHPLACE

YES 1
NO 2
CHILD DOES NOT DO
HOMEWORK AT HOME 3

PF5. Do you (or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father) (or another adult in your household) check to see that (his/her) homework is done?

FHCHECK

YES 1
NO 2

PF6. Have any of the following people helped (CHILD) with (his/her) homework either at home or somewhere else during this school year? How about...

YES NO

		If any HH member is child's mother, ask a (if 2 mothers, use PF6d for mother with value for MOMTYPE2).	
FHMOMH	a.	(You/(CHILD)'s mother/stepmother/foster mother)?	1 2
		If any HH member is child's father, ask b (if 2 fathers, use PF6d for father with value for DADTYPE2).	
FHDADH	b.	(You/(CHILD)'s father/stepfather/ foster father)?	1 2
		If any HH member is a sibling and is no more than 1 year younger than the child and not under age 5 (RELATN[n] = 3, 4, and AGE >= 5 and AGE >= (sampled child's current age) - 1), ask c.	
FHSIBH	c.	(You/You or (CHILD)'s (brother) (or) (sister))?(/CHILD)'s (brother) (or) (sister))?	1 2
		If any HH member is age 18 or older and ((a second mother/father) or (not a parent or sibling)), ask d.	
FHHHADLH	d.	(You/You or another adult in your household/Another adult in your household)?	1 2
FHNHADLH	e.	A tutor, someone at an after-school program, or an adult who does not live in your household?	1 2

If any PF6 a-e = 1 (someone has helped child with homework) and PF1 = 1, autocode PF7 = 1. Else, if any PF6 a-e = 1 (someone has helped child with homework), ask PF7. Else, go to PGINTRO.

PF7. During this school year, how often have you (or any of the people we just mentioned) helped (him/her) with (his/her) homework? Would you say...
 [DISPLAY RESPONSE CATEGORIES UP TO RESPONSE FOR PF1.]

FHHELP

- Less than once a week, 1
- 1 to 2 days a week, 2
- 3 to 4 days a week, or 3
- 5 or more days a week? 4

Family Involvement Outside of School [PATH = All]

PGINTRO. Now I'd like to talk with you about (CHILD)'s activities with family members in the past week.

If (PB6/PB7 (grade/equivalent) = K, T, P or 1 through 3) or [(PB7 (grade equivalent) = U) and (AGE2002 <= 9)], ask PG1. Else, go to box after PG1.

PG1. How many times have you or someone in your family read to (CHILD) in the past week? Would you say . . .

FOREADTO	Not at all,	1
	Once or twice,	2
	3 or more times, or	3
	Every day?	4

If (PB6/PB7 (grade/equivalent) = K, T, P, 1-5) or [(PB7 (grade equivalent) = U) and (AGE2002 <= 11)], ask PG2. Else, if (PB7/PB7 (grade/equivalent) = 6 through 12) or [(PB7 (grade equivalent) = U) and (AGE2002 >= 12)], ask PG3.

PG2. In the past week, have you or has someone in your family done the following things with (CHILD)?

		<u>YES</u>	<u>NO</u>
FOSTORY	a. Told (CHILD) a story?	1	2
FOCRAFTS	b. Did arts and crafts, for example, coloring, painting, pasting, or using clay?	1	2
FOSPORTS	c. Played sports, active games, or exercised together?	1	2
FOCHORE	d. Involved (CHILD) in household chores like cooking, cleaning, picking up clothes, setting the table, or caring for pets?	1	2
FOBUILD	e. Worked on another type of project with (CHILD) that you didn't think of as a chore, like building, making, or fixing something?	1	2
FOHIST	f. Talked with (CHILD) about (his/ her) family history or ethnic heritage?	1	2
FOGAMES	g. Played board games or did puzzles with (CHILD)?	1	2

Go to PG4.

YUTH

PG3. In the past week, have you or has someone in your family done the following things with (CHILD)?

		<u>YES</u>	<u>NO</u>
FOBUILD	a. Worked on a project with (CHILD), like arts and crafts, building, making, or fixing something?	1	2
FOSPORTS	b. Played a sport or exercised together?.....	1	2
FORESPON	c. Discussed with (CHILD) how (he/she) would manage (his/her) time?.....	1	2

PG4. In the past month, that is, since (MONTH) (DAY), have you or has someone in your family done the following things with (CHILD)?

		<u>YES</u>	<u>NO</u>
FOLIBRAY	a. Visited a library?	1	2
FOCONCRT	b. Gone to a play, concert, or other live show?	1	2
FOMUSEUM	c. Visited an art gallery, museum, or historical site?.....	1	2
FOZOO	d. Visited a zoo or aquarium?.....	1	2
FORELIG	e. Attended an event sponsored by a religious group?.....	1	2
FOCOMMUN	f. Attended an event sponsored by a community or ethnic group?	1	2
FOSPRTEV	g. Attended an athletic or sporting event (outside of school) in which (CHILD) was not a player?	1	2

If any activity in PG4 = 1, ask PG5.

PG5. Who did the activities you just told me about with (CHILD) in the past month? How about...

		If any HH member is child's mother, ask a (if 2 mothers, use PG5c for mother with value for MOMTYPE2).	
FOMOMA	a. (You/(CHILD)'s mother/stepmother/foster mother)?	1	2
		If any HH member is child's father, ask b (if 2 fathers, use PG5c for second father with value for DADTYPE2).	
FODADA	b. (You/(CHILD)'s father/stepfather/foster father)?	1	2
		If any HH member is age 18 or older and (a second mother/father) or (not a parent), ask c.	
FOHHADLA	c. (You/You or another adult in your household/Another adult in your household)?.....	1	2
FONHADLA	d. Other adults who do not live in your household (other than (CHILD)'s (mother/father/parents)?.....	1	2

If PATH = E or [HOMSCFLG = 1 (home schooled but attends regular school too) and [(PB7 (grade equivalent) = T, K, P or 1 – 5) or (PB7 (grade equivalent) = U) and (AGE2002 >= 4 and <= 11)], ask a, b, and c of PG6. Else, if HOMSCFLG = -1 (home schooled only) and [(PB7 (grade equivalent) = T, K, P, or 1 – 5) or ((PB7 (grade equivalent) = U) and (AGE2002 >= 4 and <= 11))], ask b and c of PG6. Else, if PATH = H and HOMSCFLG = -1 (home schooled only) and (PB7 = 6-12 or (PB7=U and AGE2002 >= 12)) ask b,c,d,e,f. Else, ask all of PG6.

PG6. Now, I'd like to ask about how often you talk to (CHILD) about various subjects. During the past month, how frequently have you [or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)] talked to (CHILD) about ...

[IF NECESSARY, READ AFTER SECOND STATEMENT: Would you say never, sometimes, or often?]

		<u>NEVER</u>	<u>SOME- TIMES</u>	<u>OFTEN</u>
FOTSCHL	a. (His/her) experiences in school? Would you say never, sometimes, or often?	1	2	3
FOTFRND	b. (His/her) friends?	1	2	3
FOTTRBL	c. Things that are troubling (him/her)?	1	2	3
FOTDRUG	d. The subjects of drugs or alcohol?	1	2	3
FOTFUTUR	e. Plans for further education after high school?	1	2	3
FOTWORK	f. Plans for work after (CHILD) finishes (his/her) education?	1	2	3

PG7. Do you have a home computer that (CHILD) uses?

FOCOMP YES 1 (GO TO PG8)
 NO 2 (GO TO BOX ABOVE PG9)

PG8. In a typical week, about how many hours does (CHILD) use the computer at home?

FOCOMPHR
 HOURS
 LESS THAN AN HOUR BUT NOT ZERO..... 99

If PG7 = 2 (no home computer, refused, don't know), do not ask PG9f. If PATH = H and HOMSCFLG = -1 (home schooled only), do not ask PG9c. If PATH = E or [PATH = H and ((PB7 (grade equivalent) = K - 5) or (PB7 (grade equivalent) = U and AGE2002 >= 4 and <= 11))], ask a, b, c, and f of PG9. Else, ask all of PG9.

PG9.	Are there family rules for (CHILD) about . . .		<u>YES</u>	<u>NO</u>
FORBED	a. What time (he/she) goes to bed on school nights?	1		2
FORTVPRG	b. Rules about what TV programs or how much TV (he/she) is allowed to watch?	1		2
FORHW	c. Rules about doing homework?	1		2
FORNIGHT	d. Rules about when (he/she) needs to be home at night?	1		2
FORKNOW	e. Rules about letting you or other household members know where (CHILD) is when (he/she) is not at home, (school), or some other usual place?	1		2
FORCOMPU	f. Rules about using the computer?	1		2

If PATH = H and HOMSCFLG = -1 (home schooled only), go to box above PG11. Else, ask PG10.

PG10. During this school year, has (CHILD) participated in any school activities such as sports teams, band or chorus, or safety patrol?

FOSCHACT	YES	1
	NO	2

If [(PB6/PB7 (grade equivalent) = 6-12) or (PB7 (grade equivalent =U) and AGE2002 > = 12)], ask all of PG11. Else, ask a-e and g of PG11.

PG11. During this school year, has (CHILD) participated in any of the following activities (outside of school)? How about...

		<u>YES</u>	<u>NO</u>
FOMUSLES	a. Music lessons (from someone other than a homeschooling parent)?	1	2
FOCHURCH	b. Church or temple youth group or religious instruction?.....	1	2
FOORGSPR	c. Organized sports like t-ball or soccer that are supervised by an adult?	1	2
FOSCOUTS	d. Scouting or other group or club activities?	1	2
FOEDUC	e. Educational programs, such as extra classes or tutoring (from someone other than a homeschooling parent)?	1	2
FOCOLEXM	f. Programs to prepare (CHILD) for college entrance exams? ..	1	2
FOOSACT	g. Any other regular (out-of-school) activities or lessons(provided by someone other than a homeschooling parent)?.....	1	2
FOOSAOS/R	SPECIFY _____		
FOARTS	h. <i>Performing and other arts</i>	1	
FOSPORUK⁴	i. <i>Other sports, adult supervision unknown</i>	1	

Health and Disability [PATH = ALL]

PHINTRO. Now I have a few questions about (CHILD)'s health.

PH1. In general, would you say (his/her) health is...

HDHEALTH	Excellent,.....	1
	Very good,.....	2
	Good,.....	3
	Fair, or.....	4
	Poor?.....	5

PH2. Has a health professional told you that (CHILD) has any of the following disabilities?

		<u>YES</u>	<u>NO</u>
HDLEARN	a. A specific learning disability?	1	2
HDRETARD	b. Mental retardation?.....	1	2
HDSPEECH	c. A speech or language delay?	1	2
HDDISTRB	d. A serious emotional disturbance?	1	2
HDDEAFIM	e. Deafness or another hearing impairment?.....	1	2
HDBLNDIM	f. Blindness or another visual impairment?	1	2
HDORTHO	g. An orthopedic impairment?	1	2
HDOTHER	h. Another health impairment lasting 6 months or more?	1	2

⁴ The variables FOARTS and FOSPORUK were added based "other, specify" responses at PG11g. These variables are coded '1' for those who gave this response, and '-1' for all others.

PH3.	Does (CHILD) have...		
HDAUTISM	a.	Autism?.....	1 2
HDADD	b.	Attention deficit disorder, ADD, or ADHD?.....	1 2
HDPDD	c.	Pervasive Developmental Disorder or PDD?	1 2

**If any PH2 or PH3 = 1, go to PH4.
Else, go to PIINTRO.**

PH4.	Is (CHILD) receiving services for (his/her) condition ...		
			<u>YES</u> <u>NO</u>
HDSCHL	a.	From your local school district?.....	1 2
HDGOVT	b.	From a state or local health or social service agency?	1 2
HDDOCTOR	c.	From a doctor, clinic, or other health care provider?.....	1 2
HDSOURCE	d.	From some other source?	1 2
HDSOUROS/R		What is that? _____	

If any PH4a, b, c, or d = 1, ask PH5. Else, go to PH8.

PH5.	Are any of these services provided through an Individualized Educational Program or Plan, or IEP?		
HNIFSP		YES	1 (GO TO PH6)
		NO	2 (GO TO PH7)

PH6.	Did you [or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father /grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)] work with the school to develop or change (his/her) IEP?		
HDDEVIEP		YES	1
		NO	2

PH7.	Is (CHILD) currently enrolled in any special education classes?		
HDSPCLEP		YES	1
		NO	2

If PH5 = 1 or PH7 = 1, ask PH8. Else, go to PH9.

YUTH

PH8. During this school year, how satisfied have you been with the following aspects of (CHILD)'s IEP or special education classes or services?
 [1 = VERY SATISFIED; 2 = SOMEWHAT SATISFIED; 3 = SOMEWHAT DISSATISFIED; 4 = VERY DISSATISFIED; 5 = DOES NOT APPLY]

		<u>VERY SATISFIED</u>	<u>SOMEWHAT SATISFIED</u>	<u>SOMEWHAT DISSATISFIED</u>	<u>VERY DISSATISFIED</u>	<u>DOES NOT APPLY</u>
HDCOMMU	a. The school's communication with your family? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?.....	1	2	3	4	5
HDTCHR	b. (CHILD)'s special needs teacher or therapists?.....	1	2	3	4	5
HDACCOM	c. The school's ability to accommodate (his/her) special needs?....	1	2	3	4	5

PH9. (Does/Do) (CHILD)'s (disability/disabilities) affect (his/her) ability to learn?

HDAFFECT YES 1
 NO 2

Child Race and Country of Origin [PATH = ALL]

DEMO

PIINTRO. Now I have some questions about (CHILD)'s background.

PI1. In what state, country, or territory was (CHILD) born?

CBORNUS ONE OF THE 50 STATES OR THE DISTRICT OF COLUMBIA..... 1 (GO TO PI2)
 ONE OF THE U.S. TERRITORIES [PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS]..... 2 (GO TO PI10V)
 (SPECIFY) _____
CTERROS/R SOME OTHER COUNTRY 3 (GO TO PI10V)
 (SPECIFY) _____
CCONTOS/R

PI10V. How old was (CHILD) when (he/she) first moved to the (United States/50 states or the District of Columbia)?

CMOVEAGE

--	--

AGE

PI2. Is (CHILD)...

[IF R GIVES ETHNICITY (E.G., HISPANIC), PROBE FOR RACE.
IF NO RACE OR MORE THAN 1 RACE GIVEN, CODE 91.]

CRACE

- White, 1 (GO TO PI3)
- Black,..... 2 (GO TO PI3)
- American Indian or Alaska Native,..... 3 (GO TO PI3)
- Asian or Pacific Islander, or 4 (GO TO PI3)
- Some other race?..... 91 (GO TO PI20V)

PI20V. [CODE RESPONSE IF PA3=91]

COTHRACE

- HISPANIC/LATINO/MEXICAN/SPANISH/
PUERTO RICAN 1 (AUTOCODE PI3=1
AND GO TO BOX AFTER PI3)
- MORE THAN ONE RACE/BIRACIAL/MULTIRACIAL 2 (GO TO PI3)
- OTHER 91 (GO TO PI3)

COTHRAOS/R

(SPECIFY) _____

PI3. Is (he/she) of Hispanic origin?

CHISPAN

- YES 1
- NO 2

Parent/Guardian Characteristics [PATH = ALL]

Mother Items

MAMA

Ask question PU2/PV2 for each sampled child. But ask questions PU1 through PU10V, PU2 through PU16, PV1 through PV10V, and PV2 through PV16 once per mother/father in household.

If there is no mother or father in the household but there are both a grandmother and grandfather and one of the grandparents is the respondent, ask section PU about the grandmother and section PV about the grandfather. Else, go to the next box.

If there are two mothers or two fathers, choose the parent with the lowest value of MOMTYPE1 or MOMTYPE2 or lowest value of DADTYPE1 or DADTYPE2 as the subject of section PU or PV. If both mothers or both fathers have the same value, use MOMTYPE1 or DADTYPE1. Else, go to next box.

If HHMOM = 1, 2, or 3 (mother or female guardian), go to PUINTRO. Else, if HHMOM = 4 (no mother/female guardian), go to box after PU16.

PUINTRO. These next questions are about ((CHILD)'s mother, (NAME)/(you (and) (CHILD)'s (mother/stepmother/foster mother/grandmother) (and) (father/stepfather/foster father/grandfather)). (Let's start with (you/(CHILD)'s mother/(CHILD)'s grandmother)).

PU1. (Are you/Is (CHILD)'s (mother/stepmother/foster mother/grandmother)) currently...

- MOMSTAT**
- Married, 1 (GO TO PU2)
 - Separated, 2 (GO TO BOX)
 - Divorced, 3 (GO TO BOX)
 - Widowed, or 4 (GO TO BOX)
 - Never married? 5 (GO TO BOX)

If any HH member other than the mother/grandmother and other than the subject child is age 16 or older ask PU10V. Else, if the only HH member other than the mother/grandmother who is age 16 or older is the subject child, autocode PU10V to 2. Else, go to PU2.

PU1OV. (Are you/Is she) currently living with a partner?

MOMLIVW YES 1
 NO 2

PU2. What was the first language (you/(CHILD)'s (mother/stepmother/foster mother/grandmother) learned to speak?

MOMLANG ENGLISH..... 1 (GO TO BOX)
 SPANISH..... 2 (GO TO BOX)
 ENGLISH AND SPANISH EQUALLY 3 (GO TO BOX)
 ENGLISH AND ANOTHER LANGUAGE EQUALLY 4 (GO TO BOX)
 SPECIFY _____
MOMLANOS/R ANOTHER LANGUAGE..... 91 (GO TO BOX)
 SPECIFY _____

If the subject of section PU is the respondent, copy the response from PA8 to PU3 and go to PU4. Else if the subject of section PU completed an AEWI interview, copy IBSPEAK into PU3. Else, if PU2 = 1 then autocode PU3 to 1. Else, ask PU3.

PU3. What language (do you/does (CHILD)'s (mother/stepmother/foster mother/grandmother)) speak most at home now?

MOMSPEAK ENGLISH..... 1
 SPANISH..... 2
 ENGLISH AND SPANISH EQUALLY 3
 ENGLISH AND ANOTHER LANGUAGE EQUALLY 4
 SPECIFY _____
 ((ENGLISH AND) OTHER LANGUAGE SPECIFIED IN PU2 (EQUALLY)) 5
 OTHER LANGUAGE SPECIFIED IN PU2..... 6
MOMSPEOS/R ANOTHER LANGUAGE..... 91
 SPECIFY _____

PU4. In what state, country, or territory (were you/was (CHILD)'s (mother/stepmother/foster mother/grandmother)) born?

- MOMBORN** ONE OF THE 50 STATES OR THE DISTRICT OF COLUMBIA,..... 1 (GO TO PU5)
 ONE OF THE U.S. TERRITORIES, [PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS] 2 (GO TO PU4OV)
MOMTEROS/R SPECIFY _____
 SOME OTHER COUNTRY 3 (GO TO PU4OV)
MOMCONOS/R SPECIFY _____

PU4OV. How old (were you/was she) when (you/she) first moved to the (United States/50 states or the District of Columbia)?

MOMUSAGE |__| |__|
 AGE

PU5. [Are you/Is she]...
 [IF R GIVES ETHNICITY (E.G., HISPANIC), PROBE FOR RACE.
 IF NO RACE OR MORE THAN 1 RACE GIVEN, CODE 91.]

- MOMRACE** White, 1 (GO TO PU6)
 Black,..... 2 (GO TO PU6)
 American Indian or Alaska Native, 3 (GO TO PU6)
 Asian or Pacific Islander, or 4 (GO TO PU6)
 Some other race? 91 (GO TO PU5OV)

PU5OV. [CODE RESPONSE IF PU5=91]

- MOTHRACE** HISPANIC/LATINO/MEXICAN/SPANISH/
 PUERTO RICAN 1 (AUTOCODE PU6=1
 AND GO TO PU7)
 MORE THAN ONE RACE/BIRACIAL/MULTIRACIAL 2 (GO TO PU6)
 OTHER 91 (GO TO PU6)
MOTHRAOS/R (SPECIFY) _____

PU6. (Are you/Is she) of Hispanic origin?

- MOMHISP** YES 1
 NO 2

MAMA

PU7. What is the highest grade or year of school that (you/(CHILD)'s (mother/stepmother/foster mother/grandmother)) completed?

- | | | |
|-----------------|--|----------------------------|
| MOMGRADE | UP TO 8TH GRADE..... | 1 (ENTER GRADE, GO TO PU8) |
| MOMGRAD1 | 9TH TO 11TH GRADE..... | 2 (ENTER GRADE, GO TO PU8) |
| MOMGRAD2 | 12TH GRADE BUT NO DIPLOMA..... | 3 (GO TO PU8) |
| | HIGH SCHOOL DIPLOMA/EQUIVALENT..... | 4 (GO TO PU9) |
| | VOC/TECH PROGRAM AFTER HIGH SCHOOL
BUT NO VOC/TECH DIPLOMA..... | 5 (GO TO PU8) |
| | VOC/TECH DIPLOMA AFTER HIGH SCHOOL..... | 6 (GO TO PU8) |
| | SOME COLLEGE BUT NO DEGREE..... | 7 (GO TO PU7OV) |
| | ASSOCIATE'S DEGREE (AA, AS)..... | 8 (GO TO PU8) |
| | BACHELOR'S DEGREE (BA, BS)..... | 9 (GO TO PU9) |
| | ATTENDED BUT DID NOT COMPLETE GRADUATE OR
PROFESSIONAL SCHOOL..... | 10 (GO TO PU9) |
| | MASTER'S DEGREE (MA, MS)..... | 11 (GO TO PU9) |
| | DOCTORATE DEGREE (PHD, EDD)..... | 12 (GO TO PU9) |
| | PROFESSIONAL DEGREE BEYOND BACHELOR'S
DEGREE (MEDICINE/MD; DENTISTRY/DDS;
LAW/JD/LLB; ETC.)..... | 13 (GO TO PU9) |

PU7OV. Did (you/she) earn a vocational or technical diploma after leaving high school?

- | | | |
|-----------------|----------|---|
| MOMVOTEC | YES..... | 1 |
| | NO..... | 2 |

PU8. (Do you/Does she/Did you later receive/Did she later receive) have a high school diploma or its equivalent, such as a GED?

- | | | |
|----------------|----------|---|
| MOMDIPL | YES..... | 1 |
| | NO..... | 2 |

PU9. During the past week, did (you/(CHILD)'s (mother/stepmother/foster mother/grandmother)) work at a job for pay or income?

- | | | |
|----------------|------------------------------|----------------|
| MOMWORK | YES..... | 1 (GO TO PU11) |
| | NO..... | 2 (GO TO PU10) |
| | RETIRED..... | 3 (GO TO PU12) |
| | DISABLED/UNABLE TO WORK..... | 4 (GO TO PU12) |

PU10. (Were you/Was she) on leave or vacation from a job during the past week?

MOMLEAVE YES 1 (GO TO PU11)
NO 2 (GO TO PU12)

PU11. About how many total hours per week (do you/does she) usually work for pay or income, counting all jobs?
[IF HOURS VARY, PROBE FOR AVERAGE PER WEEK.]

MOMHOURS |_|_|_|
 WEEKLY HOURS

PU12. In the past 12 months, how many months (,if any,) (have you/has she) worked for pay or income?
[IF LESS THAN 1 MONTH, ENTER "1"]

MOMMTHS |_|_|_|
 MONTHS

If PU9 or PU10 = 1 (working or on leave/vacation), go to PU16. If PU9 =3, then autocode PU15 = 3, and go to box after PU15. If PU9 = 4, then autocode PU15 = 5, and go to box after PU15. Else, ask PU13.

PU13. (Have you/Has she) been actively looking for work in the past 4 weeks?

MOMLOOK YES 1 (GO TO PU14)
NO 2 (GO TO PU15)

PU14. What (have you/has she) been doing in the past 4 weeks to find work? (Have you/Has she)...

		<u>YES</u>	<u>NO</u>
MOMAGN	a. Checked with an employment agency?	1	2
MOMEMPL	b. Checked with an employer directly or sent a resume? .	1	2
MOMREL	c. Checked with friends or relatives?	1	2
MOMANSAD	d. Placed or answered job ads?.....	1	2

If all of PU14a-d NE 1 (not actively looking for work), go to PU15. Else, go to box after PU15.

PU15. What (were you/was she) doing most of last week? Would you say...

MOMACTY	Keeping house or caring for children or other dependents,	1
	Going to school,	2
	Retired,.....	3
	Volunteering,	4
	Unable to work, or	5
	Something else?	91
MOMACTOS/R	What was that? _____	

If PU15 = 2, autocode PU16 = 1 and go to box after PU16. Else, ask PU16.

PU16. (Are you/Is (CHILD)'s mother/stepmother/foster mother/grandmother) attending or enrolled in a school, college, university, or adult learning center, or receiving vocational education or job training [other than at (your/her) regular job]?

MOMENROL	YES	1
	NO	2

Father Items

PAPA

If there is no mother or father in the household but there are both a grandmother and grandfather and one of the grandparents is the respondent, ask section PV about the grandfather (and section PU about the grandmother). Else, go to the next box.

If there are two fathers, use the lowest value of MALGARD1/2 to select the subject of section PV. If both same sex parents have the same value of MALGARD1/2, choose the first person with that value as the subject of section PV. Else, go to next box.

**If HHDAD = 1, 2, or 3 (father or male guardian), go to PVINTRO.
Else, if HHDAD = 4 (no father or male guardian), go to box after PV16.**

PVINTRO. Now I have some questions about ((CHILD)'s father, (NAME)/(you/(CHILD)'s (father/stepfather/foster father/grandfather)).

PV1. [Are you/Is (CHILD)'s (father/stepfather/foster father/grandfather)] currently...

DADSTAT

Married,	1	(GO TO PV2)
Separated,	2	(GO TO BOX)
Divorced,	3	(GO TO BOX)
Widowed, or	4	(GO TO BOX)
Never married?	5	(GO TO BOX)

If (any HH member other than the father/grandfather and other than the subject child is age 16 or older)and (PU1OV was not asked already), ask PV1OV. Else, if the only HH member other than the father/grandfather who is age 16 or older is the subject child, autocode PV1OV to 2. Else, go to PV2.

PV1OV. (Are you/Is he) currently living with a partner?

DADLIVW

YES	1
NO	2

PV2. What was the first language (you/(CHILD)'s (father/stepfather/foster father/grandfather)) learned to speak?

- DADLANG** ENGLISH..... 1 (GO TO BOX)
 SPANISH..... 2 (GO TO BOX)
 ENGLISH AND SPANISH EQUALLY 3 (GO TO BOX)
 ENGLISH AND ANOTHER LANGUAGE EQUALLY 4 (GO TO BOX)
 SPECIFY _____
DADLANOS/R ANOTHER LANGUAGE..... 91 (GO TO BOX)
 SPECIFY _____

If the subject of section PV is the respondent, copy the response from PA8 to PV3 and go to PV4. Else if the subject of section PV completed an AEWI interview, copy IBSPEAK into PV3. Else, if PV2 = 1 then autocode PV3 to 1. Else, ask PV3.

PV3. What language (do you/does (CHILD)'s (father/stepfather/foster father/grandfather)) speak most at home now?

- DADSPEAK** ENGLISH..... 1
 SPANISH..... 2
 ENGLISH AND SPANISH EQUALLY 3
 ENGLISH AND ANOTHER LANGUAGE EQUALLY 4
 SPECIFY _____
 ((ENGLISH AND) OTHER LANGUAGE SPECIFIED
 IN PV1 (EQUALLY))..... 5
 OTHER LANGUAGE SPECIFIED IN PV2 6
DADSPEOS/R ANOTHER LANGUAGE..... 91
 SPECIFY _____

PV4. In what state, country, or territory (were you/was (CHILD)'s (father/stepfather/foster father/grandfather) born?

- DADBORN** ONE OF THE 50 STATES OR THE DISTRICT OF
 COLUMBIA,..... 1 (GO TO PV5)
 ONE OF THE U.S. TERRITORIES, [PUERTO RICO,
 GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS,
 MARIANA ISLANDS, OR SOLOMON ISLANDS] 2 (GO TO PV4OV)
DADTEROS/R SPECIFY _____
 SOME OTHER COUNTRY 3 (GO TO PV4OV)
DADCONOS/R SPECIFY _____

PV7. What is the highest grade or year of school that (you/(CHILD)'s (father/stepfather/foster father/grandfather)) completed?

- DADGRADE** UP TO 8TH GRADE..... 1 (ENTER GRADE, GO TO PV8)
- 9TH TO 11TH GRADE 2 (ENTER GRADE, GO TO PV8)
- DADGRAD1** 12TH GRADE BUT NO DIPLOMA..... 3 (GO TO PV8)
- DADGRAD2** HIGH SCHOOL DIPLOMA/EQUIVALENT 4 (GO TO PV9)
- VOC/TECH PROGRAM AFTER HIGH SCHOOL
BUT NO VOC/TECH DIPLOMA..... 5 (GO TO PV8)
- VOC/TECH DIPLOMA AFTER HIGH SCHOOL 6 (GO TO PV8)
- SOME COLLEGE BUT NO DEGREE..... 7 (GO TO PV7OV)
- ASSOCIATE'S DEGREE (AA, AS) 8 (GO TO PV8)
- BACHELOR'S DEGREE (BA, BS) 9 (GO TO PV9)
- ATTENDED BUT DID NOT COMPLETE GRADUATE OR
PROFESSIONAL SCHOOL 10 (GO TO PV9)
- MASTER'S DEGREE (MA, MS)..... 11 (GO TO PV9)
- DOCTORATE DEGREE (PHD, EDD)..... 12 (GO TO PV9)
- PROFESSIONAL DEGREE BEYOND BACHELOR'S
DEGREE(MEDICINE/MD; DENTISTRY/DDS; LAW/
JD/LLB; ETC.) 13 (GO TO PV9)

PV7OV. Did (you/he) earn a vocational or technical diploma after leaving high school?

- DADVOTEC** YES 1
- NO 2

PV8. (Do you/Does he/Did you later receive/Did he later receive) have a high school diploma or its equivalent, such as a GED?

- DADDIPL** YES 1
- NO 2

PV9. During the past week, did (you/(CHILD)'s (father/stepfather/foster father/grandfather)) work at a job for pay or income?

- DADWORK** YES 1 (GO TO PV11)
- NO 2 (GO TO PV10)
- RETIRED..... 3 (GO TO PV12)
- DISABLED/UNABLE TO WORK..... 4 (GO TO PV12)

PV10. (Were you/Was he) on leave or vacation from a job during the past week?

DADLEAVE YES 1 (GO TO PV11)
NO 2 (GO TO PV12)

PV11. About how many total hours per week (do you/does he) usually work for pay or income, counting all jobs?
[IF HOURS VARY, PROBE FOR AVERAGE PER WEEK.]

DADHOURS |_|_|_|
 WEEKLY HOURS

PV12. In the past 12 months, how many months (,if any,) (have you/has he) worked for pay or income?
[IF LESS THAN 1 MONTH, ENTER "1"]

DADMTHS |_|_|_|
 MONTHS

If PV9 or PV10 = 1 (working or on leave/vacation), go to PV16. If PV9 = 3, then autocode PV15 = 3, and go to box after PV15. If PV9 = 4, then autocode PV15 =5, and go to box after PV15. Else, ask PV13.

PV13. (Have you/Has he) been actively looking for work in the past 4 weeks?

DADLOOK YES 1 (GO TO PV14)
NO 2 (GO TO PV15)

PV14. What (have you/has he) been doing in the past 4 weeks to find work? (Have you/Has he)...

		<u>YES</u>	<u>NO</u>
DADAGN	a. Checked with an employment agency?	1	2
DADEMP	b. Checked with an employer directly or sent resume?	1	2
DADREL	c. Checked with friends or relatives?	1	2
DADANSAD	d. Placed or answered job ads?.....	1	2

If all of PV14a-d NE 1 (not actively looking for work), go to PV15. Else, go to box after PV15.

PV15. What (were you/was he) doing most of last week? Would you say...

DADACTY	Keeping house or caring for children or other dependents, ..	1
	Going to school,	2
	Retired,	3
	Volunteering,	4
	Unable to work, or	5
	Something else?.....	91
DADACTOS/R	What was that? _____	

If PV15 = 2, then autocode PV16 = 1, and go to box after PV16. Else, ask PV16.

PV16. (Are you/Is (CHILD)'s (father/stepfather/foster father/grandfather)) attending or enrolled in a school, college, university, or adult learning center, or receiving vocational education or job training [other than at (your/his) regular job]?

DADENROL	YES	1
	NO	2

Receipt of Free or Reduced-Price School Lunches [PATH = E, M, S, H if HOMSCFLG = 1]

If this is the interview for CHILD2 and PC16 = 1 in CHILD1's interview (2 sampled children attend the same school) and the respondent is the same for both children) and CHILD1's PW2 = 2 (school does not serve lunches for free or reduced price lunch), autocode CHILD1'S PW1 and PW2 to "2" (no) and go to box after PW8. If PATH = H and HOMSCFLG = -1 (home schooled only), go to box after PW8. Else, go to PW1.

PW1. Since the beginning of this school year, has (CHILD) ever received a free or reduced-price lunch at school?

LUEVER YES 1 (GO TO PW3)
 NO 2 (GO TO BOX AFTER PW1)

If this is the interview for CHILD2 and PC16 = 1 in CHILD1's interview (2 sampled children attend the same school) and the respondent is the same for both children and CHILD1's PW2 = 1, copy response for CHILD1's PW2 to CHILD2's PW2 and go to PW3. Else, ask PW2.

PW2. Does (CHILD)'s school serve school lunches for free or at a reduced price to low-income children?

LUSERVE YES 1 (GO TO PW3)
 NO 2 (GO TO BOX AFTER PW8)

PW3. Did you [or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)] fill out an application for (CHILD) to receive free or reduced price lunches this school year?

LUAPPLY YES 1
 NO 2

If (PW1 = 2 and PW3 = 1) (did not receive free/reduced price lunch but filled out an application), go to PW4.

Else, if [(PW1 = 1 and PW3 = 2) or (PW1 = 2 and PW3 = 2)] (received free/reduced price lunch but did not fill out an application, or did not get free/reduced price lunch and did not fill out an application), go to PW5. Else, if [(PW1 = 1 and PW3 = 1) (received free/reduced price lunch and filled out an application), go to PW6.

PW4. Was (CHILD) approved to receive free or reduced-price school lunches by (his/her) school?

LUAPPROV YES 1
 NO 2

If (PW1 = 2 and PW3 = 1 and PW4 = 1) (did not receive free/reduced price lunch but filled out an application and was approved), go to PW1CHK.

Else, if (PW1 = 2 and PW3 = 1 and PW4 = 2) (did not receive free/reduced price lunch but filled out an application and was not approved), go to PW6. Else, go to box after PW8.

PW1CHK1.⁵ Earlier I recorded that ((CHILD) has never received a free or reduced-price school lunch/you do not know if (CHILD) has ever received a free or reduced-price school lunch), and I also recorded that (your family applied/you don't know if your family applied) for (CHILD) to receive free or reduced-price lunches (and/but) that (he/she) was approved to receive them.

Has (CHILD) ever received a free or reduced-price lunch at school?

LUCHK1/R YES 1
 NO 2

If (PW3 = 1) (filled out an application), go to PW6. Else, go to box after PW8.

⁵ Check questions PW1CHK1, PW1CHK2, and PW3CHK were asked in order to correct previous answers that were inconsistent. They were asked both for the conditions shown in the skip boxes and for patterns of response that included "don't know" and "refused" answers (not shown in skip boxes).

PW5. Some students are automatically approved for free or reduced-price school lunches. Was (CHILD) automatically approved to receive free or reduced-price school lunches by (his/her) school even though you [or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/ grandmother /grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)] did not submit an application?

LUAUTO YES 1
 NO 2

If [(PW1 = 1 and PW3 = 2 and PW5 = 2) or (PW1 = 2 and PW3 = 2 and PW5 = 1)] (received free/reduced price lunch and did not fill out an application and was not automatically approved, or did not receive free/reduced price lunch and did not fill out an application but was automatically approved), go to PW1CHK2.

Else, if (PW1=1 and PW3=2 and PW5=1) (received free/reduced price lunch and did not fill out an application but was automatically approved), go to box before PW7.
Else, go to box after PW8.

PW1CHK2. Earlier I recorded that ((CHILD) has (never) received a free or reduced-price school lunch/you do not know if (CHILD) has ever received a free or reduced-price school lunch), and I also recorded that (your family did not apply/you don't know if your family applied) for (CHILD) to receive free or reduced-price lunches (and/but) that ((he/she) was (not) automatically approved to receive them/you do not know if (he/she) was automatically approved to receive them). Just to clarify, please let me ask you again...

Has (CHILD) ever received a free or reduced-price lunch at school?

LUCHK2/R YES 1
 NO 2

If (PW1CHK2 = 2 and PW1 = 2 and PW3 = 2 and PW5 = 1) (check question indicated did not receive free/reduced price lunch and this matched previous answer in PW1 and the family did not fill out an application but the child was automatically approved), go to box after PW8. Else, go to PW3CHK.

PW3CHK. I'd also like to clarify what you said about the application. Some students are automatically approved for free school lunches while others must submit an application. Did you [or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)] fill out an application for (CHILD) to receive free or reduced price lunches this school year?

LUCHK3/R YES 1
NO 2

If (PW1CHK2 = 1 and PW3CHK = 2 and PW1 = 1 and PW3 = 2 and PW5 = 2) (check questions and PW1 and PW3 all indicate that received free/reduced price lunch but did not fill out an application and was not automatically approved), go to box before PW7. Else, if PW3CHK = 1 (check question indicated that filled out an application), go to PW6.

PW6. When you filled out the application for free or reduced-price school lunches for (CHILD...

YES NO

LUFOODST

a. Did you [or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)] write a food stamp or other program case number on the application? 1 2

If PW6a= 1 (wrote case number on application), go to box after PW6. Else, go to PW6b.

LUINCOM

b. Did you [or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)] refer to income documentation from pay check stubs, income tax returns or other documents to help complete the form? 1 2

If (PW1 =1 and PW1CHK1 ne 2 and PW1CHK2 ne 2) or (PW1CHK1 = 1 or PW1CHK2= 1) (received free/reduced price lunch), go to PW7. Else, go to box after PW8.

YUTH

PW7. Has (CHILD) received a free or reduced-price school lunch at least once a week during the current school year?

LUWEEKLY YES 1
NO 2

PW8. During the last five days that (CHILD) was in school, how many school lunches did (he/she) receive free or at a reduced price?

LU5DYNUM

|_|_|
NUMBER

NONR

Involvement of the Non-Residential Parent [PATH = ALL]

If there are two same sex adoptive parents, go to box above PYINTRO. Else, if HHMOM NE 1 (no birth/adoptive mother in the household), ask about mother and set NONRTYP1 = 1. If HHDAD NE 1 (no birth/adoptive father in household), ask about father and set NONRTYP1 = 2. Else, if both HHDAD and HHMOM NE 1, ask about mother and set NONRTYP1 = 1 and ask about father and set NONRTYP2 = 2. Else, go to box above PYINTRO.

If PA5 = 2 (adoptive mother) and HHDAD NE 1 (no birth/adoptive father in the household) or PA6 = 2 (adoptive father) and HHMOM NE 1 (no birth/adoptive mother in the household), ask PX1. Else, go to PXINTRO.

PX1. You said before that you are (CHILD)'s adoptive (mother/father). Does (CHILD) have an adoptive (mother/father)?

NRADOPT1 YES 1
NRADOPT2 NO 2

If PX1 = 1 (child has adoptive mother or father), ask about adoptive parent in PXINTRO. Else, go to box above PYINTRO.

PXINTRO. Now I would like to ask you a few questions about how much contact (CHILD)'s (birth/ adoptive) (mother/father) (who doesn't live with you) has had with (him/her).

PX2. During this school year, has (CHILD) lived with you most of the time, lived with (his/her) (mother/father), or lived with each of you about equally?

- | | | |
|-----------------|---|-----------------------------|
| NRLIVAR1 | WITH RESPONDENT | 1 (GO TO PX3) |
| NRLIVAR2 | MOST OF THE TIME WITH OTHER PARENT | 2 (GO TO BOX AFTER PX8OV2) |
| | HALF AND HALF | 3 (GO TO BOX AFTER PX8OV2) |
| | OTHER PARENT DECEASED | 4 (GO TO PX3) |
| NRLIVOS1 | CHILD NEVER HAD CONTACT WITH OTHER PARENT | 5 (GO TO BOX ABOVE PYINTRO) |
| NRLIVOS2 | OTHER..... | 91 (GO TO PX3) |
| | (SPECIFY) _____ | |

PX3. How long has it been since (CHILD)'s (mother/father) lived in the same household with (CHILD), if ever?

- | | | |
|-----------------|---|-----------------------------|
| NRLIVEV1 | NEVER LIVED IN HOUSEHOLD | 0 (GO TO BOX ABOVE PX4) |
| NRLIVEV2 | NUMBER GIVEN..... | 1 (GO TO PX3OV1) |
| | CHILD NEVER HAD CONTACT WITH OTHER PARENT | 2 (GO TO BOX ABOVE PYINTRO) |

PX3OV1. (GO TO PX3OV2)
NRLIVNU1 NUMBER
NRLIVNU2

[VERIFY ENTRY]
PX3OV2. UNIT:
NRLIVUN1 DAYS..... 1
NRLIVUN2 WEEKS 2
 MONTHS..... 3
 YEARS 4

If PX2 = 4 (nonresident parent is deceased), go to box above PYINTRO. Else, if PX3 = 0 (never lived in household), go to PX4. Else, if PX3 = 2 (never had contact, refused, don't know), go to box above PYINTRO. Else, go to PX4.

PX4. How long has it been since (CHILD)'s (mother/father) last saw (him/her)?

- NRSAW1** NUMBER GIVEN..... 1 (GO TO PX4OV1)
- NRSAW2** SAW PARENT TODAY 2 (GO TO PX5)
- CHILD NEVER HAD CONTACT WITH OTHER PARENT 3 (GO TO BOX ABOVE PYINTRO)

PX4OV1. (GO TO PX4OV2)
NRSAWNU1 NUMBER
NRSAWNU2

[VERIFY ENTRY]

- PX4OV2. UNIT:
- NRSAWUN1** DAYS..... 1
 - NRSAWUN2** WEEKS 2
 - MONTHS..... 3
 - YEARS 4

If PX4 (length of time since last saw nonresidential parent) = more than 90 days, 12 weeks, or 3 months, go to PX7.

PX5. In the last 3 months, on how many days did (CHILD)'s (mother/father) see (him/her)? Your best guess is fine.

NR3MODA1
NR3MODA2 DAYS

PX6. In the past month, has (CHILD)'s (mother/father) done any of the following things with (CHILD)?
How about . . .

		<u>YES</u>	<u>NO</u>
NRLIBRA1	a. Visited a library?	1	2
NRLIBRA2			
NRCONCR1	b. Gone to a play, concert, or other live show?	1	2
NRCONCR2			
NRMUSEU1	c. Visited an art gallery, museum, or historical site?	1	2
NRMUSEU2			
NRZOO1	d. Visited a zoo or aquarium?	1	2
NRZOO2			
NRRELIG1	e. Attended an event sponsored by a religious group?	1	2
NRRELIG2			
NRCOMMU1	f. Attended an event sponsored by a community or		
NRCOMMU2	ethnic group?	1	2
NRSPRTE1	g. Attended an athletic or sporting event (outside of school)		
NRSPRTE2	in which (CHILD) was not a player?	1	2

Go to box after PX8OV2.

PX7. In the past year, about how many times has (CHILD) . . .

TIMES

NRPTHONY1	a. Talked to (his/her) (mother/father) on the phone?	_ _ _
NRPTHONY2		
NRLETTY1	b. Gotten a letter or email from (him/her)?	_ _ _
NRLETTY2		

If (PX4OV1 > 12 and PX4OV2 = 3) or (PX4OV1 > 1 and PX4OV2 = 4) then go to next box. Else ask c.

NRPERY1	c. Seen (his/her) (mother/father) in person?	_ _ _
NRPERY2		

**If ([PX7 a and PX7b = 0] and (PX7c = 0 or -1)), go to PX8.
Else, go to box above PYINTRO.**

NONR

PX8. How long has it been since (CHILD) last had any type of contact with (his/her) (mother/father)?

NRLSTCO1 NUMBER GIVEN..... 1 (GO TO PX8OV1)
NRLSTCO2 CHILD NEVER HAD CONTACT WITH OTHER PARENT 2 (GO TO BOX ABOVE PYINTRO)

PX8OV1. |__| |__| (GO TO PX8OV2)
NRLSTNU1 NUMBER
NRLSTNU2

PX8OV2. UNIT:
NRLSTUN1 MONTHS..... 1
NRLSTUN2 YEARS 2

If (PATH = H and HOMSCFLG = -1) or PX4OV1 and PX4OV2 > 12 months (child has not had contact in more than 12 months), go to box above PYINTRO. Else, ask PX9.

PX9. Since the beginning of this school year, has (CHILD)'s (mother/father) . . .

		<u>YES</u>	<u>NO</u>
NRMTCNF1	a. Attended a meeting or parent-teacher conference at (CHILD)'s school?	1	2
NRMTCNF2	b. Attended a sports, school, or class event because of (CHILD)?.....	1	2
NRSPORT1		1	2
NRSPORT2	c. Volunteered in (CHILD)'s classroom or at the school?	1	2
NRVOLNT1		1	2
NRVOLNT2			

Household Characteristics [PATH = ALL]

HOME

The following questions are asked only once per household.

PYINTRO. Now, a few questions about your household.

If an AEWI interview was conducted before the PFI interview, copy responses for PY1-PY11 and PY16-PY16OV2 to the PFI interview and go to PY12. Else, go to PY1.

HOME

PY6. How many of these additional telephone numbers are used for computer or fax lines?

*

NUMBER

If PY6 > 0, go to PY7. Else, go to box before PY9.

PY7. Some households have telephone numbers that are used both for talking and for computer or fax lines. (Is the number/Are any of the numbers) used for (a) computer or fax line(s) ever answered for talking?

*

YES 1 (GO TO NEXT BOX)
NO 2 (GO TO BOX BEFORE PY9)

If PY6 = 1 (only 1 other telephone number for computer or fax), autocode PY8= 1, and go to box before PY9. Else, ask PY8.

PY8. How many computer or fax telephone numbers are also answered for talking?

*

NUMBER

If PG7 = 1, autocode PY9 = 1. Else, ask PY9.

PY9. Do you have a computer or laptop at home?

COMPHOME

YES 1
NO 2

PY10. Do you have access to the Internet at home?

WEBHOME YES 1
 NO 2

PY11. So that we can group households geographically, may I have your ZIP code?

STFZIP/R | | | | |
 ZIP CODE

PY12. In the past 3 years, how many times has your family moved from one home or household to another?

H3YRMOVE | | |
 NUMBER

PY13. Are there any conditions in your neighborhood that make you worried about the health or safety of ((CHILD)/any of the children in your household)?

HNEIGHB YES 1
 NO 2

PY14. In the past 3 years, that is, since (DATE), has your family received benefits from Temporary Assistance for Needy Families or TANF, AFDC, or your state welfare program?

HAFDC3YR YES 1
 NO 2

If PY14=2 (no TANF in past 3 years), autocode PY15a=2 and go to PY15b. Else, ask PY15a-e.

PY15. In the past 12 months, that is since (CURRENT MONTH) of 2002, has your family received benefits from any of the following programs? How about...

		<u>YES</u>	<u>NO</u>
HTANF	a. TANF, AFDC, or your state welfare program?	1	2
HWIC	b. Women, Infants, and Children, or WIC?	1	2
HFOODST	c. Food Stamps?	1	2
HMEDIC	d. Medicaid?	1	2
HCHIP	e. Child Health Insurance Program or (STATE CHIP PROGRAM)?	1	2

PY16OV2. What was your total household income last year, to the nearest thousand?

HINCMEXT

\$|_|_|_|, |_|_|_|_|_|
AMOUNT

CLOSE1. Thank you, but we are only asking about children in a specific age or grade range. Please hold on for a moment while I check to see if there is anyone else I need to ask you about or anyone else I need to speak with. [THANK RESPONDENT.]

CLOSE2. Those are all the questions I have about (CHILD). Please hold on for a moment while I check to see if there is anyone else I need to ask about or anyone else I need to speak with. [THANK RESPONDENT.]

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**Adult Education for Work-Related Reasons Survey
of the 2003 National Household Education Surveys Program
(AEWR-NHES:2003)**

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NHES:2003 Adult Education for Work-Related Reasons

INTRO1. [READ IF RESPONDENT WAS NOT SCREENER RESPONDENT: Hello, this is (INTERVIEWER). I'm calling for the U.S. Department of Education. We are conducting a voluntary and confidential national study about education and training that adults take.]

INTRO2. The purpose of this interview is to learn about education and training that adults may take part in. We will talk about college or vocational degree programs, apprenticeships, and other kinds of courses, workshops, seminars, or training. On average, the interview takes less than 20 minutes.

Initial Background

AA1. First, I have a few questions about your background and work experience. What is the highest grade or year of school that you completed?

- IBGRADE** UP TO 8TH GRADE..... 1 (ENTER GRADE, GO TO AA3)
- IBGRAD1** 9TH TO 11TH GRADE..... 2 (ENTER GRADE, GO TO AA3)
- IBGRAD2** 12TH GRADE BUT NO DIPLOMA..... 3 (GO TO AA3)
- HIGH SCHOOL DIPLOMA/EQUIVALENT..... 4 (GO TO AA4)
- VOC/TECH PROGRAM AFTER HIGH SCHOOL BUT
NO VOC/TECH DIPLOMA..... 5 (GO TO AA3)
- VOC/TECH DIPLOMA AFTER HIGH SCHOOL..... 6 (GO TO AA3)
- SOME COLLEGE BUT NO DEGREE..... 7 (GO TO AA2)
- ASSOCIATE'S DEGREE (AA, AS)..... 8 (GO TO AA3)
- BACHELOR'S DEGREE (BA, BS)..... 9 (GO TO AA4)
- ATTENDED BUT DID NOT COMPLETE GRADUATE
OR PROFESSIONAL SCHOOL..... 10 (GO TO AA4)
- MASTER'S DEGREE (MA, MS)..... 11 (GO TO AA4)
- DOCTORATE DEGREE (PHD, EDD)..... 12 (GO TO AA4)
- PROFESSIONAL DEGREE BEYOND BACHELOR'S
DEGREE (MEDICINE/MD; DENTISTRY/DDS;
LAW/JD/LLB; ETC.)..... 13 (GO TO AA4)

AA2. Did you earn a vocational or technical diploma after leaving high school?

- IBVOCDIP** YES..... 1
- NO..... 2

AA3. (Do you have/Did you later receive) a high school diploma or its equivalent, such as a GED?

- IBDIPL** YES..... 1 (GO TO AA4)
- NO..... 2 (GO TO BOX BEFORE AA5)

INTRO3. Now, I'd like to ask you about different kinds of training or education that you may have taken during the past 12 months, that is, since (MONTH), 2002.

College or University Degree Programs For Work-Related Reasons

AB1 Display logic:
If AA1 (IBGRADE) = 9 or 10 (bachelor's degree or some graduate), display a post-baccalaureate certificate. If AA1 = 11 (master's degree), display a post-baccalaureate certificate and post-master's certificate. If AA1 =12 or 13 (doctorate or professional), display a post-baccalaureate, post-master's certificate, or post-doctoral certificate.

AB1. During the past 12 months, were you enrolled in a program to earn a college or university degree, such as an associate's, bachelor's, or graduate degree(, or to earn a post-baccalaureate certificate, post-master's certificate, or post-doctoral certificate)?

CRDEGREE YES 1 (GO TO AB2)
 NO 2 (GO TO AC1)

AB2. In what types of college degree programs were you enrolled?
 [CODE ALL THAT APPLY.]

CRTYASC⁶ ASSOCIATE'S DEGREE (AA, AS) 1
CRTYBCH BACHELOR'S DEGREE (BA, BS) 2
CRTYMAS MASTER'S DEGREE (MA, MS)..... 3
CRTYDOC DOCTORATE (PHD, EDD) 4
CRTYPRF PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE (MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.) 5
CRPOSBAC POST-BACCALAUREATE CERTIFICATE 6
CRPOSMAS POST-MASTER'S CERTIFICATE 7
CRPOSDOC POST-DOCTORAL CERTIFICATE..... 8
CRTYOTH ANOTHER DEGREE OR CERTIFICATE 91
**CRTYOS1-
 CRTYOS3/R** SPECIFY _____

For each program reported, ask AB3 (major field of study) and AB4 (work-related reasons).

AB3. What was the major subject or field of study of your (DEGREE/CERTIFICATE) program?

**CRMAJOR1-
 CRMAJOR3/R** MAJOR FIELD OF STUDY _____

⁶ The variables associated with question AB2 are counter variables, each of which represents the number of programs of a given type reported by a respondent. For example, if CRTYASC = 2, this indicates that the respondent reported two associate's degree programs.

AB4. Did you take the (DEGREE/CERTIFICATE) program in (MAJOR) for any work-related reasons, such as preparing for a career or advancing in a job or career?

CRWRREA1- YES 1
CRWRREA3 NO 2

If two or more programs were reported, go to AB6 and ask about the program taken for work-related reasons with the highest degree level. If two or more programs at the same highest level were reported for work-related reasons, ask AB5. If only one program was reported for work-related reasons, go to AB6. If none were work-related, go to AC1.

AB5. Of the (NUMBER OF DEGREE PROGRAMS) (DEGREE/CERTIFICATE) degree programs you took for work-related reasons in the past 12 months, which one is the most recent program you were enrolled in?
That is, [DISPLAY THE HIGHEST WORK-RELATED DEGREE PROGRAMS.]

CRRECENT MOST RECENT PROGRAM NUMBER

For The Highest Degree Program for Work-Related Reasons

AB6. (Let's talk about your (DEGREE/CERTIFICATE) program in (MAJOR).) Are you currently enrolled in the (DEGREE/CERTIFICATE) program, have you completed the program, or did you stop without completing it?

CRCURR CURRENTLY ENROLLED 1
COMPLETED 2
STOPPED WITHOUT COMPLETING 3

If AA5 NE 1 (not worked in the past 12 months) or AA7 = 2 (self-employed only), ask AB7a, b, e, f, and g. Else, ask all of AB7.

AB7. Did you take the (DEGREE/CERTIFICATE) program in (MAJOR) for any of the following reasons? How about ...

		<u>YES</u>	<u>NO</u>
CRRSSKIL	a. To maintain or improve skills or knowledge that you already had?.....	1	2
CRRSNWSK	b. To learn completely new skills or knowledge?.....	1	2
CRRSEMP	c. Because your employer required or recommended that you take it?	1	2
CRRSRAIS	d. To receive a promotion or pay raise?.....	1	2
CRRSCHNG	e. To help you change your job or career field, enter the workforce, or start your own business?	1	2
CRRSCERT	f. To get or keep a state or industry certificate or license?	1	2
CRRSOTH	g. Any other reason?.....	1	2
CRRSOCAT	SPECIFY _____		
CRRSOTOS/R			

**If AB7f = 1 (took for certificate or license), go to AB8.
Else, go to AB10.**

AB8. Do you or did you have to take a certification or licensing test or examination specifically to get this certificate or license?

CREXAM	YES	1
	NO	2

AB9. Did you receive your certificate or license before (MONTH), 2002 or have you not received it yet?

CRCERMO	YES	1
	NO	2
	NOT YET RECEIVED	3

AB10. For how many total credit hours were you enrolled in your (DEGREE/CERTIFICATE) program in the past 12 months?
[PROBE FOR UNIT.]

CRCRDHR |_|_|_|_|
TOTAL CREDIT HOURS
CREDIT HOURS DO NOT APPLY TO THE
CERTIFICATE PROGRAM..... 99

If CRCRDHR = 99, autocode CRCRUNT = -1.

CRCRUNT UNIT
SEMESTER HOURS 1
QUARTER HOURS..... 2
TRIMESTER HOURS 3
OTHER..... 91

CRCRUOS/R SPECIFY _____

AB11. Did you take any courses in the (DEGREE/CERTIFICATE) program over the Internet or World Wide Web in the past 12 months?

CRINTNET YES 1
 NO 2

AB12. In the past 12 months, how much of your own or your family's money did you pay for...

AMOUNT

CRTUITON a. Tuition and fees to attend the (DEGREE/
 CERTIFICATE) program? \$|_|_|_|,|_|_|_|_|

CRMATLS b. How much for books and other materials?..... \$|_|_|_|,|_|_|_|_|

**If AB12a >0 (paid some amount for tuition and fees)
and AB12b = 0 (\$0 for books or
materials), ask AB13. Else, go to AB14.**

AB13. Did the tuition and fees also include books and other materials?

CRINCBK YES 1
 NO 2

AB14. During the past 12 months, did you receive any financial support for the (DEGREE/CERTIFICATE) program that you don't have to pay back from any of the following sources? How about...

		<u>YES</u>	<u>NO</u>
CRGOVSUP	a. A local, state, or federal government?.....	1	2
CRUNISUP	b. Labor unions?.....	1	2
CRFNDSUP	c. Private foundations?.....	1	2
CRORGSUP	d. Professional or trade organizations?.....	1	2

If AB6 = 3 (stopped without completed), then autocode AB15 MONTH = 13 and go to box.

AB15. In what month and year (did you (complete/stop taking)/do you expect to complete) your (DEGREE/ CERTIFICATE) program?
 [IF DON'T KNOW, PROBE WHETHER NEVER COMPLETED OR DON'T INTEND TO COMPLETE.]

CRCOMPMM	_ _ _	_ _ _ _ _	
CRCOMPYY	MONTH	YEAR	
	NEVER COMPLETED		13
	DO NOT INTEND TO COMPLETE		14

If CRCOMPMM = 13 or 14, autocode CRCOMPYY = 13 or 14, respectively.

If AA5 = 1 and AA7 NE 2 (worked in the past 12 months and not self-employed only), ask AB16. Else, go to box before AB21.

AB16. (Have you been/Were you) employed (other than your self-employment) during the time you (have been/were) taking the (DEGREE/CERTIFICATE) program?

CRWORK	YES	1	(GO TO AB17)
	NO	2	(GO TO BOX AFTER AB20)

AB17. (Are you taking/Did you take) the (DEGREE/CERTIFICATE) program at your workplace?

CRWRKPL	YES	1
	NO	2

AB18. (Are you taking/Did you take) the (DEGREE/CERTIFICATE) program during your regular work hours?

CRWRKHR YES 1
NO 2

AB19. (Are/Were) you being paid by your employer during the hours you (are/were) taking the (DEGREE/CERTIFICATE) program?

CREMPAID YES 1
NO 2

AB20. Did your employer...

		<u>YES</u>	<u>NO</u>
CREMPTUI	a. Reimburse you or pay directly for all or part of the tuition and fees for the (DEGREE/CERTIFICATE) program?	1	2
CREMPMAT	b. Reimburse you or pay directly for all or part of the costs of books and other materials?	1	2

If AA6 = 1 (self-employed in the past 12 months), go to AB21. Else, go to AB22.

AB21. Were any of the costs for tuition and fees or for books and materials paid for through your self-employed business?

CRSLFPAY YES 1
NO 2

AB22. As a result of participating in the (DEGREE/CERTIFICATE) program, have you . . .

		<u>YES</u>	<u>NO</u>
CRPIMPSK	a. Improved skills and knowledge you already had?.....	1	2
CRPLRNSK	b. Learned entirely new skills?	1	2
CRPINCR	c. Increased your employability in the labor market?	1	2
CRPADVNC	d. Improved your ability to advance in your career?	1	2
CRPNEWJB	e. Gotten a new job or position, changed your career field, or started your own business?	1	2
CRPMONEY	f. Made more money?.....	1	2
CRPOTH	g. Anything else?.....	1	2
CRPOTCAT	SPECIFY _____		
CRPOS/R			

For the Most Recent Vocational/Technical Diploma Program

AC6. (Let's talk about your (VOC/TECH) program in (MAJOR).) Are you currently enrolled in the (VOC/TECH) program, have you completed the program, or did you stop without completing it?

VOCURR CURRENTLY ENROLLED 1
 COMPLETED 2
 STOPPED WITHOUT COMPLETING 3

If AA5 NE 1 (not worked in the past 12 months) or AA7 = 2 (self-employed only), ask AC7a, b, e, f, and g. Else, ask all of AC7.

AC7. Did you take the (VOC/TECH) program in (MAJOR) for any of the following reasons? How about ...

		<u>YES</u>	<u>NO</u>
VORSSKIL	a. To maintain or improve skills or knowledge that you already had?.....	1	2
VORSNWSK	b. To learn completely new skills or knowledge?.....	1	2
VORSEMP	c. Because your employer required or recommended that you take it?	1	2
VORSRAIS	d. To receive a promotion or pay raise?.....	1	2
VORSCHNG	e. To help you change your job or career field, enter the workforce, or start your own business?	1	2
VORSCERT	f. To get or keep a state or industry certificate or license?	1	2
VORSOTH	g. Any other reason?.....	1	2
VORSOCAT	SPECIFY _____		
VORSOTOS/R			

If AC7f = 1 (took for certificate or license), go to AC8. Else, go to AC10.

AC8. Do you or did you have to take a certification or licensing test or examination specifically to get this certificate or license?

VOEXAM YES 1
 NO 2

AC9. Did you receive your certificate or license before (MONTH), 2002 or have you not received it yet?

VOCERWN YES 1
 NO 2
 NOT YET RECEIVED 3

AC14. During the past 12 months, did you receive any financial support for the (VOC/TECH) program that you don't have to pay back from any of the following sources? How about. . .

		<u>YES</u>	<u>NO</u>
VOGOVSUP	a. A local, state, or federal government?.....	1	2
VOUNISUP	b. Labor unions?.....	1	2
VOFNDSUP	c. Private foundations?.....	1	2
VOORGSUP	d. Professional or trade organizations?.....	1	2

If AC6 = 3 (stopped without completed), then autocode AC15 MONTH = 13 and go to box.

AC15. In what month and year (did you (complete/stop taking)/do you expect to complete) your (VOC/TECH) program?
 [IF DON'T KNOW, PROBE WHETHER NEVER COMPLETED OR DON'T INTEND TO COMPLETE.]

VOCOMPMM	_ _ _	_ _ _ _ _	
VOCOMPYY	MONTH	YEAR	
	NEVER COMPLETED		13
	DO NOT INTEND TO COMPLETE		14

If VOCOMPMM = 13 or 14, autocode VOCOMPYY = 13 or 14, respectively.

If AA5 = 1 and AA7 NE 2 (worked in the past 12 months and not self-employed only), ask AC16. Else, go to box before AC21.

AC16. (Have you been/Were you) employed (other than your self-employment) during the time you (have been/were) taking the (VOC/TECH) program?

VOWORK	YES	1	(GO TO AC17)
	NO	2	(GO TO BOX AFTER AC20)

AC17. (Are you taking/Did you take) the (VOC/TECH) program at your workplace?

VOWRKPL	YES	1
	NO	2

AC18. (Are you taking/Did you take) the (VOC/TECH) program during your regular work hours?

VOWRKHR	YES	1
	NO	2

AC19. (Are/Were) you being paid by your employer during the hours you (are/were) taking the (VOC/TECH) program?

VOEMPAID YES 1
NO 2

AC20. Did your employer...

		<u>YES</u>	<u>NO</u>
VOEMPTUI	a. Reimburse you or pay directly for all or part of the tuition and fees for the (VOC/TECH) program?	1	2
VOEMPMAT	b. Reimburse you or pay directly for all or part of the costs of books and other materials?	1	2

If AA6 = 1 (self-employed in the past 12 months), go to AC21. Else, go to AC22.

AC21. Were any of the cost for tuition and fees or for books and materials paid for through your self-employed business?

VOSLFPAY YES 1
NO 2

AC22. As a result of participating in the (VOC/TECH) program, have you . . .

		<u>YES</u>	<u>NO</u>
VOIMPSK	a. Improved skills and knowledge you already had?.....	1	2
VOPLRNSK	b. Learned entirely new skills?	1	2
VOPINCR	c. Increased your employability in the labor market?	1	2
VOPADVNC	d. Improved your ability to advance in your career?	1	2
VOPNEWJB	e. Gotten a new job or position, changed your career field, or started your own business?	1	2
VOPMONEY	f. Made more money?.....	1	2
VOPOTH	g. Anything else?.....	1	2
VOPOTCAT	SPECIFY _____		
VOPOS/R			

Apprenticeship Programs

AD1. During the past 12 months, were you in a formal apprenticeship program leading to journeyman status in a skilled trade or craft?

APPRENTI YES 1 (GO TO AD2)
 NO 2 (GO TO AE1)

AD2. In what trade or craft did you apprentice?

APTRADE/R TRADE OR CRAFT _____

AD3. Are you currently enrolled in the (TRADE) apprenticeship program, have you completed the program, or did you stop without completing it?

APCURR CURRENTLY ENROLLED 1
 COMPLETED 2
 STOPPED WITHOUT COMPLETING 3

If AA5 NE 1 (not worked in the past 12 months) or AA7 = 2 (self-employed only), go to AD4b. Else, go to AD4a.

AD4. Who (provides/provided) the program? (Is/Was) it . . .

		<u>YES</u>	<u>NO</u>
AEMPLOY	a. Your employer?	1	2
APUNION	b. A labor union?	1	2
APSTAGOV	c. The local or state government?	1	2
APFEDGOV	d. The federal government?	1	2
APOTHER	e. Anyone else?	1	2
APOTHEOS/R	Who (is/was) that? _____		

If AA5 NE 1 (not worked in the past 12 months) or AA7 = 2 (self-employed only), ask AD5a, b, e, f, and g. Else, ask all of AD5.

AD9. (Not counting your self-employment,) (Do/Did) you take the classroom instruction for the (TRADE) apprenticeship at your workplace?

APWRKPL YES 1
 NO 2

AD10. Did you take any instruction for your apprenticeship over the Internet or World Wide Web in the past 12 months?

APINTNET YES 1
 NO 2

AD11. In the past 12 months, how much of your own or your family's money did you pay for . . .

AMOUNT

APTUITON a. Tuition and fees to attend the (TRADE) apprenticeship program? \$|_|_|_|,|_|_|_|_|

APMATLS b. How much for books and other materials?..... \$|_|_|_|,|_|_|_|_|

If AD11a >0 (paid some amount for tuition and fees) and AD11b = 0 (\$0 for books or materials), ask AD12. Else, go to AD13.

AD12. Did the tuition and fees also include books and other materials?

APINCBK YES 1
 NO 2

AD13. During the past 12 months, did you receive any financial support that you don't have to pay back from any of the following sources? How about...

YES NO

APGOVSUP	a.	A local, state, or federal government?.....	1	2
APUNISUP	b.	Labor unions?.....	1	2
APFNDSUP	c.	Private foundations?.....	1	2
APORGSUP	d.	Professional or trade organizations?.....	1	2

If AD3= 3 (stopped without completed), then autocode AD14 MONTH = 13 and go to box.

AD14. In what month and year (did you (complete/stop taking)/do you expect to complete) the apprenticeship program?

APCOMPMM
APCOMPYY

____|____| ____|____|____|____|
MONTH YEAR

NEVER COMPLETED 13
DO NOT INTEND TO COMPLETE 14

If APCOMPMM = 13 or 14, autocode APCOMPYY = 13 or 14, respectively.

If AA5 = 1 and AA7 NE 2 (worked in the past 12 months and not self-employed only), ask AD15. Else, go to box before AD16.

AD15. (Not counting your self-employment,) (Did/did) your employer . . . YES NO

APEMPTUI	a. Reimburse you or pay directly for all or part of the tuition and fees for the (TRADE) apprenticeship program?	1	2
APEMPMAT	b. Reimburse you or pay directly for all or part of the costs of books and other materials?	1	2

If AA6 = 1 (self-employed in the past 12 months), ask AD16. Else, go to AD17.

AD16. Were any of the costs for tuition and fees or for books and materials paid for through your self-employed business?

APSLFPAY YES 1
NO 2

AD17. As a result of participating in the (TRADE) apprenticeship program, have you . . .

		<u>YES</u>	<u>NO</u>
APPIMPSK	a. Improved skills and knowledge you already had?.....	1	2
APPLRNSK	b. Learned entirely new skills?	1	2
APPINCR	c. Increased your employability in the labor market?.....	1	2
APPADVNC	d. Improved your ability to advance in your career?	1	2
APPNEWJB	e. Gotten a new job or position, changed your career field, or started your own business?	1	2
APPMONEY	f. Made more money?.....	1	2
APPOTH	g. Anything else?.....	1	2
APPOTCAT	SPECIFY _____		
APPOS/R			

Work-Related Trainings or Courses

AE1. Now I'd like to ask you about any training, workshops, seminars, courses, or classes you took for work-related reasons in the past 12 months. This includes training or classes that had an instructor and were related to a job or career, whether or not you had a job when you took them. (Not counting the (college) (or) (vocational/technical) (or) (apprenticeship) program(s) we talked about earlier,) (Did/did) you take any work-related training, workshops, seminars, or courses in the past 12 months?

WRACTY YES 1 (GO TO AE3)
 NO 2 (GO TO AE2)

AE2. How about training sessions, workshops, or classes on computer skills, the Internet, stress management, communication or diversity, or any other work-related skills or issues?

WRACTOTH YES 1 (GO TO AE3)
 NO 2 (GO TO AF1)

Roster Training

AE3. Please tell me the name and general topic for each work-related training or course you have taken during the past 12 months.
 [MAY RECORD UP TO 20 COURSES.]

CRNAME1- TRAINING NAME _____ TOPIC _____
CRRNAME19/R TRAINING NAME _____ TOPIC _____
CRSUBJ1- TRAINING NAME _____ TOPIC _____
CRSUBJ19/R TRAINING NAME _____ TOPIC _____
WRNAME1- TRAINING NAME _____ TOPIC _____
WRNAME4/R TRAINING NAME _____ TOPIC _____
WRSUBJ1-
WRSUBJ4/R⁸

AE3A. Have you taken any other training sessions, workshops or classes on computer skills, the Internet, stress management, communication or diversity, or any other work-related skills or issues during the past 12 months?

* MATRIX CORRECT 1
 RETURN TO MATRIX..... 2

Sample up to 4 trainings or courses. For each sampled training or course, ask AE4-AE17.

⁸ Variables CRNAME1–20 and CRSUBJ1–20 contain all course names and subjects collected in the interview; WRNAME1–4 and WRSUBJ1–4 contain the names and subjects of sampled courses.

AE7. (Are you taking/Did you take) the (TRAINING NAME) (training/course/seminar) for any of the following reasons? How about...

		<u>YES</u>	<u>NO</u>
WRRSSKI1- WRRSSKI4	a. To maintain or improve skills or knowledge that you already had?.....	1	2
WRRSNWS1- WRRSNWS4	b. To learn completely new skills or knowledge?.....	1	2
WRRSEMP1- WRRSEMP4	c. Because your employer required or recommended that you take it?	1	2
WRRSRAI1- WRRSRAI4	d. To receive a promotion or pay raise?	1	2
WRRSCHN1- WRRSCHN4	e. To help you change your job or career field, enter the workforce, or start your own business?	1	2
WRRSCER1- WRRSCER4	f. To get or keep a state or industry certificate or license?	1	2
WRRSOTH1- WRRSOTH4	g. Any other reason?.....	1	2
WRRSOCA1- WRRSOCA4	SPECIFY _____		
WRRSOTO1- WRRSOTO4/R			

**If AE7f = 1 (took for certificate or license), go to AE8.
Else, go to AE10.**

AE8. Do you or did you have to take a certification or licensing test or examination specifically to get this certificate or license?

WREXAM1- WREXAM4	YES	1
	NO	2

AE9. Did you receive your certificate or license before (MONTH), 2002 or have you not received it yet?

WRCERMO1- WRCERMO4	YES	1
	NO	2
	NOT YET RECEIVED	3

AE10. For how many total hours did you take the (TRAINING NAME) (training/course/seminar)?

WRCLSHR1- WRCLSHR4	_ _ _ _ TOTAL HOURS
-------------------------------	-------------------------

AE11. Did you take the (TRAINING NAME) (training/course/seminar) over the Internet or World Wide Web?

WRINTNE1- WRINTNE4	YES	1
	NO	2

AE12. How much of your own or your family's money did you pay for . . .

AMOUNT

- WRTUITO1-
WRTUITO4** a. Tuition and fees to attend the (TRAINING NAME) (training/course/seminar)?..... \$|_|_|_|,|_|_|_|_|
- WRMATLS1-
WRMATLS4** b. How much for books and other materials?..... \$|_|_|_|,|_|_|_|_|

If AE12a >0 (paid some amount for tuition and fees) and AE12b =0 (\$0 for books or materials), ask AE13. Else, go to AE14.

AE13. Did the tuition and fees also include books and other materials?

- WRINCBK1-
WRINCBK4** YES 1
NO 2

AE14. As a result of participating in the (TRAINING NAME) (training/course/seminar), have you ...

- | | <u>YES</u> | <u>NO</u> |
|--|------------|-----------|
| WRPIMPS1-
WRPIMPS4 a. Improved skills and knowledge you already had?..... | 1 | 2 |
| WRPLRNS1-
WRPLRNS4 b. Learned entirely new skills? | 1 | 2 |
| WRPINCR1-
WRPINCR4 c. Increased your employability in the labor market? | 1 | 2 |
| WRPADVN1-
WRPADVN4 d. Improved your ability to advance in your career? | 1 | 2 |
| WRPNEWJ1-
WRPNEWJ1 e. Gotten a new job or position, changed your career field,
or started your own business? | 1 | 2 |
| WRPMONE1-
WRPMONE1 f. Made more money?..... | 1 | 2 |
| WRPOTH1-
WRPOTH4 g. Anything else?..... | 1 | 2 |
| WRPOTCA1-
WRPOTCA4 SPECIFY _____ | | |
| WRPOS1-
WRPOS4/R | | |

If AA5 NE 1 (not worked in the past 12 months), go to AE17.

If AE15 = 5 or AE16 = 3 (not currently working) for any work-related courses, autocode AE15 = 5 and go to box before AE16.

AE15. How useful are the skills or knowledge you learned from the (TRAINING NAME) (training/course/seminar) for your work or career? Would you say . . .

- WRUSEFU1-
WRUSEFU4**
- Very useful, 1
 - Useful, 2
 - Somewhat useful, or 3
 - Not too useful? 4
 - NOT CURRENTLY EMPLOYED 5
 - HAVE NOT YET USED SKILLS 6

If AE15 = 5 (not currently employed), then autocode AE16 = 3 and go to AE17. If AE15 = 6 (have not yet used skills), then autocode AE16 = 2 and go to AE17. Else, go to AE16.

AE16. Have you used any of the skills or knowledge you learned from the (TRAINING NAME) (training/course/seminar) at your job or at work?

- WRUSED1-
WRUSED4**
- YES 1
 - NO 2
 - NOT CURRENTLY EMPLOYED 3

AE17. During the past 12 months, did you receive any financial support for the (TRAINING NAME) (training/course/seminar) that you don't have to pay back from any of the following sources? How about...

- | | <u>YES</u> | <u>NO</u> |
|--|------------|-----------|
| WRGOVSU1-
WRGOVSU4 a. A local, state, or federal government?..... | 1 | 2 |
| WRUNISU1-
WRUNISU4 b. Labor unions?..... | 1 | 2 |
| WRFNDSU1-
WRFNDSU4 c. Private foundations?..... | 1 | 2 |
| WRORGSU1-
WRORGSU4 d. Professional or trade organizations?..... | 1 | 2 |

For each sampled training or course, repeat AE4-AE17. If more than 4 trainings or courses were reported at AE3, go to AE18. Else, go to AE19.

AE18. We have talked about 4 trainings or courses you took in the past 12 months. The next question is about (the other (NUMBER) trainings or courses/the (TRAINING NAME) (training/course/seminar)). (Were any of the other trainings or courses/Was the (TRAINING NAME) (training/course/seminar)) ...

		<u>YES</u>	<u>NO</u>
WROCOLL	a. Taught by a college or university?.....	1	2
WROTKCOL	b. Taken at a college or university?.....	1	2
WROWWW	c. Taken through the Internet or World Wide Web?.....	1	2
WROCERT	d. Taken to get or to keep a state or industry certificate or license?	1	2

AE19. Did you or will you receive Continuing Education Units, or CEUs for...
 [DISPLAY SAMPLED TRAININGS OR COURSES. ALSO DISPLAY AE19e, IF MORE THAN FOUR TRAININGS OR COURSES.]

		<u>YES</u>	<u>NO</u>
WRCEU1	a. (TRAINING NAME1) (training/course/seminar)?	1	2
WRCEU2	b. (TRAINING NAME2) (training/course/seminar)?	1	2
WRCEU3	c. (TRAINING NAME3) (training/course/seminar)?	1	2
WRCEU4	d. (TRAINING NAME4) (training/course/seminar)?	1	2
WROCEU	e. (Any of) the other ((training/course(s)/seminar(s)) you took in the past 12 months?.....	1	2

If AA5 = 1 and AA7 NE 2 (worked in the past 12 months and not self-employed only), go to AE20. If AA7 = 2 (self-employed only), go to AE26. Else, go to AF1.

AE20. (Not counting your self-employment,) (Did/did) or does your employer provide the instruction for...
 [DISPLAY SAMPLED TRAININGS OR COURSES. ALSO DISPLAY AE20e, IF MORE THAN FOUR TRAININGS OR COURSES.]

		<u>YES</u>	<u>NO</u>
WRPROVE1	a. (TRAINING NAME1) (training/course/seminar)?	1	2
WRPROVE2	b. (TRAINING NAME2) (training/course/seminar)?	1	2
WRPROVE3	c. (TRAINING NAME3) (training/course/seminar)?	1	2
WRPROVE4	d. (TRAINING NAME4) (training/course/seminar)?	1	2
WROPROVE	e. (Any of) the other ((training/course(s)/seminar(s)) you took in the past 12 months?.....	1	2

AE21. (Which of the following trainings or courses, if any,) did you take (the (TRAINING NAME)) at your workplace? (How about...)
 [DISPLAY SAMPLED TRAININGS OR COURSES. ALSO DISPLAY AE21e, IF MORE THAN FOUR TRAININGS OR COURSES.]

		<u>YES</u>	<u>NO</u>
WRWRKPL1	a. (TRAINING NAME1) (training/course/seminar)?	1	2
WRWRKPL2	b. (TRAINING NAME2) (training/course/seminar)?	1	2
WRWRKPL3	c. (TRAINING NAME3) (training/course/seminar)?	1	2
WRWRKPL4	d. (TRAINING NAME4) (training/course/seminar)?	1	2
WROWRKPL	e. (Any of) the other ((training/course(s)/seminar(s)) you took in the past 12 months?.....	1	2

AE22. (Which of the following trainings or courses, if any,) did you take (the (TRAINING NAME)) during your regular work hours? (How about...)
 [DISPLAY SAMPLED TRAININGS OR COURSES. ALSO DISPLAY AE22e, IF MORE THAN FOUR TRAININGS OR COURSES.]

		<u>YES</u>	<u>NO</u>
WRWRKHR1	a. (TRAINING NAME1) (training/course/seminar)?	1	2
WRWRKHR2	b. (TRAINING NAME2) (training/course/seminar)?	1	2
WRWRKHR3	c. (TRAINING NAME3) (training/course/seminar)?	1	2
WRWRKHR4	d. (TRAINING NAME4) (training/course/seminar)?	1	2
WROWRKHR	e. (Any of) the other ((training/course(s)/seminar(s)) you took in the past 12 months?.....	1	2

AE23. (Again, not counting your self-employment,) (Were/were) you being paid by your employer during the hours you were taking...
 [DISPLAY SAMPLED TRAININGS OR COURSES. ALSO DISPLAY AE23e, IF MORE THAN FOUR TRAININGS OR COURSES.]

		<u>YES</u>	<u>NO</u>
WREMPAI1	a. (TRAINING NAME1) (training/course/seminar)?	1	2
WREMPAI2	b. (TRAINING NAME2) (training/course/seminar)?	1	2
WREMPAI3	c. (TRAINING NAME3) (training/course/seminar)?	1	2
WREMPAI4	d. (TRAINING NAME4) (training/course/seminar)?	1	2
WROEMPAI	e. (Any of) the other ((training/course(s)/seminar(s)) you took in the past 12 months?.....	1	2

AE24. Did your employer reimburse you or pay directly for all or part of the tuition and fees for...
 [DISPLAY SAMPLED TRAININGS OR COURSES. ALSO DISPLAY AE24e, IF MORE THAN FOUR TRAININGS OR COURSES.]

		<u>YES</u>	<u>NO</u>
WREMPMU1	a. (TRAINING NAME1) (training/course/seminar)?	1	2
WREMPMU2	b. (TRAINING NAME2) (training/course/seminar)?	1	2
WREMPMU3	c. (TRAINING NAME3) (training/course/seminar)?	1	2
WREMPMU4	d. (TRAINING NAME4) (training/course/seminar)?	1	2
WROEMPTU	e. (Any of) the other ((training/course(s)/seminar(s)) you took in the past 12 months?.....	1	2

AE25. Did your employer reimburse you or pay directly for all or part of the costs of books and other materials for...
 [DISPLAY SAMPLED TRAININGS OR COURSES. ALSO DISPLAY AE25e, IF MORE THAN FOUR TRAININGS OR COURSES.]

		<u>YES</u>	<u>NO</u>
WREMPMA1	a. (TRAINING NAME1) (training/course/seminar)?	1	2
WREMPMA2	b. (TRAINING NAME2) (training/course/seminar)?	1	2
WREMPMA3	c. (TRAINING NAME3) (training/course/seminar)?	1	2
WREMPMA4	d. (TRAINING NAME4) (training/course/seminar)?	1	2
WROEMPMA	e. (Any of) the other ((training/course(s)/seminar(s)) you took in the past 12 months?.....	1	2

If AA6 = 1 (self-employed in the past 12 months), go to AE26. Else, go to AF1.

AE26. Were any of the costs for tuition and fees or for books and materials paid for through your self-employed business for...
 [DISPLAY SAMPLED TRAININGS OR COURSES. ALSO DISPLAY AE26e, IF MORE THAN FOUR TRAININGS OR COURSES.]

		<u>YES</u>	<u>NO</u>
WRSLFPA1	a. (TRAINING NAME1) (training/course/seminar)?	1	2
WRSLFPA2	b. (TRAINING NAME2) (training/course/seminar)?	1	2
WRSLFPA3	c. (TRAINING NAME3) (training/course/seminar)?	1	2
WRSLFPA4	d. (TRAINING NAME4) (training/course/seminar)?	1	2
WROSLFPA	e. (Any of) the other ((training/course(s)/seminar(s)) you took in the past 12 months?	1	2

Factors Associated with Participation in Work-Related Educational Activities

AF1. These next questions are about how people feel about taking training courses for work-related reasons. In the past 12 months, did you have an interest in taking any (additional) work-related training, workshops, seminars, courses, or classes?

WNINTRST

YES 1 (GO TO AF2)
 NO 2 (GO TO BOX)

AF2. Did your interest lead you to actually look for any information about the training, workshops, seminars, courses, or classes?

WNLOOK

YES 1
 NO 2

If AA5 NE 1 (not worked in the past 12 months), ask only AF3d and e. If AA7 = 2 (self-employed only), ask only AF3a, c, d, and e and skip AF3b. Else, ask all of AF3.

AF3. People have different ideas about taking (additional) work-related training or courses and whether or not it might be useful to them. Please tell me what you think about the following:

		<u>YES</u>	<u>NO</u>
WNENOUGH	a. Do you feel that you have enough training to do your job well?	1	2
WNSUPER	b. Do you feel that your supervisor supports or encourages you to get more training?	1	2
WNREQ	c. Do you think that your job or work assignment requires additional training?	1	2
WNFINBEN	d. Do you think there would be any financial benefit to getting additional training?	1	2
WNAHEAD	e. Do you think more training would help you get ahead in your job or career?	1	2

If AA5 NE 1 (not worked in the past 12 months) or AA7 = 2 (self-employed only), go to box before AG1. Else, go to next box.

**If AB20a = 1 or AC20a = 1 or AD15a = 1 or AE24a-e = 1
 (reimbursement or direct pay for tuition and fees),
 then autocode AF4a = 1.**
**If AB20b = 1 or AC20b = 1 or AD15b = 1 or AE25a-e = 1
 (reimbursement or direct pay for books and materials),
 then autocode AF4b = 1.**
**If AB19 = 1 or AC19 = 1 or AE23a-e = 1 (paid while
 taking training or courses), then autocode AF4c = 1.**
**If AB17 = 1 or AC17 = 1 or AD9 = 1 or AE21a-e = 1
 (trainings or courses at workplace), then autocode
 AF4d = 1.**

AF4. Please tell me whether (your employer/any of the employers you worked for in the past 12 months) offer(s) any of the following benefits to you. How about...

		<u>YES</u>	<u>NO</u>
WNTUIT	a. Tuition reimbursement or direct tuition payment?	1	2
WNMATL	b. Reimbursement or direct payment for text books and other training materials?.....	1	2
WNTIME	c. Giving you time to take training while you were being paid?	1	2
WNWRKPL	d. Training, workshops, seminars, or work-related courses or classes at your workplace?	1	2

Work-Related Less Formal Learning Activities

If AA5 NE 1 (not worked in the past 12 months), ask AG1c, d, e, and f. Else, ask all of AG1.

AG1. Up to now, we've talked about training, workshops, seminars, programs, or courses. Now I'd like to talk with you about other ways that people learn new skills or information for work-related reasons. Please tell me if you have done any of the following things related to your job or career in the past 12 months. How about...

		<u>YES</u>	<u>NO</u>
ILDEMO	a. Received on-the-job demonstrations of equipment, techniques, or procedures by a supervisor or coworker?.....	1	2
ILSUPTR	b. Received other supervised training or mentoring on the job?...	1	2
ILSELF	c. Self-paced study using books, procedures manuals, audio tapes, or videos?	1	2
ILCOMP	d. Self-paced study using computer-based software tutorials, including CD-ROM or from the Internet?.....	1	2
ILBBAG	e. Attending "brown-bag" or informal presentations?	1	2
ILCONF	f. Attending conferences, trade shows, or conventions related to your work or profession?.....	1	2

If any of AG1a-f = 1 (participated in informal learning activities), go to AG2. Else, go to box before AH1.

AG2. Did you (attend on-the-job demonstrations/receive the supervised training or mentoring/do self-paced study/attend the brown bag or informal presentation/attend the conferences, trade shows, or convention/do any of these things) to get or to keep a state or industry certificate or license?

ILCERT	YES	1	(GO TO AG3)
	NO	2	(GO TO BOX)

AG3. Do you or did you have to take a certification or licensing test or examination specifically to get this certificate or license?

ILEXAM	YES	1
	NO	2

AG4. Did you receive your certificate or license before (MONTH), 2002 or have you not received it yet?

ILCERMO	YES	1
	NO	2
	NOT YET RECEIVED	3

If AA5 NE1 (not worked in the past 12 months), go to AG6. Else, go to AG5.

AG5. Did you do these less-formal learning activities during your work time, your own time, or both?

ILTIME	WORK TIME	1
	OWN TIME	2
	BOTH	3

AG6. As a result of doing these less-formal learning activities during the past 12 months, have you...

		<u>YES</u>	<u>NO</u>
ILPIMPSK	a. Improved skills and knowledge you already had?.....	1	2
ILPLRNSK	b. Learned entirely new skills?	1	2
ILPINCR	c. Increased your employability in the labor market?	1	2
ILPADVNC	d. Improved your ability to advance in your career?	1	2
ILPNEWJB	e. Gotten a new job or position, changed your career field, or started your own business?	1	2
ILPMONEY	f. Made more money?.....	1	2
ILPOTH	g. Anything else?.....	1	2
ILPOTCAT	SPECIFY _____		
ILPOS/R			

Remaining Background

Any background information gathered in a previous interview with the same respondent is not asked again.

AH1. Now, I would like to ask you a few more questions about your background. In what month and year were you born?

**ADOBMM
ADOBY**

|_|_| |_|_|_|_|_|
MONTH YEAR

- | | |
|------------|-------------|
| 1 JANUARY | 7 JULY |
| 2 FEBRUARY | 8 AUGUST |
| 3 MARCH | 9 SEPTEMBER |
| 4 APRIL | 10 OCTOBER |
| 5 MAY | 11 NOVEMBER |
| 6 JUNE | 12 DECEMBER |

Calculate current age for display in AH1A. If current age does not match Screener age or birth month is current month, go to AH1A. Else, go to AH2.

AH1A. That would mean that you [are (AGE)/turn (AGE) this month]. Is that right?

- * YES 1 (GO TO AH2)
 NO 2 (RETURN TO AH1)

AH2. Are you . . .
[IF RESPONDENT GIVES ETHNICITY (E.G., HISPANIC), PROBE FOR RACE. IF NO RACE OR MORE THAN ONE RACE GIVEN, CODE 91.]

- ARACE** White, 1 (GO TO AH4)
 Black,..... 2 (GO TO AH4)
 American Indian or Alaska Native, 3 (GO TO AH4)
 Asian or Pacific Islander, or 4 (GO TO AH4)
 Some other race? 91 (GO TO AH3)

AH3. [CODE RESPONSE IF AH2=91.]

AOTHRACE HISPANIC/LATINO/MEXICAN/SPANISH/
PUERTO RICAN 1 (AUTOCODE AH4=1
AND GO AH5)
MORE THAN ONE RACE/BIRACIAL/MULTIRACIAL 2 (GO TO AH4)
OTHER 91 (GO TO AH4)
ARACEOS/R SPECIFY _____

AH4. Are you of Hispanic origin?

AHISPANI YES 1
NO 2

AH5. Are you currently . . .

AMARSTAT Married, 1 (GO TO AH7)
Separated, 2 (GO TO BOX)
Divorced, 3 (GO TO BOX)
Widowed, or 4 (GO TO BOX)
Never married? 5 (GO TO BOX)

**If any HH member other than adult is age 16
or over, ask AH6. Else, go to AH7.**

AH6. Are you currently living with a partner?

ALIVWITH YES 1
NO 2

AH7. In what state, country, or territory were you born?

ABORNUS ONE OF 50 STATES OR THE DISTRICT OF
COLUMBIA 1
ONE OF THE U.S. TERRITORIES (PUERTO RICO,
GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS,
MARIANA ISLANDS, OR SOLOMON ISLANDS) 2
ATERROS/R SPECIFY _____
SOME OTHER COUNTRY 3
ACONTOS/R SPECIFY _____

AH8. About your language background, what language do you speak most at home now?

IBSPEAK	ENGLISH.....	1
	SPANISH.....	2
	ENGLISH AND SPANISH EQUALLY	3
	ENGLISH AND ANOTHER LANGUAGE EQUALLY	4
	(SPECIFY)_____	
IBSPEAOS/R	ANOTHER LANGUAGE.....	91
	(SPECIFY)_____	

**If AA5 = 1 and AH8 NE 1 (worked in the past 12 months
and not speak English most at home), go to AH9.
Else, go to AH10.**

AH9. (About your language background,) What language do you speak most at work?

ASPWRK	ENGLISH.....	1
	SPANISH.....	2
	ENGLISH AND SPANISH EQUALLY	3
	ENGLISH AND ANOTHER LANGUAGE EQUALLY	4
	(SPECIFY)_____	
ASPWRKOS/R	((ENGLISH AND) (ANOTHER LANGUAGE SPECIFIED IN AA8 (EQUALLY))	5
	ANOTHER LANGUAGE.....	91
	(SPECIFY)_____	

AH10. What is the highest grade or year of school that your mother completed?

AMOMGRD	NO SCHOOL.....	1
	LESS THAN HIGH SCHOOL DIPLOMA.....	2
	HIGH SCHOOL DIPLOMA/EQUIVALENT	3
	SOME COLLEGE BUT NO DEGREE.....	4
	ASSOCIATE'S DEGREE (AA, AS)	5
	BACHELOR'S DEGREE (BA, BS)	6
	MASTER'S DEGREE (MA, MS).....	7
	DOCTORATE DEGREE (PHD, EDD).....	8
	PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE (MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.).....	9

AH11. What is the highest grade or year of school that your father completed?

- ADADGRD**
- NO SCHOOL..... 1
 - LESS THAN HIGH SCHOOL DIPLOMA..... 2
 - HIGH SCHOOL DIPLOMA/EQUIVALENT 3
 - SOME COLLEGE BUT NO DEGREE..... 4
 - ASSOCIATE'S DEGREE (AA, AS) 5
 - BACHELOR'S DEGREE (BA, BS) 6
 - MASTER'S DEGREE (MA, MS)..... 7
 - DOCTORATE DEGREE (PHD, EDD)..... 8
 - PROFESSIONAL DEGREE BEYOND BACHELOR'S
DEGREE (MEDICINE/MD; DENTISTRY/DDS;
LAW/JD/LLB; ETC.)..... 9

**If AA5 NE 1 (not worked in the past 12 months),
autocode AH12 = 2 and AH13 = 2 and go to box before
AH15. Else, go to AH12.**

AH12. During the past week, did you work at a job for pay or income?

- IBWORK**
- YES 1 (GO TO AH14)
 - NO 2 (GO TO AH13)
 - RETIRED..... 3 (GO TO AH15)
 - DISABLED/UNABLE TO WORK..... 4 (GO TO AH15)

AH13. Were you on leave or vacation from a job during the past week?

- IBLEAVE**
- YES 1 (GO TO AH14)
 - NO 2 (GO TO BOX BEFORE
AH15)

AH14. About how many total hours per week do you usually work for pay or income (counting all jobs)?
[IF HOURS VARY, PROBE FOR AVERAGE PER WEEK.]

PAYHRS

|_|_|_|
WEEKLY HOURS

**If AA5 NE 1 (not worked in the past 12 months), then
autocode AH15 = 0 and go to AH16. Else, go to AH15.**

AH15. In the past 12 months, how many months have you worked for pay or income?

IBWORKMO

|_|_|
MONTHS

If AH12 = 1 (worked last week) or AH13 = 1 (on leave or vacation), go to AH22. Else if AH12= 3 (retired), then autocode AH18 = 3 and go to AH22. Else if AH12 =4 (unable to work), then autocode AH18 = 5 and go to AH22. Else, go to AH16.

AH16. Have you been actively looking for work in the past 4 weeks?

JOBLOOK YES 1 (GO TO AH17)
 NO 2 (GO TO AH18)

AH17. What have you been doing in the past 4 weeks to find work? Have you...

		<u>YES</u>	<u>NO</u>
JOBAGN	a. Checked with an employment agency?	1	2
JOBEMPL	b. Checked with an employer directly or sent a resume?	1	2
JOBREL	c. Checked with friends or relatives?	1	2
JOBANSAD	d. Placed or answered job ads?	1	2

If all of AH17a-d NE 1 (not actively looking for work), go to AH18. Else, go to box after AH18.

AH18. What were you doing most of last week? Would you say . . .

JOBACTY Keeping house or caring for children or other dependents, 1
 Going to school, 2
 Retired, 3
 Volunteering, 4
 Unable to work, or 5
 Something else?..... 91

JOBACTOS/R What was that? _____

If AH15 = 0 (not worked for all 12 months), then go to AH19. Else, go to AH22.

AH19. Have you ever worked at a job for pay or income?

JOBEVER YES 1 (GO TO AH20)
 NO 2 (GO TO AH21)

AH20. In what year did you last work for pay or income?

JOBLSTYY

|_|_|_|_|
YEAR

AH21. Do you plan to work at a job for pay or income in the next year?

JOBNXTYR

YES 1
NO 2

Go to AH29.

AH22. For whom (do/did) you work (at your longest job during the past 12 months) and what kind of business or industry (is/was) this?
[EMPLOYER PROBE: Name of the company, business, organization, or other employer.]
[BUSINESS/INDUSTRY PROBE: For example, TV and radio manufacturing, retail shoe store, state labor department, or farm.] [IF MORE THAN ONE JOB, COLLECT JOB WHERE R WORKS MOST HOURS.]

**EMPLNAME/R
INDUSTRY/R**

NAME OF COMPANY _____
TYPE OF INDUSTRY _____

**If AA6 = 1 (self-employed in the past 12 months),
go to AH22A. Else, go to AH23.**

AH22A. [IS THIS RESPONDENT'S OWN BUSINESS?]

AOWNBUS

YES 1
NO 2

AH23. What kind of work (are/were) you doing and what (are/were) your most important activities or duties?
[JOB PROBE: For example, electrical engineer, stock clerk, typist, or farmer]
[IMPORTANT DUTY PROBE: For example, typing, keeping account books, filing, selling cars, operating printing press, or finishing concrete.]
[IF MORE THAN ONE JOB, COLLECT JOB WHERE R WORKS MOST HOURS.]

**PROFESSN/R
DUTIES/R**

KIND OF WORK _____
IMPORTANT DUTY _____

**If AA8 > 1 (more than 1 employer) and (AH12 = 1 or
AH13 = 1) (worked last week or on leave or vacation),
then go to AH24. Else go to AH25.**

AH24. Do you currently work for (EMPLOYER/your business)?

CUREMP YES 1
NO 2

AH25. About how many years (have you worked/did you work) for (EMPLOYER/your business)?
[IF LESS THAN ONE YEAR, ENTER "1."]

CUREMPYR |_|_|_|_|
TOTAL YEARS

If AH12 = 3 (retired) or AH18 = 3 (retired), then go to AH27. Else, go to AH26.

AH26. Do you plan to leave the workforce or retire in the next year?

RETIREYR YES 1
NO 2

AH27. Counting all the locations where (EMPLOYER/your business) operates, what is the total number of persons who work for (EMPLOYER/your business)? Would you say . . .

NUMPEEP Under 10 people,..... 1
10 to 24, 2
25 to 99, 3
100 to 499, 4
500 to 999, or 5
More than 1,000 people? 6

AH28. (If you had worked for all 12 months this past year,) About how much (would/do) you (have earned/earn) before taxes and other deductions at (EMPLOYER/your business)?

EARNAMT |_|,|_|_|_|_|_|,|_|_|_|_| . |_|_|_|
AMOUNT

EARNUNT Per
HOUR 1
DAY 2
WEEK 3
BI WEEKLY 4
MONTH 5
YEAR 6
OTHER 91

EARNUNOS/R What (is/was) that? _____

AH29. Does your occupation have legal or professional requirements for continuing education or lifelong learning?

CONTREQ YES 1
 NO 2

If AH18 = 2 (going to school) or AB6 = 1 (currently enrolled in college/university programs) or AC6 = 1 (currently enrolled in vocational/technical programs) or AD3 = 1 (currently enrolled in apprenticeships) or (AE4 = 1 and AE20 NE 1) (currently enrolled in work-related courses and not employer provided), autocode AH30 = 1. Else, ask AH30.

AH30. Are you attending or enrolled in a school, college, university, or adult learning center for any reason, or receiving vocational education or job training (other than at your regular job)?

AENROL YES 1
 NO 2

If AA7 = 2 (self-employed only), go to AH33. Else, go to AH31.

AH31. Are you currently a member of a labor union or of a labor organization?

LABUNION YES 1
 NO 2

AH32. Are you currently covered by a union contract or a collective bargaining agreement?

UNIONCON YES 1
 NO 2

AH33. Have you ever heard of . . .

		<u>YES</u>	<u>NO</u>
GILIFE	a. The Lifetime Learning tax credit?	1	2
GIHOPE	b. The HOPE tax credit?	1	2

If AH33a = 1 (heard of Lifetime Learning tax credit) and R is a participant (AB1 = 1 OR AC1 = 1 OR AD1 = 1 OR OR AE1 = 1 OR AE2=1), go to AH34. Else, go to box before AH35.

AH34. Did you or will you use the Lifetime Learning tax credit for any courses you have taken in the past 12 months?

GILIFUS YES 1
NO 2

If AH33b = 1 (heard of HOPE tax credit) and R is a participant (AB1 = 1 OR AC1 = 1 OR AD1 = 1 OR OR AE1 = 1 OR AE2=1), go to AH35. Else, go to box before HHINTRO.

AH35. Did you or will you use the HOPE tax credit for any courses you have taken in the past 12 months?

GIHOPUS YES 1
NO 2

**If A14 > 0 (other telephone numbers for home use),
go to A16. Else, go to A15.**

A15. Besides this phone number, do you have any telephone numbers in your household that are used for computer or fax lines?

- * YES 1 (GO TO A16)
- NO 2 (GO TO A19)

A16. How many of these additional telephone numbers are used for computer or fax lines?

- *

NUMBER	

If A16 > 0, then go to A17. Else, go to A19.

A17. Some households have telephone numbers that are used both for talking and for computer or fax lines. (Is the number/Are any of the numbers) used for (a) computer or fax line(s) ever answered for talking?

- * YES 1 (GO TO BOX)
- NO 2 (GO TO A19)

**If A16 = 1 (only 1 other telephone number for computer
or fax), autocode A18 =1 and go to A19. Else, ask A18.**

A18. How many computer or fax telephone numbers are also answered for talking?

- *

NUMBER	

A19. Do you have a computer or laptop at home?

- COMPHOME** YES 1
- NO 2

A110. Do you have access to the Internet at home?

- WEBHOME** YES 1
- NO 2

AI11. So that we can group households geographically, may I have your ZIP code?

STFZIP/R

ZIP CODE					

**If annual salary is \$50,000 or more (AH28-EARNAMT >= 50,000 and EARNUNT = 6) and worked all 12 months (IBWORKMO = 12), autocode AI12 = 2 and go to AI12OV.
Else, go to AI12.**

AI12. In studies like this, households are sometimes grouped according to income. What was the total income of all persons in your household over the past year, including salaries or other earnings, interest, retirement, and so on for all household members?

Was it..

HINCMRNG	\$25,000 or less, or	1 (READ SET 1)
	More than \$25,000?	2 (GO TO AI12OV)

AI12OV. Was it ...

HINCM50K	\$50,000 or less, or	1 (READ SET 2)
	More than \$50,000?	2 (READ SET 3)

Was it ...

HINCOME	[SET 1]	
	\$5,000 or less.....	1
	\$5,001 to \$10,000	2
	\$10,001 to \$15,000	3
	\$15,001 to \$20,000, or.....	4
	\$20,001 to \$25,000?	5
	[SET 2]	
	\$25,001 to \$30,000	6
	\$30,001 to \$35,000	7
	\$35,001 to \$40,000	8
	\$40,001 to \$45,000, or.....	9
	\$45,001 to \$50,000	10
	[SET 3]	
	\$50,001 to \$60,000,	11
	\$60,001 to \$75,000,	12
	\$75,001 to \$100,000, or.....	13
	Over \$100,000?	14

APPENDIX B

SUMMARY OF WEIGHTING AND SAMPLE VARIANCE ESTIMATION VARIABLES

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B-1. Summary of weighting and sample variance estimation variables

NHES data file	Full sample weight	Computing sampling errors					Approximating sampling errors
		Replication method (WesVar, SUDAAN ¹)			Taylor-series method (SUDAAN, Stata, SAS 8 ²)		DEFT (Average root design effect)
		Respondent ID	Replicate weights	Jackknife method	Sample design	Nesting variables	
NHES:1991 Early Childhood Education <ul style="list-style-type: none"> ■ Primary file ■ Preprimary file 	EWGT EWGT	PERSID	EWREPL1 – EWREPL50 EWREPL1 – EWREPL50	JK1 JK1	WR WR	VSTRAT PSU VSTRAT PSU	1.3 1.3
NHES:1991 Adult Education <ul style="list-style-type: none"> ■ Adult file ■ Course file³ 	AEWT AEWT	PERSID CLASID	AEREPL1-AEREPL50 AEREPL1-AEREPL50	JK1 JK1	WR WR	VSTRAT PSU VSTRAT PSU	4.5 Full Sample 2.3 Participants 2.8 Nonparticipants 3.8 Black (non-Hispanic) 3.2 Hispanic 2.8 White (non-Hispanic) 2.4 Other races
NHES:1993 School Readiness	FWGT0	ENUMID	FWGT1 - FWGT60	JK2	WR	STRATUM PSU	1.3
NHES:1993 School Safety & Discipline <ul style="list-style-type: none"> ■ Parent interviews only ■ Parent & Emancipated Youth (EY) interviews ■ Youth interviews (including Emancipated Youth) 	FWGT0	BASMID	FWGT1-FWGT60	JK2	WR	STRATUM PSU	1.4
	FWGT0 (for parents) & PFWGT0 (for EY)	BASMID	FWGT1-FWGT60, PFWGT1-PFWGT60	JK2	WR	STRATUM PSU	1.4
	FWGT0	ENUMID	FWGT1-FWGT60	JK2	WR	STRATUM PSU	1.5
NHES:1995 Early Childhood Program Participation	EWEIGHT	ENUMID	ERPL1 - ERPL50	JK1	WR	STRATUM PSU	1.2
NHES:1995 Adult Education ⁴	AEWEIGHT	BASMID	ARPL1 - ARPL50	JK1	WR	STRATUM PSU	1.3
NHES:1996 Screener/Household & Library	FHWT	BASEID	FHWTR1-FHWTR80	JK1	WR	HSTRATUM HPSU	1.1
NHES:1996 Parent PFI/CI	FPWT	BASMID	FPWTR1-FPWTR80	JK1	WR	PSTRATUM PPSU	1.3

See notes at end of table.

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B-1. Summary of weighting and sample variance estimation variables—Continued

NHES data file	Full sample weight	Computing sampling errors					Approximating sampling errors
		Replication method (WesVar, SUDAAN ¹)			Taylor-series method (SUDAAN, Stata, SAS 8 ²)		DEFT (Average root design effect)
		Respondent ID	Replicate Weights	Jackknife Method	Sample Design	Nesting Variables	
NHES:1996 Youth CI	FYWT	BASMID	FYWTR1-FYWTR80	JK1	WR	YSTRATUM YPSU	1.4
NHES:1996 Adult CI	FAWT	BASMID	FAWTR1-FAWTR80	JK1	WR	ASTRATUM APSU	1.2
NHES:1999 Parent Interview	FPWT	BASMID	FPWT1-FPWT80	JK1	WR	PSTRATUM PPSU	1.3
NHES:1999 Youth Interview	FYWT	BASMID	FYWT1-FYWT80	JK1	WR	YSTRATUM YPSU	1.3
NHES:1999 Adult Education Interview	FAWT	BASMID	FAWT1-FAWT80	JK1	WR	ASTRATUM APSU	1.3 Full sample 1.4 Participants 1.5 Black, non-Hispanic
NHES:2001 Early Childhood Program Participation	FEWT	BASMID	FEWT1-FEWT80	JK1	WR	ESTRATUM EPSU	1.2 Full sample 1.3 Black, non-Hispanic
NHES:2001 Before- and After-School Programs and Activities	FSWT	BASMID	FSWT1-FSWT80	JK1	WR	SSTRATUM SPSU	1.3 Full sample 1.4 Black, non-Hispanic
NHES:2001 Adult Education and Lifelong Learning	FAWT	BASMID	FAWT1-FAWT80	JK1	WR	ASTRATUM APSU	1.3
NHES:2003 Parent and Family Involvement in Education	FPWT	BASMID	FPWT1-FPWT80	JK1	WR	PSTRATUM PPSU	1.3 Full sample 1.4 Race/ethnicity subgroups
NHES:2003 Adult Education for Work-Related Reasons	FAWT	BASMID	FAWT1-FAWT80	JK1	WR	ASTRATUM APSU	1.3 Full sample 1.4 Hispanics 1.4 Work-related adult education participants

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¹WesVar Complex Samples software, version 4, is available from Westat (www.westat.com). Information on SUDAAN can be obtained at www.rti.org. SUDAAN performs replication using the JK1 procedure but not the JK2 procedure.

²Information on SUDAAN can be obtained at www.rti.org. Information on Stata can be obtained at www.stata.com. Additionally SAS version 8 includes survey procedures that use the Taylor-series method for variance estimation. (See www.sas.com.)

³Unlike the NHES:1995 Adult Education data file, no course weights are provided in the NHES:1991 course file. The full sample weight and variables for computing sampling errors are provided in the course file for making adult-level estimates. Information as to the total number of courses that adults took is also available, and procedures similar to those described in See *National Household Education Survey of 1995: Adult Education Data File User's Manual* (Collins et al. 1996) could be used to create weights for making course-related estimates. However, it is important to note that the course information collected in NHES:1991 pertains to the four most recent courses taken, rather than a random sample of courses as was the case in NHES:1995.

⁴This data file contains weights for making “person-course” estimates pertaining to work-related and other formal structured courses. A simple way of doing this is to create a new variable that is the product of the course weight and the variable of interest. The standard weight and variance estimation methods are then applied to the new variable. The weight variables are called WRWGT, for adjusting for the courses adults took in work-related classes, and SAWGT, for adjusting for personal development courses. Weights are required for these types of courses because course-related data were collected only for a random subsample of courses. See *National Household Education Survey of 1995: Adult Education Data File User's Manual* (Collins et al. 1996) for more details.