

ECLS-K BASE YEAR PUBLIC-USE DATA FILES AND ELECTRONIC CODEBOOK

Prepared by:

Westat Rockville, Maryland

Rockville, Maryland
Karen Tourangeau
John Burke
Thanh Le
Siu Wan
Margaret Weant
Eugene Brown
Nancy Vaden-Kiernan
Elizabeth Rinker
Richard Dulaney
Kirsten Ellingsen
Brandon Barrett
Ismael Flores-Cervantes
Nicholas Zill

Educational Testing Service Princeton, New Jersey Judith Pollack Donald Rock University of Michigan School of Education Ann Arbor, Michigan Sally Atkins-Burnett Samuel Meisels

The National Center for Education Statistics U.S. Department of Education Washington, DC

Jonaki Bose Jerry West Education Statistics Services
Institute
Washington, DC
Kristen Denton
Amy Rathbun
Jill Walston

TABLE OF CONTENTS

| <u>Chapter</u> | | |
|----------------|------|---|
| 1 | INTR | ODUCTION |
| | 1.1 | Background |
| | 1.2 | Conceptual Model |
| | 1.3 | Study Components |
| | 1.4 | Contents of Manual. |
| | 1.5 | Differences Between the ECLS-K Restricted-Use Base Year |
| | | Files and the ECLS-K Base Year Public-Use Files |
| 2 | DESC | CRIPTION OF DATA COLLECTION INSTRUMENTS |
| | 2.1 | The Direct Child Assessments |
| | 2.2 | Parent Interview |
| | 2.3 | Teacher Questionnaires |
| | | 2.3.1 Content of the ARS |
| | | 2.3.2 Teacher SRS |
| | 2.4 | Special Education Teacher Questionnaires |
| | 2.5 | Adaptive Behavior Scale |
| | 2.6 | School Administrator Questionnaire |
| | 2.7 | School Facilities Checklist |
| | 2.8 | School Records Abstract Form |
| | 2.9 | Salary and Benefits Questionnaire |
| 3 | ASSE | ESSMENT AND RATING SCALE SCORES USED IN THE |
| | ECLS | S-K |
| | 3.1 | Direct Cognitive Assessment |
| | | 3.1.1 Number-Right Scores |
| | | 3.1.2 IRT Scale Scores |
| | | 3.1.3 Standardized Scores (T-Scores) |
| | | 3.1.4 Proficiency Scores |
| | | 3.1.5 Choosing the Appropriate Score for Analysis |
| | | 3.1.6 Reliabilities |
| | 3.2 | Indirect Cognitive Assessment (ARS) |
| | | 3.2.1 Comparison to Direct Cognitive Assessment |
| | 3.3 | IRT Scores Available for the ARS |
| | 3.4 | The Oral Language Development Scale (OLDS) |
| | | |

| <u>Chapter</u> | | | |
|----------------|------------|----------|--|
| | 3.5 3.6 | | motor Assessment |
| | | 3.6.1 | Teacher SRS |
| | | 3.6.2 | Parent SRS |
| 4 | SAM | PLE DES | IGN AND IMPLEMENTATION |
| | 4.1 | Selectin | ng the Area Sample |
| | 4.2 | Selectin | ng the School Sample |
| | | 4.2.1 | Frame Construction |
| | | 4.2.2 | School Measure of Size, Stratification, and Sample |
| | | 4 2 2 | Selection |
| | | 4.2.3 | Freshening the School Sample |
| | | 4.2.4 | Sampling Children, Parents, and Teachers within Schools. |
| | 4.3 | Calcula | ation and Use of Sample Weights |
| | | 4.3.1 | Types of Sample Weights |
| | | 4.3.2 | Weighting Procedures |
| | | 4.3.3 | Computation of School and Teacher Weights |
| | | 4.3.4 | Computation of Child Weights |
| | | 4.3.5 | Replicate Weights |
| | | 4.3.6 | Characteristics of Sample Weights |
| | 4.4 | Variand | ce Estimation |
| | | 4.4.1 | Paired Jackknife Replication Method |
| | | 4.4.2 | Taylor Series Method. |
| | | 4.4.3 | Specifications for Computing Standard Errors |
| | 4.5 | Design | Effects |
| | | 4.5.1 | Use of Design Effects |
| | | 4.5.2 | Average Design Effects for the ECLS-K |
| 5 | DAT | A COLLE | CTION METHODS AND RESPONSE RATES |
| | 5.1 | Data Co | ollection Methods |
| | 5.2 | | Endorsements and School Recruitment |
| | 5.3 | - | taff Training |
| | | | <i>G</i> |

| <u>Chapter</u> | | | |
|----------------|-----|---------|---|
| | 5.4 | Fall-Ki | indergarten Data Collection |
| | | 5.4.1 | Advance Mailings |
| | | 5.4.2 | Preassessment Visits |
| | | 5.4.3 | Conducting the Direct Child Assessment |
| | | 5.4.4 | Conducting the Parent Interview |
| | | 5.4.5 | Teacher Data Collection |
| | 5.5 | Fall-Ki | indergarten Response Rates |
| | 5.6 | | -Kindergarten Data Collection |
| | | 5.6.1 | Advance Contact with Respondents |
| | | 5.6.2 | Preassessment Contact |
| | | 5.6.3 | Conducting Direct Child Assessments |
| | | 5.6.4 | Conducting the Parent Interview |
| | | 5.6.5 | Teacher and School Data Collection |
| | | 5.6.6 | Conducting Data Collection on Children Who |
| | | | Withdrew from Their Original School |
| | | 5.6.7 | Collection of Head Start Data |
| | 5.7 | Data C | Collection Quality Control |
| | | 5.7.1 | Child Assessment Observations |
| | | 5.7.2 | Parent Validations |
| | | 5.7.3 | School Validations |
| | | 5.7.4 | Quality Control of the OLDS Scoring |
| | | 5.7.5 | Assessor Effects |
| | 5.8 | Spring | -Kindergarten Response Rates |
| | 5.9 | Base Y | Year Response Rates |
| 6 | DAT | A PREPA | RATION |
| | 6.1 | Coding | g and Editing Specifications for CATI/CAPI |
| | | 6.1.1 | Range Specifications |
| | | 6.1.2 | Consistency Checks (Logical Edits) |
| | | 6.1.3 | Coding |
| | 6.2 | Coding | g and Editing Specifications for Hard Copy Questionnaires |
| | | 6.2.1 | Receipt Control |
| | | 6.2.2 | Coding |
| | | | |

| <u>Chapter</u> | | | | <u>Page</u> |
|----------------|------|----------------------|---|--------------|
| | | 6.2.3 | Data Entry | 6-8 |
| | | 6.2.4 | Data Editing | 6-9 |
| 7 | DATA | A FILE C | ONTENT AND COMPOSITE VARIABLES | 7-1 |
| | 7.1 | Identifi | ication Variables | 7-1 |
| | 7.2 | Missin | g Values | 7-2 |
| | 7.3 | | le Naming Conventions | 7-4 |
| | 7.4 | | site Variables | 7-6 |
| | | 7.4.1 | Child Variables | 7-6 |
| | | 7.4.2 | Family and Household Variables | 7-8 |
| | | 7.4.3 | Teacher Variables | 7-12 |
| | | 7.4.4 | School and Class Characteristics | 7-13 |
| | | 7.4.5 | Parent Identifiers and Household Composition | 7-17 |
| | | 7.4.6 | Changes in Household Composition between | , 1, |
| | | 7.4.0 | Fall-Kindergarten and Spring-Kindergarten | 7-21 |
| | | 7.4.7 | The Supplemental Section (SPQ) in the | 7-21 |
| | | / . 4 . / | Spring-Kindergarten Parent Interview | 7-21 |
| | | 710 | 1 6 | 7-21 7-22 |
| | | 7.4.8 | Industry and Occupation Codes Used in ECLS-K | 1-22 |
| | 7.5 | | Teacher Data Collected Either in Fall-kindergarten or | |
| | | | -kindergarten | 7-25 |
| | 7.6 | | elationship Among Composite Variables on the Child, er, and School Catalogs | 7-26 |
| | 7.7 | | g a Child File for Classroom Level Analysis | 7-31 |
| | 7.8 | | ng a Classroom Level File Using Teacher Data | 7-31 |
| | 7.9 | | d Variables | 7-72 |
| | 1.9 | Masket | v arrables | 7-72 |
| 8. | GUID | E TO TH | IE ECLS-K BASE YEAR PUBLIC-USE ELECTRONIC | |
| | CODI | E BOOK | | 8-1 |
| | 8.1 | Introdu | ction | 8-1 |
| | | 8.1.1 | Hardware/Software Requirements | 8-2 |
| | | 8.1.2 | ECLS-K Base Year Public-Use ECB Features | 8-2 |
| | 8.2 | | ng, Starting, and Exiting the ECLS-K Base Year Use ECB | 8-3 |
| | | 8.2.1 | Installing the ECLS-K Base Year Public-Use ECB Program on Your PC | 8-3 |
| | | 822 | | |
| | | 8.2.2 | Starting the ECLS-K Base Year Public-Use ECB | 8-8 |

| <u>Chapter</u> | | | | <u>Page</u> |
|----------------|-----|---------|---|-------------|
| | | 8.2.3 | Exiting the ECLS-K Base Year Public-Use ECB | 8-11 |
| | | 8.2.4 | Removing the ECB Program From Your PC | 8-11 |
| | | 8.2.5 | The Title Bar | 8-12 |
| | | 8.2.6 | The Menu Bar | 8-12 |
| | | 8.2.7 | Using Shortcut Keys to Navigate | 8-13 |
| | 8.3 | The Va | nriable List | 8-14 |
| | | 8.3.1 | Searching the Code Book for Variables | 8-16 |
| | 8.4 | The W | orking Taglist | 8-22 |
| | | 8.4.1 | Opening A Taglist | 8-23 |
| | | 8.4.2 | Adding Variables to the Working Taglist | 8-23 |
| | | 8.4.3 | Removing Variables from the Working Taglist | 8-25 |
| | | 8.4.4 | Saving Taglists | 8-26 |
| | | 8.4.5 | Using Predefined Taglists | 8-28 |
| | | 8.4.6 | Deleting Taglists | 8-29 |
| | | 8.4.7 | Viewing Code Book and Variable Information | 8-30 |
| | 8.5 | Extract | ting Data from the ECB | 8-37 |
| | | 8.5.1 | Reviewing the Extract Specifications | 8-44 |
| | | 8.5.2 | Repairing and Compacting the Database | 8-45 |
| | 8.6 | The Ch | nild Catalog | 8-45 |
| | | 8.6.1 | Child Catalog Topical Variable Groupings | 8-47 |
| | | 8.6.2 | Child Catalog Predefined Taglists | 8-56 |
| | | 8.6.3 | Child Catalog Limiting Fields | 8-63 |
| | 8.7 | The Te | eacher Catalog | 8-64 |
| | | 8.7.1 | Teacher Catalog Topical Variable Groupings | 8-65 |
| | | 8.7.2 | Teacher Catalog Predefined Taglists | 8-68 |
| | | 8.7.3 | Teacher Catalog Limiting Fields | 8-68 |
| | 8.8 | The Sc | hool Catalog | 8-69 |
| | | 8.8.1 | School Catalog Topical Variable Groupings | 8-71 |
| | | 8.8.2 | School Catalog Predefined Taglists | 8-73 |
| | | 8.8.3 | School Catalog Limiting Fields | 8-73 |

| Chapter | | Page |
|---------------|---|--------------|
| | 8.9 Switching Catalogs | 8-74 8-76 |
| | List of Tables | |
| <u>Tables</u> | | |
| 2-1 | Instruments used in the fall and spring ECLS-K | 2-1 |
| 2-2 | Flow of the fall direct child assessment | 2-4 |
| 2-3 | Direct child assessment | 2-8 |
| 2-4 | Flow of the spring direct child assessment | 2-9 |
| 2-5 | ECLS-K parent interview by major content topics and point of data collection | 2-12 |
| 2-6 | ARS response scale | 2-15 |
| 2-7 | Teacher questionnaire | 2-18 |
| 2-8 | Special education teacher questionnaire ¹ | 2-20 |
| 2-9 | School administrator questionnaire ¹ | 2-22 |
| 3-1 | Direct cognitive assessment: types of scores, variable names, descriptions, ranges, means, and standard deviations ¹ | 3-3 |
| 3-2 | Reliability of IRT-based scores and routing test number correct | 3-14 |
| 3-3 | Split half reliability of item-cluster-based scores (proficiency level scores) | 3_14 |

| <u>Table</u> | | ; |
|--------------|--|---|
| 3-4 | Reliability for the Rasch-based score | |
| 3-5 | ARS: variable names, descriptions, ranges, means, and standard deviations | |
| 3-6 | OLDS: variable names, descriptions, ranges, means, and standard deviations | |
| 3-7 | Psychomotor scales: variable names, descriptions, ranges, means, and standard deviations | |
| 3-8 | SRS response scale | |
| 3-9 | Split half reliability for the teacher SRS scale scores | |
| 3-10 | Split half reliability for the parent SRS scale scores | |
| 3-11 | Teacher social rating scores: variable names, descriptions, ranges, means, and standard deviations | |
| 3-12 | Parent social rating scores: variable names, descriptions, ranges, means, and standard deviations | |
| 4-1 | Stratum definitions for the 38 non-self-representing strata | |
| 4-2 | Distribution of the ECLS-K PSU sample by SR status, MSA status, and census region | |
| 4-3 | Characteristics of the ECLS-K original school sample | |
| 4-4 | The ECLS-K: fall-kindergarten cross-sectional weights | |
| 4-5 | The ECLS-K: spring-kindergarten cross-sectional weights | |
| 4-6 | The ECLS-K: base year longitudinal weights | |
| 4-7 | Distribution of schools by number of cases (children) with nonzero weights. | |
| 4-8 | Number of children who were not assessed due to special situations | |

| <u>Table</u> | |
|--------------|--|
| 4-9 | Characteristics of teacher- and school-level weights |
| 4-10 | Characteristics of child-level weights |
| 4-11 | ECLS-K Taylor Series stratum and first-stage unit identifiers |
| 4-12 | Specifications for computing standard errors |
| 4-13 | ECLS-K, fall-kindergarten: standard errors and design effects for the full sample – child level |
| 4-14 | ECLS-K, spring-kindergarten: standard errors and design effects for the full sample – child level |
| 4-15 | ECLS-K, panel: standard errors and design effects for the full sample – child level |
| 4-16 | ECLS-K: median design effects for subgroups – child level |
| 4-17 | ECLS-K, fall-kindergarten: standard errors and design effects for the full sample – teacher level |
| 4-18 | ECLS-K, spring-kindergarten: standard errors and design effects for the full sample – teacher level |
| 4-19 | ECLS-K: median design effects for subgroups – teacher level |
| 4-20 | ECLS-K, spring-kindergarten: standard errors and design effects for the full sample – school level |
| 4-21 | ECLS-K: median design effects for subgroups – school level |
| 5-1 | OLDS routing results in fall-kindergarten |
| 5-2 | Number of children excluded from or accommodated in the fall-kindergarten assessment |
| 5-3 | Number of children excluded from parts of the psychomotor assessment |
| 5-4 | The ECLS-K, fall-kindergarten: number of cooperating schools and before-substitution school-level response rates |

| <u>Table</u> | | <u>Page</u> |
|--------------|---|-------------|
| 5-5 | The ECLS-K fall-kindergarten: number of completed child-level cases and child-level completion rates, by school characteristic | 5-18 |
| 5-6 | The ECLS-K, fall-kindergarten: number of completed child-level cases and child-level completion rates, by child characteristic | 5-20 |
| 5-7 | The ECLS-K, fall-kindergarten: number of completed teacher questionnaires and teacher-level completion rates | 5-23 |
| 5-8 | The ECLS-K, fall-kindergarten: number of completed child-level cases and overall child-level response rates, by school characteristic | 5-24 |
| 5-9 | The ECLS-K, fall-kindergarten: number of completed child-level cases and overall child-level response rates, by school characteristic | 5-25 |
| 5-10 | OLDS routing patterns in spring-kindergarten for fall-kindergarten respondents | 5-26 |
| 5-11 | OLDS routing results in spring-kindergarten | 5-27 |
| 5-12 | Number of children excluded from or accommodated in the spring-kindergarten assessment | 5-27 |
| 5-13 | Number of children who moved by category and assessment result | 5-30 |
| 5-14 | The ECLS-K, spring-kindergarten: number of cooperating schools and before-substitution school-level response rates | 5-36 |
| 5-15 | The ECLS-K, spring-kindergarten: number of completed child-level cases and child-level completion rates, by school characteristic | 5-37 |
| 5-16 | The ECLS-K, spring-kindergarten: number of completed child-level cases and child-level completion rates, by child characteristic | 5-40 |
| 5-17 | The ECLS-K, spring-kindergarten: number of completed teacher questionnaires and teacher-level completion rates | 5-42 |
| 5-18 | The ECLS-K, spring-kindergarten: number of completed school administrator questionnaire and school-level completion rates | 5-43 |

| <u>Table</u> | | <u>Page</u> |
|--------------|--|-------------|
| 5-19 | The ECLS-K, spring-kindergarten: child-level sample sizes and overall response rates, by school characteristic | 5-44 |
| 5-20 | The ECLS-K, spring-kindergarten: number of completed teacher questionnaires and teacher-level response rates | 5-47 |
| 5-21 | The ECLS-K, spring-kindergarten: number of completed instruments and child-level completion rates for additional data collected | 5-48 |
| 5-22 | The ECLS-K: number sampled and number and percent cooperating during fall- or spring-kindergarten, with percent of fall respondents who also responded in the spring | 5-48 |
| 7-1 | Missing data for SES variables | 7-9 |
| 7-2 | Preliminary Census poverty thresholds for 1998 ¹ | 7-12 |
| 7-3 | Pointers to parent figure questions | 7-19 |
| 7-4 | SPQ item matches to fall-kindergarten items | 7-23 |
| 7-5 | Relationship among composite variables on the three ECB catalogs | 7-27 |
| 7-6 | Composite variables | 7-34 |
| 7-7 | Masked variables in the child catalog. | 7-74 |
| 7-8 | Masked variables in the teacher catalog | 7-83 |
| 7-9 | Masked variables in the school catalog | 7-89 |
| 8-1 | Add variables buttons | 8-24 |
| 8-2 | Remove variables buttons | 8-25 |
| 8-3 | Code book information | 8-30 |
| 8-4 | Navigation buttons | 8-32 |
| 8-5 | Child catalog required variables | 8-46 |

| <u>Table</u> | | <u>Page</u> |
|---------------|---|-------------|
| 8-6 | Child catalog blocks | 8-48 |
| 8-7 | Child catalog topical variable groupings | 8-50 |
| 8-8 | Fall-kindergarten predefined taglist - child catalog | 8-56 |
| 8-9 | Spring-kindergarten predefined taglist – child catalog | 8-58 |
| 8-10 | Kindergarten base year predefined taglist – child catalog | 8-60 |
| 8-11 | Teacher catalog required variables | 8-64 |
| 8-12 | Teacher catalog blocks | 8-66 |
| 8-13 | Teacher catalog topical variable groupings | 8-67 |
| 8-14 | School catalog required variables | 8-69 |
| 8-15 | School catalog blocks | 8-71 |
| 8-16 | School catalog topical variable groupings | 8-72 |
| | List of Figures | |
| <u>Figure</u> | | |
| 1-1 | ECLS-K conceptual model | 1-4 |
| 8-1 | Windows Run screen | 8-4 |
| 8-4 | Choose Destination Location | 8-6 |
| 8-5 | Setup Status | 8-6 |
| 8-7a. | Desktop icon | 8-8 |
| 8-7b | Desktop screen - click start | 8-8 |
| 8-8 | First time user dialog box | 8-9 |

List of Figures (continued)

| <u>Figures</u> | | <u>Page</u> |
|----------------|--|-------------|
| 8-9 | The ECLS-K Base Year ECB splash screen | 8-9 |
| 8-10 | Select Catalog screen | 8-10 |
| 8-11 | Main ECB screen | 8-10 |
| 8-12 | Exit screen | 8-11 |
| 8-13 | Save Working Taglist dialog box | 8-11 |
| 8-14 | Title Bar | 8-12 |
| 8-15 | Menu Bar | 8-13 |
| 8-16 | The ECLS-K Base Year ECB main screen | 8-14 |
| 8-17 | The Variable List | 8-15 |
| 8-18 | The "Go" button | 8-17 |
| 8-19 | Narrow Text Search dialog box | 8-18 |
| 8-20 | No matches found message | 8-19 |
| 8-21 | Example of narrowing a search | 8-20 |
| 8-22 | Expand Text Search dialog box | 8-21 |
| 8-23 | No matches found message | 8-21 |
| 8-24 | The ECB Working Taglist | 8-22 |
| 8-25 | Open Taglist dialog box | 8-23 |
| 8-26 | Add Taglist dialog box | 8-25 |
| 8-27 | Save Taglist as dialog box | 8-27 |
| 8-28 | Save Taglist as dialog box (#2) | 8-28 |
| 8-29 | Delete Taglist Selection screen | 8-29 |

List of Figures (continued)

| <u>Figures</u> | | <u>Page</u> |
|----------------|--|-------------|
| 8-30 | Delete Taglist confirmation window | 8-29 |
| 8-31 | ECB view | 8-31 |
| 8-32 | Printing Status screen | 8-32 |
| 8-33 | Export Taglist selection screen | 8-33 |
| 8-34 | Variable Quick View | 8-34 |
| 8-35 | Add All Variables dialog box | 8-35 |
| 8-36 | View of the entire code book | 8-36 |
| 8-37 | Printer Dialog box | 8-36 |
| 8-38 | Teacher catalog limiting fields dialog box | 8-38 |
| 8-39 | Save SAS program file dialog box | 8-39 |
| 8-40 | Save SAS program file location browse screen | 8-39 |
| 8-41 | Save SAS data file dialog box | 8-40 |
| 8-42 | Save SPSS program file dialog box | 8-41 |
| 8-43 | Save SPSS program file location browse screen | 8-41 |
| 8-44 | Save SPSS data file dialog box | 8-42 |
| 8-45 | Save STATA program file dialog box | 8-43 |
| 8-46 | Save STATA program file location browse screen | 8-43 |
| 8-47 | Save STATA data file dialog box | 8-44 |
| 8-48 | Repair database completed screen | 8-45 |
| 8-49 | Child catalog limiting fields | 8-63 |
| 8-50 | Teacher catalog limiting fields | 8-68 |

List of Figures (continued)

| <u>Figures</u> | | <u>Page</u> |
|-----------------|--|-------------|
| 8-51 | School catalog limiting fields | 8-73 |
| 8-52 | Save changes | 8-74 |
| 8-53 | Select Catalog screen | 8-75 |
| | List of Exhibits | |
| <u>Exhibit</u> | | |
| 5-1 | Timeline of base year data collection | 5-2 |
| | List of Appendixes | |
| <u>Appendix</u> | | |
| A | PDF FILES CONTAINING BASE YEAR INSTRUMENTS | |
| В | RECORD LAYOUT OF SCHOOL, TEACHER, AND CHILD DATA FILES | |

1. INTRODUCTION

The Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K) is a multisource, multimethod study that focuses on children's early school experiences beginning with kindergarten. The ECLS-K has been developed under the sponsorship of the U.S. Department of Education, National Center for Education Statistics (NCES). We stat is conducting this study with assistance provided by the Survey Research Center and the School of Education at the University of Michigan and Educational Testing Services (ETS).

The ECLS-K is following a nationally representative cohort of children from kindergarten through fifth grade. A total of 21,260 children throughout the country participated by having a child assessment or parent interview in the fall and/or spring of kindergarten. The children were in kindergarten when sampled. Base year data were collected in the fall of 1998 and spring of 1999. Four waves of data collection are planned beyond kindergarten: fall and spring first grade, and spring third and fifth grades. All data collection will be completed in the spring of 2004 when most of the children will be in fifth grade.

The ECLS-K has several major objectives and numerous potential applications. The ECLS-K combines elements of (1) a study of achievement in the elementary years; (2) an assessment of the developmental status of children in the United States at the start of their formal schooling and at key points during the elementary school years; (3) a cross-sectional study of the nature and quality of kindergarten programs in the United States; and (4) a study of the relationship of family, preschool, and school experiences to children's developmental status at school entry and their progress during the kindergarten and early elementary school years.

The ECLS-K is part of a longitudinal studies program comprising two cohorts—a kindergarten cohort and a birth cohort. The birth cohort (ECLS-B) will follow a national sample of children, born in the year 2001, from birth through first grade. ECLS-B will focus on the characteristics of children and their families that influence children's first experiences with the demands of formal school, as well as children's early health care and in- and out-of-home experiences. Together these cohorts will provide the range and breadth of data required to more fully describe and understand children's health, early learning, development, and education experiences.

The ECLS-K has both descriptive and analytic purposes. It will provide descriptive data on children's status at entry into school, children's transition into school, and their progress through fifth grade. The ECLS-K also will provide a rich data set that will enable researchers to analyze how a wide range of family, school, community, and individual variables affect children's early success in school; explore school readiness and the relationship between the kindergarten experience and later elementary school performance; and record children's cognitive and academic growth as they move through elementary school.

1.1 Background

National policymakers and the public at large have increasingly recognized that the prosperity of the United States depends on the successful functioning of the American education system. There is also growing awareness that school reform efforts cannot focus solely on the secondary and postsecondary years but must pay attention to the elementary and preschool years as well. Increased policy interest in the early grades is reflected in an intensified recent national policy aimed at ensuring that children are capable of reading by the third grade, providing college student and adult volunteer tutors for children who are having difficulty learning to read, and increasing the number of children served by Head Start to 1 million by the year 2002.

Efforts to expand and improve early education will benefit from insights gained through analyses of data from the large-scale, nationally representative, longitudinal ECLS-K database. The ECLS-K database contains information about the types of preschool and elementary programs in which children participate, the services they receive, and repeated measures of the children's cognitive skills and knowledge. The ECLS-K database also contains measures of children's physical health and growth, social development, and emotional well being, along with information on family background and the educational quality of their home environments.

As a study of early achievement, the ECLS-K allows researchers to examine how children's progress is affected by such factors as placement in high or low ability groups, receipt of special services or remedial instruction, grade retention, and frequent changes in schools attended because of family moves. Data on these early school experiences are collected as they occur. This produces a more accurate measurement of these antecedent factors and enables stronger causal inferences to be made about their relationship to later academic progress.

The ECLS-K enables educational policy analysts to use an ecological perspective on early childhood education, using techniques such as multilevel modeling to study how school and classroom factors affect the progress of individual children. The data collected will enable analysts to examine how children's status at school entry and performance in school are jointly determined by an interaction of child characteristics and family and school environments.

Data collected during the kindergarten year can serve as baseline measures to examine how schooling shapes later individual development. The longitudinal nature of the study enables researchers to study children's cognitive, social, and emotional growth and to relate trajectories of change to variations in children's school experiences in kindergarten and the early grades.

A goal of the kindergarten data collection has been to describe accurately the diversity of kindergarten children and the programs they attend. For instance, national data are available for the first time on public and private kindergarten programs and the children who attend them. The ECLS-K sample includes substantial numbers of children from various minority groups. Thus, the ECLS-K data present many possibilities for studying cultural and ethnic differences in the educational preferences and approaches of families, the developmental patterns and learning styles of children, and the educational resources and opportunities that different groups are afforded in the United States.

1.2 Conceptual Model

The design of the ECLS-K has been guided by a framework of children's development and schooling that emphasizes the interaction between the child and family, the child and school, the family and school, and the family, school, and community. The ECLS-K recognizes the importance of factors that represent the child's health status, socio-emotional and intellectual development and incorporates factors from the child's family, community, and school-classroom environments. The conceptual model is presented in figure 1-1. The study has paid particular attention to the role that parents and families play in helping children adjust to formal school and in supporting their education through the primary grades. It has also gathered information on how schools prepare for and respond to the diverse backgrounds and experiences of the children and families they serve.

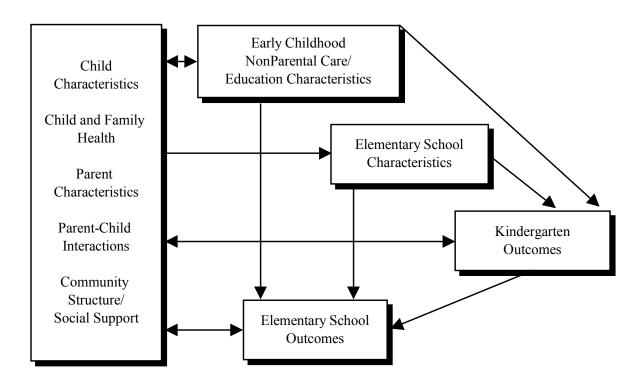


Figure 1-1. ECLS-K conceptual model

1.3 Study Components

The emphasis that is being placed on the whole of the child's environments and development has critical implications for the design of the ECLS-K. The design of the study allows for the collection of data from the child, the child's parents/guardians, teachers, and schools.

- Children are asked to participate in various activities to measure the extent to which they exhibit those abilities and skills deemed important to success in school. They are asked to participate in activities designed to measure important cognitive (e.g., general knowledge, literacy, and quantitative skills) and noncognitive (e.g., fine motor and gross motor coordination, socio-emotional) skills and knowledge. All measures of a child's cognitive skills are obtained through an untimed one-on-one assessment of the child. During later years of the ECLS-K, children will report on their own experiences in and out of school.
- Parents/guardians are an important source of information about the families of the children selected for the study and about themselves. They are asked to provide key information about their children, especially during the first years of the study. Parents are one of the important sources of information about children's development at school entry and their experiences both with family members and others. Information

is collected from parents each time children are assessed using computer-assisted telephone interviewing (CATI) [or computer-assisted personal interviewing (CAPI) if they do not have a telephone].

- **Teachers**, like parents, represent a valuable source of information on themselves, the children in their classrooms, and the children's learning environment, i.e., the classroom. Teachers are not only asked to provide information about their own backgrounds, teaching practices, and experience, they are also called upon to provide information on the classroom setting for the sampled children they teach and to evaluate each sampled child on a number of critical cognitive and noncognitive dimensions. Teachers complete self-administered questionnaires each time children are assessed, with the exception of the fall first grade data collection.
- School administrators are asked to complete self-administered questionnaires during the spring data collection. They are asked to provide information on the physical, organizational, and fiscal characteristics of their schools, and on the schools' learning environment and programs. Special attention is paid to the instructional philosophy of the school and its expectations for students.

1.4 Contents of Manual

This manual provides documentation and guidance for users of the three public-use data files of the ECLS-K: the child file, teacher file, and the school file. The manual contains information about the data collection instruments (chapter 2) and the psychometric properties of these instruments (chapter 3). The manual describes the ECLS-K sample design (chapter 4); data collection procedures and response rates (chapter 5); and data processing procedures (chapter 6). In addition, the manual shows how the public-use data file is structured, provides definitions of composite variables (chapter 7), and explains how to use the Electronic Code Book (chapter 8). The Electronic Code Book contains unweighted frequencies for all variables.

Analysts who wish to obtain descriptive information about U.S. kindergarten students or their families, or who want to examine relationships involving children and families, children and teachers, or children and schools, should make use of the child file. Analysts wishing to obtain descriptive information about the population of kindergarten teachers in the United States, or to study relationships involving teachers as the principal focus of attention, should employ the teacher file. Analysts who want to obtain descriptive information about public and private schools that contain kindergarten classes, or who want to examine relationships among school characteristics, should make use of the school file.

1.5 Differences Between the ECLS-K Restricted-Use Base Year Files and the ECLS-K Base Year Public-Use Files

In preparing the ECLS-K Base Year Public-Use data files the National Center for Education Statistics (NCES) has taken steps to minimize the likelihood that an individual school, teacher, parent or child participating in the study can be identified. This is in compliance with the Privacy Act of 1974 and the National Education Statistics Act of 1994, both of which mandate the protection of the confidentiality of respondents. The process began with the ECLS-K Restricted-Use Base Year data files, which underwent a formal disclosure risk analysis. Variables identified as posing the greatest disclosure risk were altered, and in some instances entirely suppressed, and in this way the ECLS-K Base Year Public-Use data files were created. Every effort has been made to alter the files as little as possible, consistent with the requirement for confidentiality protection. After altering the variables the disclosure risk analysis was repeated to verify that the disclosure risk had been reduced to acceptable levels.

The following data modifications account for the differences between the base year publicuse and restricted-use data files:

- Outlier values were top- or bottom- coded;
- Individual cases for which a particular variable posed an especially high risk for disclosure had the value of that variable altered (usually by no more than 5 to 10 percent) to reduce the risk;
- Some continuous variables were modified into categorical variables, and certain categorical variables had their categories collapsed; and
- Certain variables with too few cases and a sparse distribution were suppressed altogether, rather than modified.

A comprehensive list of the variables that have been altered or suppressed can be found in section 7.9.

Both the public- and restricted-use files provide data at the individual child, teacher, and school levels. The modifications that were implemented to avoid the identification of schools, teachers, and children do not affect the overall data quality and most researchers should be able to find all that they need in the public-use files. While very few of the variables have been suppressed, there are a few users who might require the restricted files. Those researchers examining certain rare subpopulations such as the disabled, or children with specific non-English home languages or countries of birth and those

interested in examining the type and number of hours of kindergarten programs offered in schools will find that the restricted-use files contain a few more variables. However, in many instances even though the detailed information on the restricted-use files may be of interest, the sample sizes will be too small to support these analyses. NCES recommends that researchers uncertain of which data release to use, first examine the public-use files to ascertain whether their specific analytic objectives can be met using those data files.

2. DESCRIPTION OF DATA COLLECTION INSTRUMENTS

This chapter describes the instruments used to collect base year data in the fall of 1998 and spring of 1999 for the Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K). In the fall, data were collected by teacher questionnaires, parent computer-assisted interviews (CAIs), and direct child assessments. Most of the fall instruments were repeated for the spring of 1999 data collection, although the parent and teacher measures varied by content between the two data collection points to ease respondent burden. This chapter also describes the Head Start verification study, where part of the data was collected in the fall parent interview and student record abstract. Table 2-1 below lists all of the instruments used in each of the two rounds of data collection.

Table 2-1. Instruments used in the fall and spring ECLS-K

| Fall-Kindergarten | Spring-Kindergarten |
|------------------------------|--|
| Parent Interview | Parent Interview |
| Child Assessment | Child Assessment |
| Teacher Questionnaire-Part A | Teacher Questionnaire-Part A |
| Teacher Questionnaire-Part B | Teacher Questionnaire-Part B |
| Teacher Questionnaire-Part C | Teacher Questionnaire-Part C |
| | Special Education Teacher Questionnaire-Part A |
| | Special Education Teacher Questionnaire-Part B |
| | Adaptive Behavior Scale |
| | School Administrator Questionnaire |
| | Student Record Abstracts |
| | School Facilities Checklist |
| | Salary and Benefits Questionnaire |

Appendix A contains a copy of the base year instruments, except for the direct child assessment, the social rating scale¹ in the parent interview and teacher questionnaire, and the adaptive

¹ Adapted with permission from Elementary Scale A ("How Often?"), Frank M. Gresham and Stephen N. Elliott ©1990, American Guidance Service, Inc.

behavior scale.² These latter measures contain copyright protected materials and agreements with the test publishers that restrict their distribution.

2.1 The Direct Child Assessments

Fall Child Assessments. In the fall of the base year, one-on-one child assessments were conducted with the sampled children. This assessment included cognitive, psychomotor, and physical components. The assessment took approximately 50-70 minutes and was designed to provide data on the developmental status of children in the United States at the start of their formal schooling. The ECLS-K cognitive assessment battery consisted of questions in three subject areas: language and literacy, mathematical thinking, and general knowledge. Psychomotor assessments were also included in the fall, along with assessments of the child's height and weight.

The assessment began by verifying the child's name and administering a set of warm-up exercises similar in form to the items used to administer the cognitive component. Prior to administering the cognitive assessment battery, a language-screening assessment was administered to those children identified from their school records (or by their teacher, if no school records were available) as coming from a language minority background (meaning that their primary home language was not English). This screening test was used to determine if a child was able to understand and respond to the cognitive assessment items in English.

The Language Screener. Efforts were made to include children who spoke a language other than English in the ECLS-K assessment. Field supervisors either checked the school records to determine children's home language or, if records were not available, requested this information directly from children's teachers. (See chapter 5 for a complete description of this process.) A brief language screener, the Oral Language Development Scale (OLDS), was given to those children who had a non-English language background. The screener determined if children understood English well enough to receive the direct child assessment in English. Children who passed the language screener received the full ECLS-K direct assessment battery. Children who did not pass an established cut score on the language screener received a reduced version of the ECLS-K assessments.

² Lambert, Nadine, Nihira, Kazuo, and Leland, Henry, Adaptive Behavior Scale-Second Edition, ©1993, The American Association on Mental Retardation

The OLDS was also used to capture baseline information on children whose primary language was not English. The baseline data for these children can be used by researchers to examine English language acquisition over time.

The OLDS measured children's listening comprehension, vocabulary, and ability to understand and produce language. The OLDS consisted of three parts extrapolated from the preLAS 2000 (Duncan, S.E. and De Avila, E.A., 1998³). For the OLDS, children participated in Simon Says, Art Show, and Let's Tell Stories. Part one, Simon Says, measured listening comprehension of basic English instructions (i.e., asking a child to do things such as touch ear, pick up paper, or knock on table). Part two, Art Show, was a picture vocabulary assessment where children were asked to name pictures they were shown. The Art Show served as an assessment of a child's ability to produce language and measured the child's command of expressive language. The final part of the OLDS, Let's Tell Stories, was used to obtain a sample of a child's natural speech by asking a child to retell a story read by the assessor. The child was read two different stories and asked to tell what happened using pictures as prompts. The assessor recorded on paper exactly what the child said and scored the story using the established preLAS 2000 scoring rules. The scores assigned were based on the complexity of the child's sentence structure and vocabulary in his or her retelling of the story. These scores provide researchers with a direct measure of oral language performance.

Children who passed the language screener received the full English direct assessment. Certain components of the direct child assessment could also be conducted in Spanish. If a child did not pass the language screener but spoke Spanish, he or she was administered a Spanish translated form of the mathematics assessment and an alternate form of the language screener, the Spanish version of the Oral Language Development Scale (Spanish OLDS), as well as a psychomotor assessment that was conducted in Spanish. The Spanish OLDS that was administered is similar in content to the English OLDS and measures the same constructs.

A variety of steps were undertaken to confirm that the scores obtained from the Spanish mathematics assessment would be comparable to those for the English version. After the test items were translated into Spanish, a back-translation was carried out, followed by a review of the assessment instrument by two Spanish-speaking math experts. Psychometric analyses were also performed to compare the English and Spanish mathematics test results. Differential Item Functioning (DIF)

³ Duncan, S.E. and De Avila, E. A., preLAS 2000 Cue Picture Book English Form C, CTB/McGraw-Hill Companies, Inc., 1998

procedures were carried out to determine whether the relative difficulty of each of the mathematics items was comparable in the English and Spanish version. Of the 31 mathematics items with sufficient numbers of observations for analysis, 16 appeared to be relatively easier for the Spanish speaking children and 15 for the English version. Of these 31 DIF statistics, 28 showed differences that were slight and/or not statistically significant. The three items marked as having "C" level DIF (sizeable difference in performance, and statistical significance) were split between the groups, with one item found to be relatively easier on the Spanish test and two relatively easier in English. A finding of differential item functioning does not necessarily indicate bias in the test; it may simply be an indication that achievement differences among groups may be more pronounced for certain skills than for others. A review of the "C" level test items by developmental and Spanish-language experts found no evidence of bias in either the content or the translation of the items. When Item Response Theory (IRT) procedures were carried out to calculate scaled scores, plots showing the fit of data to item parameters were examined for the Spanish compared to the English mathematics tests. The results were very similar to the DIF findings: there was an essentially identical fit for almost all of the test items; there were small differences in one direction or the other for a few items; and there was no evidence of systematic bias. All of these analyses support the conclusion that the language of administration had little or no impact on the scores obtained.

Children who did not pass the established cut score on the language screener and whose native language was not Spanish were excluded from the assessment; however, assessors collected physical measurements of these children's height and weight. Table 2-2 shows the paths of the direct child assessment by home language and scores on the English OLDS.

Table 2-2. Flow of the fall direct child assessment

| Home Language | English OLDS | Spanish OLDS | Warm-up Booklet | Reading | Math | Psycho- motor | General Knowledge | Height/ Weight |
|------------------|---|--------------|--------------------|---------|--------------|------------------|----------------------|-------------------|
| English | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Other | ✓ Score at or Above Cutpoint | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | ✓ Score Below Cutpoint Speaks Spanish | ~ | √ Spanish | | √ Spanish | √ Spanish | | √ |
| | ✓ Score Below Cutpoint Doesn't Speak Spanish | | | | | | | ✓ |

Two-Stage Assessment Design

The direct cognitive assessment consisted of a set of two-stage assessments: a first-stage routing section for each of the three subject areas, followed by several alternative second-stage forms. The same reading, mathematics, and general knowledge routing sections, consisting of 12 to 20 items with a broad range of difficulty, were administered to all children. A child's performance on the routing section determined the second-stage form that was administered. The reading and mathematics assessments had low, middle, and high difficulty second-stage options, while the general knowledge assessment had two second-stage alternatives. The purpose of this adaptive assessment design was to maximize accuracy of measurement and minimize administration time.

The second-stage forms varied by level of difficulty so that a child would be administered questions appropriate to his or her current level of ability for each cognitive domain. Administering assessment items that are too hard for a particular child not only causes frustration and distress but also provides very little information on the precise level of the child's ability. Because most of the items are likely to be answered incorrectly, all that can be concluded is that the child's ability level is below the difficulty level of the questions, but there is no information on *how much* below. Similarly, giving a larger number of very *easy* items to a child of *high* ability may be boring and, again, they are not very useful in pinpointing the child's achievement level. The assessment items that provide the best information are those that are slightly too easy or slightly too hard for an individual. The pattern of right and wrong responses on such items makes it possible to estimate ability within a narrow range. The number of questions included in this assessment was limited in order to minimize the time and burden on the children. Consequently, it was important to match the difficulty of the questions to the ability level of the children, to the extent that this was possible with preselected sets of items. The routing section provided a rough estimate of each child's achievement level, so that a second-stage form with items of the appropriate difficulty for maximizing measurement accuracy could be selected.

The cognitive assessment included both multiple choice and open-ended items. For ease of administration, questions of similar format were grouped together in order of increasing difficulty within each group. When the question format changed, practice items were used to introduce children to the new format. Assessments were shortened or discontinued if the administrator perceived that the child was uncomfortable or distressed about responding to the assessment items. When a child did not respond to a question, the assessor repeated the question. If there was still no response, or the child did not know the

answer, the assessor entered a code for "don't know" and moved on to the next question, while periodically reminding the child to try. For a child who did not respond to several questions in a row, the assessor still waited ten seconds after reading each question and entered a code for "don't know," but did not continue to repeat each question. If no response was given to ten questions in a row, assessors entered a "refuse" code into the computer for the remainder of the items in that subject area, without reading the questions, until reaching the next subject area, where he or she resumed reading the questions. This procedure was used to give children who did not want to respond to questions in one subject area (e.g., reading) a chance to respond to questions in another subject area (e.g., math). Scores in each subject area were computed only if at least ten questions were answered in the combined first and second stages.

Cognitive Components. The cognitive assessment focused on three general areas of competence: (1) language use and literacy (reading); (2) mathematics; and (3) knowledge of the social and physical world, referred to as "general knowledge." The assessment did not ask the children to write anything or to explain their reasoning; rather, they used pointing or verbal responses to complete the tasks. The data were collected using a computer-assisted interviewing methodology. The assessment included the use of a small easel with pictures, letters of the alphabet, words, short sentences, numbers, or number problems. A brief description of the three components of the cognitive assessment follows.

Language and Literacy. The language and literacy (reading) assessment included questions designed to measure basic skills (print familiarity, letter recognition, beginning and ending sounds, rhyming sounds, word recognition), vocabulary (receptive vocabulary), and comprehension (listening comprehension, words in context). Comprehension items were targeted to measure skills in initial understanding, developing interpretation, personal reflection, and demonstrating critical stance.

The reading assessment contained five proficiency levels. These five levels reflected a progression of skills and knowledge; if a child had mastered one of the higher levels, he or she was very likely to have passed the items that comprised the earlier levels as well. These five levels were: (1) identifying upper- and lower-case letters of the alphabet by name; (2) associating letters with sounds at the beginning of words; (3) associating letters with sounds at the end of words; (4) recognizing common words by sight; and (5) reading word in context.

Mathematical Thinking. The mathematics assessment items were designed to measure skills in conceptual knowledge, procedural knowledge, and problem solving. Approximately one-half of the mathematics assessment consisted of questions on number sense and number properties and

operations. The remainder of the assessment included questions in measurement; geometry and spatial sense; data analysis, statistics, and probability; and patterns, algebra, and functions. Each of the mathematics assessment forms contained several items for which manipulatives were available for children to use in solving the problems. Paper and pencil were also offered to the children to use for the appropriate parts of the assessment.

The items in the mathematics assessment could also be grouped into five-level proficiency levels or progression of skills, though the math clusters were less homogeneous in content than the reading clusters. The clusters of math items included: (1) identifying some one-digit numerals, recognizing geometric shapes, and one-to-one counting up to ten objects; (2) reading all one-digit numerals, counting beyond ten, recognizing a sequence of patterns, and using nonstandard units of length to compare objects; (3) reading two-digit numerals, recognizing the next number in a sequence, identifying the ordinal position of an object, and solving a simple word problem; (4) solving simple addition and subtraction problems; and (5) solving simple multiplication and division problems and recognizing more complex number patterns.

General Knowledge. The general knowledge assessment consisted of science and social studies material. The science items measure two broad classes of science competencies: a) conceptual understanding of scientific facts, and b) skills and abilities to form questions about the natural world, to try to answer them on the basis of the tools and the evidence collected, and to communicate answer and how the answers were obtained. Social studies material included questions relating to history/government, culture, geography, and economics. The assessment items drew on children's experiences with their environment, and many questions related to more than one of the categories.

The subject matter of the assessment of general knowledge was too diverse and insufficiently ranked or graded to permit formation of a set of proficiency levels. A score was calculated to represent each child's breadth and depth of understanding of the world around them. This assessment captured information on children's conception and understanding of the social, physical, and natural world and of their ability to draw inferences and comprehend implications. The skills children need to establish relationships between and among objects, events, or people and to make inferences and to comprehend the implications of verbal and pictorial concepts were also measured.

Physical Components. There were two parts to the physical component of the child assessment, psychomotor and antropometric. The assessor administered a psychomotor measure during

the baseline data collection in the fall of kindergarten and recorded each child's height and weight. The physical component included a spiral bound psychomotor booklet, psychomotor instructions and score sheet, a height and weight recording form, the Shorr Board (for measuring height), and a digital bathroom scale. Materials used for measuring fine motor skills included ten wood blocks, a pencil, and two pieces of plain white paper. The psychomotor assessment was divided into measuring fine and gross motor skills. Fine motor skills were assessed by having each child use building blocks to replicate a model, copy forms (e.g., an asterisk, a square) on paper, and draw a person. The child was asked to skip, hop on one foot, walk backward, and stand on one foot to assess gross or large motor skills. To measure physical growth and development, children's height and weight were measured. Table 2-3 displays the major domains measured during the child direct assessments in the fall and spring of kindergarten.

Table 2-3. Direct child assessment

| Direct child assessment | Fall- Kindergarten | Spring- Kindergarten |
|--|-----------------------|-------------------------|
| Language screener (OLDS) | X | / |
| Reading (language and literacy) | X | X |
| General knowledge (science and social studies) | X | X |
| Mathematical thinking | X | X |
| Psychomotor | X | |
| Height and weight | X | X |

Note: The columns to the right of each construct correspond to the waves of questionnaire administration. Waves that included the construct are marked with an "X." A "/" indicates that the OLDS was given to students new in the spring, or who did not pass the cut score in the English version during the fall OLDS administration.

Child Assessment Spring

In spring of the base year, the children who participated in the fall data collection were assessed a second time. In addition, children who were not assessed in the fall were assessed for the first time. These children included those sampled in converted schools (see chapter 5, section 5.2 for more detail). Assessments began at least 12 weeks before the end of the school year. Table 2-4 displays the

Table 2-4. Flow of the spring direct child assessment

| Home Language | English OLDS | Spanish OLDS | Warm-up Booklet | Reading | Math | General Knowledge | Height/ Weight |
|------------------|--|-----------------|--------------------|----------|--------------|----------------------|-------------------|
| English | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Other | Score at or Above Cutpoint in fall- kindergarten | | √ | √ | 1 | √ | ✓ |
| | ✓ Score at or Above Cutpoint | | ✓ | √ | ✓ | ✓ | √ |
| | ✓ Score Below Cutpoint Speaks Spanish | √ | √ Spanish | | √ Spanish | | √ |
| | ✓ Score Below Cutpoint Doesn't Speak Spanish | | | | | | √ |

of the spring direct child assessments. The same assessment materials used in the fall were used with the following exceptions:

- 1. The psychomotor assessment was not administered in the spring-kindergarten assessment and beyond.
- 2. If the sampled child passed the OLDS in fall-kindergarten, he or she was automatically routed by the computer program to take the assessment in English and did not have to retake the OLDS. If the child did not score above the cut point for the OLDS in fall-kindergarten, he or she took the OLDS again in spring-kindergarten and was routed according to the new spring-kindergarten OLDS score.
- 3. If the child did not take the assessment at all in fall-kindergarten or was a newly sampled child in spring-kindergarten, he or she was routed according to his or her home language, just as the children were in fall-kindergarten.

2.2 Parent Interview

The majority of parents participating in the base year data collection were interviewed in the fall of 1998 and again in the spring of 1999. Because more children were added to build school response rates, a group of parents completed their first interview in the spring of 1999. (see chapter 5, section 5.2). Parents or guardians were asked to provide important information about the sampled child, the home

environment, parent behavior (e.g., interactions with the child's teacher, activities with the sampled child), and family characteristics using a computer-assisted telephone interview (CATI) or computer-assisted personal interview (CAPI) for families without a telephone (see chapter 5, sections 5.4.4 and 5.6.4 for more details). Questions regarding family structure, child care use, household income, and child rearing practices were also included in the parent interview.

Fall Parent Interview

Typically the respondent for the parent interview was the mother of the child; however, the respondent could be a father, stepparent, adoptive parent, foster parent, grandparent, another relative, or nonrelative guardian. The respondent had to be knowledgeable about the child's care and education, be 18 years of age or older, and be living in the household with the child. In fall-kindergarten, respondents for the parent interview were selected according to the following order of preference:

- 1. The child's mother;
- 2. Another parent or guardian; and
- 3. Another household member.

The parent interview was conducted primarily in English, but provisions were made to interview parents who spoke other languages. The questionnaire was translated into Spanish, which was then printed on hardcopy. Bilingual interviewers were trained to conduct the parent interview in either English or Spanish. If the interview was conducted in Spanish, the interviewer used the hardcopy questionnaire and then entered respondents' answers into the CAI program. The parent interview was also translated into Chinese, Lakota, and Hmong languages and administered using the same data collection procedures as were used with Spanish speaking parents.

Topics addressed in the fall parent interview included a roster of current household members, family socio-demographic characteristics, languages spoken in the child's home, child care arrangements (currently and previously used), child's physical functioning, home activities, parent education and employment, and receipt of public assistance.

Parents were also asked to tell how often a student exhibited certain social skills and behaviors. The social rating scale (SRS) has five scales: approaches to learning, self-control, social interaction, impulsive/overactive, and sad/lonely.

See chapter 3, section 3.6.2 for variable names, ranges, means, and standard deviations for these scales.

- The **Approaches to Learning** scale (Parent SRS) includes six items that rate how often a child shows eagerness to learn, interest in a variety of things, creativity, persistence, concentration, and responsibility.
- The **Self-Control** scale (Parent SRS) has five items that indicate children's ability to control their behavior. It includes items that are worded positively as well as negative behaviors that are reverse coded (e.g., frequency with which a child fights, argues, throws tantrums, or gets angry).
- The **Social Interaction** scale (Parent SRS) asks about children's interactions with peers and adults. The three items address children's ease in joining in play, ability to make and keep friends, and positively interacting (comforting, helping) with peers.
- The **Impulsive/Overactive** scale (Parent SRS) has two items that ask about children's impulsivity and activity level.
- The **Sad/Lonely** scale (Parent SRS) has four items that ask parents about children's problems with being accepted and liked by others, sadness, loneliness, and low self-esteem.

Table 2-5 shows the broad content areas addressed in the parent interview and the point of data collection.

Spring Parent Interview

The content of the parent interview in spring-kindergarten differed from the fall interview. To avoid redundancy and increased respondent burden, many questionnaire topics were split between fall and spring data collection points. In spring-kindergarten, the parent interview included updating the household roster, parent's participation in activities in the child's school, parent's attitudes toward child-rearing, parent's psychological well-being and health, and the household's food situation. In addition, items from the SRS scales were repeated in the spring parent interview.

Table 2-5 shows the overall structure of the interview and distribution of topics across the two base year data collection points.

Table 2-5. ECLS-K parent interview by major content topics and point of data collection

| Parent Questionnaire | Fall- Kindergarten | Spring- Kindergarten |
|--|-----------------------|-------------------------|
| Family structure | X | X |
| Demographics | X | X |
| Household roster | X | X |
| Marital status | X | X |
| | | |
| Immigration status | | X |
| Primary language(s) spoken in home | X | |
| Parent's involvement with child's school | | X |
| Child care | X | |
| Arrangements with relatives | X | |
| Arrangements with nonrelatives | X | |
| Head Start attendance year before kindergarten | X | |
| Year before kindergarten child care arrangements | X | |
| Child's health and well-being | X | X |
| Birth weight | X | |
| Physical functioning | X | |
| Services for children with special needs | X | |
| Social skills rating | X | X |
| Home environment and cognitive activities | X | X |
| Frequency of literacy activities | X | X |
| Computer use | | X |
| Television viewing | | X |
| Parental educational expectations for child | X | |
| Neighborhood safety | | X |
| Parent education | X | |
| Parent employment | X | |
| Parent income | | X |

Table 2-5. ECLS-K parent interview by major content topics and point of data collection (continued)

| Parent Questionnaire | Fall- Kindergarten | Spring- Kindergarten |
|---|-----------------------|-------------------------|
| Welfare and other public assistance use | X | X |
| Parent/child interaction Parent discipline | | X X |
| Parent health and emotional well-being | | X |
| Relationships and social support Marital satisfaction | X | X X |
| Background data for fall-kindergarten nonresponding parents Child's physical functioning/birth weight of child Home language WIC benefits Parent education/mother's employment history Prekindergarten Head Start attendance Services for children with special needs | | X / / / / |

Note: The columns to the right of each construct correspond to the waves of questionnaire administration. Waves that included the construct are marked with an "X." Content areas asked in spring only to new parent participants are marked with a "/."

In the spring parent interview, households were routed to one of two questionnaire paths, either as a new household or as a continuing household that participated in fall data collection. Parents who completed the fall-kindergarten parent interview were classified as continuing households. Parents who were selected to participate in fall-kindergarten, but either refused, did not finish the interview, could not be located, or were unavailable during the field period were also classified as new households in the spring. Parents of children in schools converted in 1999 were classified as new households. The group of parents entering the study in spring 1999 were asked the same questions in the spring interview as those who participated in the fall. These respondents were also asked an additional set of questions to replicate some of the items included in the fall interview.

The rules for respondent selection varied by questionnaire path. Respondents in continuing households were selected according to the following order of preference:

- 1. The fall-kindergarten respondent;
- 2. The child's mother;

- 3. Another parent or guardian; and
- 4. Another household member.

Respondents in new households were selected according to the following order of preference:

- 1. The child's mother;
- 2. Another parent or guardian; and
- 3. Another household member.

2.3 Teacher Questionnaires

Each kindergarten teacher received a self-administered questionnaire consisting of three distinct parts. The first section, part A, asked about the teacher's class and classroom characteristics. It was designed to collect data about the composition and demographics of the children in the class. Part B addressed more specific questions on class organization, typical class activities, and evaluation methods, as well as teacher views on kindergarten readiness, school environment, and overall school climate. Background questions about the teacher were also included in this section.

Part C asked teachers to report about the sampled children in their classrooms. Teachers were asked to respond to 20 questions about the child's academic performance. The academic rating scale (ARS) gathered data on each sampled child's skills in areas of language and literacy, general knowledge, and mathematical thinking. For example, some questions asked if the child used complex sentence structure, demonstrated early writing behaviors, formed explanations based on observations, or solved problems involving numbers. Part C also included questions from the SRS that collected data on five areas of children's social skills

2.3.1 Content of the ARS

There are three scales of the ARS: language and literacy, general knowledge, and mathematics. Each of these is described below. The areas measured in the ARS overlap and augment what is measured in the direct cognitive assessment. The items were designed to ascertain the current skill

levels, knowledge, and behaviors of the child based on the teacher's past observation and experience with the child. Unless otherwise noted, the fall and spring ARS have the same number of items for each concept.

- The Language and Literacy section of the ARS asks teachers to rate each child's proficiency in speaking (1 item), listening (1 item), early reading (3 items fall, 4 items spring), and writing (1 item fall, 2 items spring). In addition, teachers rate the child's computer literacy (1 item).
- The **General Knowledge** section of the ARS asks teachers to rate each child's proficiency in social studies (1 item fall, 2 items spring) and science (3 items).
- In the **Mathematics** section, teachers rate each child on one item on each of five skills: concept of numbers, solving number problems, use of math strategies, data analysis (graphing), and measurement.

In all sections, the teacher rated the child's skills, knowledge and behaviors on a scale from "Not Yet" to "Proficient" (see table 2-6). If a skill, knowledge, or behavior had not been introduced into the classroom, the teacher coded that item as N/A (Not applicable).

See chapter 3, section 3.3 for scale scores, value ranges, means, and standard deviations for the ARS.

Table 2-6. ARS response scale

| Not yet: | Child has not yet demonstrated skill, knowledge, or behavior. |
|---------------|--|
| Beginning: | Child is <u>just beginning</u> to demonstrate skill, knowledge, or behavior but does so very inconsistently. |
| In progress: | Child demonstrates skill, knowledge, or behavior <u>with some regularity</u> but varies in level of competence. |
| Intermediate: | Child demonstrates skill, knowledge, or behavior with increasing regularity and average competence but is not completely proficient. |
| Proficient: | Child demonstrates skill, knowledge, or behavior competently and consistently. |
| N/A: | Not applicable: Skill, knowledge, or behavior has <u>not been introduced</u> in classroom setting. |

2.3.2 Teacher SRS

Teachers rated individual students as part of a self-administered questionnaire. These items are intended to measure approaches to learning, self-control, and interpersonal skills. The items were rated on a scale of one (Never) to four (Very often). See chapter 3, section 3.6.1 for variable names, ranges, means, and standard deviations for these scales.

- The **Approaches to Learning** Scale (Teacher SRS) measures behaviors that affect the ease with which children can benefit from the learning environment. It includes six items that rate the child's attentiveness, task persistence, eagerness to learn, learning independence, flexibility, and organization.
- The **Self-Control** (Teacher SRS) Scale has four items that indicate the child's ability to control behavior by respecting the property rights of others, controlling temper, accepting peer ideas for group activities, and responding appropriately to pressure from peers.
- The five **Interpersonal Skills** (Teacher SRS) items rate the child's skill in forming and maintaining friendships, getting along with people who are different, comforting or helping other children, expressing feelings, ideas and opinions in positive ways, and showing sensitivity to the feelings of others.

The two problem behavior scales reflect behaviors that may interfere with the learning process and with the child's ability to interact positively in the classroom.

- Externalizing Problem Behaviors (Teacher SRS) include acting out behaviors. Five items on this scale rate the frequency with which a child argues, fights, gets angry, acts impulsively, and disturbs ongoing activities.
- The Internalizing Problem Behavior (Teacher SRS) Scale asks about the apparent presence of anxiety, loneliness, low self-esteem, and sadness. This scale comprises four items.

This measure is adapted with permission from the instrument Elementary Scale A ("How Often?") (Gresham, F. M. and Elliott, S.N., 1990).

Fall-Kindergarten Teacher Questionnaires

Part A of the fall-kindergarten teacher questionnaire was given to all kindergarten teachers, regardless of whether they taught a sampled child. It included items characterizing the classroom and

students. Part B included questions regarding class organization and evaluation, typical class activities, and views on kindergarten readiness. The part C questionnaire asked teachers to complete an ARS and SRS rating for each sampled child in his or her classroom.

Spring-Kindergarten Teacher Questionnaires

Similar to the fall instrument, the spring questionnaire was also divided into three sections. The content of the items varied between fall and spring instruments to ease respondent burden. Part A was again completed by all kindergarten teachers in the school, regardless of whether they taught a sampled child. This section asked about the characteristics of the kindergarten class and the children in the class. The spring part B questionnaire included some, but not all, of the questions used in the part B fall questionnaire. Part B of the teacher questionnaire was completed only by kindergarten teachers new to the study. This questionnaire was similar to the part B questionnaire completed in fall. It was used to gather information about teacher background, instructional practices, views on kindergarten readiness, and the teaching climate of the school. The teacher part C questionnaire was completed by kindergarten teachers who taught sampled children. This questionnaire, similar to the part C questionnaire completed in fall, asked teachers to provide ratings of each sampled child in their classroom in academic and social areas. The spring part C also included a section titled "student information" that asked for overall academic and physical activity comparisons of the sampled child with the other children in the class and student support service participation. Table 2-7 shows the overall structure of the teacher questionnaire and the distribution of topics among the fall and spring data collection points.

2.4 Special Education Teacher Questionnaires

The special education teacher questionnaires were new in the spring. ECLS-K supervisors reviewed accommodation and inclusion information for children who received special education services. During the preassessment visit, the field supervisors specified primary special education teachers of sampled children and listed special education staff working with each child (e.g., speech pathologists, reading instructors, and audiologists). These questionnaires were given to special education teachers who taught sampled children. If a child received special education services from more than one special education teacher, a field supervisor determined the child's primary special education teacher.

Table 2-7. Teacher questionnaire

| Teacher Questionnaire | Fall- Kindergarten | Spring- Kindergarten |
|--|-----------------------|-------------------------|
| Part A Description of class—age, race, and gender distribution | X | |
| Class organization | X^1 | X |
| Children with special needs Classroom aides Class assignment and grouping Types of activity/ interest areas | X | X X X |
| Class activities Instructional time in different subjects Types of materials and activities Child vs. teacher initiated activities | X^1 X^1 | X X X |
| Parent involvement | | X |
| Professional development | | X |
| Part B Evaluation and grading practices of students Sharing progress information with parents | X | / |
| Teachers' views on school readiness | X | / |
| Perceptions about school climate | X | / |
| Perception of personal influence on policies and classroom planning | X | |
| Teacher demographic information | X | / |
| Teacher experience and education | X | / |
| Job satisfaction | X | / |
| Transition to school activities | X | / |

Table 2-7. Teacher questionnaire (continued)

| Teacher Questionnaire | Fall- Kindergarten | Spring- Kindergarten |
|--|-----------------------|-------------------------|
| Part C | | |
| Indirect child cognitive evaluation by teacher | X | X |
| Language and literacy, mathematics, general knowledge | X | X |
| Teacher evaluation of target child's social skills | X | X |
| Sampled child additional information | | X |
| Participation in special services and programs | | X |
| Target child's overall academic skills and physical activity | | X |
| Reading group participation | | X |
| | | |

¹ Collected in part B for fall-kindergarten.

Note: The columns to the right of each construct correspond to the waves of questionnaire administration. Waves that included the construct are marked with an "X." Content areas asked in spring only to new teacher participants are marked with a "/."

The primary special education teacher was defined as:

- The teacher who managed the child's Individualized Education Plan (IEP), or
- The teacher who spent the most amount of time providing special education services to the child, or
- The teacher who is most knowledgeable about the child's special needs and equipment.

Items in the special education teacher questionnaires addressed topics such as the child's disability, IEP goals, the amount and type of services used by sampled students, and communication with parents and general education teachers.

Part A of the special education teacher questionnaire was designed to collect information about the special education teacher's professional background and experience. Part B asked about the special education services provided to the child and the nature of the child's special education curriculum. Table 2-8 provides a summary of the content areas addressed in the special education teacher questionnaire.

Table 2-8. Special education teacher questionnaire¹

| Teachers of Sampled Students with IEPs Questionnaire | Spring- Kindergarten |
|--|-------------------------|
| Part A | |
| Teacher's gender | X |
| Teacher's age | X |
| Teacher's race-ethnicity | X |
| Teaching experience | X |
| Educational background | X |
| Special education teacher background | X |
| Location of service provision | X |
| Student load/week | X |
| Part B | |
| Disability category | X |
| IEP goals for the school year | X |
| Extent of services | X |
| Types of services provided for the year | X |
| Primary placement | X |
| Teaching practices, methods, and materials | X |
| Assistive technologies used by child | X |
| General education goals, expectations and assessments | X |
| Collaboration/communication with child's general education teacher | X |
| Frequency of communicating with child's parents | X |
| Receipt of formal evaluations in the past year | X |

¹ Data collected only in the spring.

2.5 Adaptive Behavior Scale

The Adaptive Behavior Scale was completed for all sampled children who were identified in spring-kindergarten as excluded from the direct child assessment. A child was excluded from the assessment if he or she needed the assessment administered in Braille, enlarged print, or sign language, or if the child's IEP specifically prohibited the child from taking standardized assessments. This questionnaire was completed by the child's primary special education teacher and asked the teacher to provide ratings of the sampled child in three domains: independent functioning, language development, and numbers and time.

2.6 School Administrator Questionnaire

The school principal, administrator, or headmaster was asked to complete the school administrator questionnaire in the spring of 1999 (shown in table 2-9). This self-administered questionnaire was intended to gather information about the school, student body, teachers, school policies, and administrator characteristics. The questionnaire was divided into nine sections. The first seven sections requested mainly factual information about each school and the programs offered at the school. These sections could be completed by either a principal or a designee who was able to provide the requested information. The school's principal was asked to complete the remaining two sections concerning his or her background and evaluations of the school climate. This questionnaire was administered only in the spring of the base year data collection.

2.7 School Facilities Checklist

ECLS-K supervisors completed the facilities checklist. The facilities checklist collects information about the (1) availability and condition of the selected schools, (2) presence and adequacy of security measures, (3) presence of environmental factors that may affect the learning environment, and (4) overall learning climate of the school. (See chapter 5, section 5.6.5 for more detail on the collection of these data.)

2.8 School Records Abstract Form

School staff completed the student records abstract form. This instrument was used to obtain information about the child's attendance record, report card, and use of an individualized education plan. Information about the type of language or English proficiency screening that the school used and whether the child participated in Head Start prior to kindergarten was also retrieved from the students' records. (See chapter 5, section 5.6.5 for more detail on the collection of these forms.)

Table 2-9. School administrator questionnaire¹

| | Spring- |
|--|--------------|
| School Questionnaire | Kindergarten |
| School characteristics | X |
| Type of school | X |
| Admission requirements | X |
| School size | X |
| School Size | 71 |
| Student characteristics | X |
| Race-ethnicity of students | X |
| Children eligible for special services | X |
| Types of kindergarten programs | X |
| | |
| School facilities and resources | X |
| Equipment | X |
| Community share staristics and school sofety | X |
| Community characteristics and school safety | Λ |
| Teaching and other school staff characteristics | X |
| Range of salary paid to teachers | X |
| Race-ethnicity of staff | X |
| | |
| School policies and programs | X |
| Assessments, testing, and retention | X |
| | |
| School-family-community connections | X |
| Programs and activities for families | X |
| Parent involvement and participation | X |
| Drograms for anguid nonvious | X |
| Programs for special populations ESL and bilingual education | X |
| Special education | X |
| Gifted and talented | X |
| Citted and allemed | 71 |
| Principal characteristics | X |
| Gender, race-ethnicity, age of principal | X |
| Experience and education | X |
| | |
| School governance and climate | X |
| Goals and objectives for kindergarten teachers | X |
| School functioning and decisionmaking | X |
| | |

¹ Collected only in the spring.

2.9 Salary and Benefits Questionnaire

The salary and benefits questionnaire collects information on the base salary, merit pay, and benefit pay of teachers and principals. The salary and benefits questionnaire was completed at the school or district level, generally by the school or district business administrator or by a private school administrator or headmaster. The teacher salary and benefits questionnaire can be used to develop child-level school resource variables that can be linked to child outcomes. The interest in payroll information stems from the fact that salaries and benefits constitute approximately 80 percent of all current expenditures in school budgets. Although instructional expenditures are 61.8 percent of total current expenditures, salaries and benefits for instruction alone constitute 56 percent of total current expenditures, and 91.6 percent of all instructional expenditures.⁴ These data provide an opportunity to learn more about how resources are allocated and used in schools and how those spending decisions impact children's achievement.

2.10 Head Start Verification

The goal of this part of the study is to verify that parent and school reports of children's Head Start participation. Respondents to the fall-kindergarten parent interview were asked in a series of questions about childcare outside the home whether or not the sampled child had ever attended Head Start. If the response was "Yes," the respondent was asked whether or not the sampled child attended Head Start in the year before kindergarten. Information on the name and location of the Head Start facility was matched by the interviewer against a database of Head Start centers. Similar data were collected in the spring-kindergarten student record abstract. In the student record abstract, one item asked whether or not the sampled child had attended a Head Start center before entering kindergarten. If the answer was "Yes," then the school staff person was asked to record the name, address, and telephone number of the Head Start center and the name of the Head Start director. The next step was to verify that the centers reported by the respondents were Head Start centers and that the child did attend the center in the 1997-98 school year. Chapter 5, section 5.6.7, describes how the data were collected.

⁴ U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics*, 1999, NCES 2000-031, Washington DC 2000. Pp. 185, table 168.

3. ASSESSMENT AND RATING SCALE SCORES USED IN THE ECLS-K

Several types of scores are used in the Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K) to describe children's cognitive and social development during their kindergarten year. These scores are for the direct cognitive assessment, the academic rating scale (ARS), the psychomotor assessment, and the social rating scale (SRS). Descriptions of the scores for each assessment or scale are provided below, along with variable names, variable descriptions, and value ranges found in the ECLS-K data files. Guidelines for when to use each cognitive test score are also provided in this chapter.

3.1 Direct Cognitive Assessment

The direct cognitive assessment contained items on reading, mathematics, and general knowledge in the fall and spring of kindergarten. In each subject area, children received a 12 to 20 item routing test. Performance on the routing items guided the selection of one of several alternative second-stage forms. The second-stage form contained items of appropriate difficulty for the level of ability indicated by the routing items. There are five different types of scores that can be used to describe children's performance on the direct cognitive assessment: (1) number right scores and (2) item response theory (IRT) scores, which measure children's performance on a set of test questions with a broad range of difficulty; (3) standardized scores, which report children's performance relative to their peers; (4) criterion-referenced proficiency level and (5) proficiency probability scores, which evaluate children's performance with respect to subsets of test items that mark specific skills. See chapter 2, section 2.1 for a description of the ECLS-K assessment battery.

Table 3-1 shows the types of scores, variable names, descriptions, ranges means, and standard deviations for the direct cognitive assessment.

3.1.1 Number-Right Scores

Number-right scores are counts of the raw number of items a child answered correctly. These scores are useful for descriptive purposes only for tests that are the same for all children. However,

when these scores are for tests that vary in average difficulty, they are not comparable to each other. For example, a student who took the middle difficulty mathematics second-stage form would probably have gotten more questions correct if he or she had taken the easier low form and fewer correct if the more difficult high form had been administered. For this reason, raw number right scores are reported in the database only for the first stage (routing) tests, which were the same for all children. Each routing test consisted of sets of items spanning a wide range of skills. For example, the reading routing test had four questions each on letter recognition, recognizing beginning sounds, recognizing ending sounds, reading simple sight words, and selecting words in the context of a sentence. An analyst might use the routing test number right scores to report actual performance on this particular set of tasks.

See table 3-1 for the variable names, ranges, means, and standard deviations for the number right scores.

3.1.2 IRT Scale Scores

Scores based on the full set of test items were calculated using IRT procedures. IRT made it possible to calculate scores that could be compared regardless of which second-stage form a child took. IRT uses the pattern of right, wrong, and omitted responses to the items actually administered in a test and the difficulty, discriminating ability, and "guess-ability" of each item to place each child on a continuous ability scale. The items in the routing test, plus a core set of items shared among the different second-stage forms, made it possible to establish a common scale. It is then possible to estimate the score the child would have achieved if all of the items in all of the test forms had been administered.

IRT has several other advantages over raw number-right scoring. By using the overall pattern of right and wrong responses to estimate ability, IRT can compensate for the possibility of a low ability student guessing several hard items correctly. If answers on several easy items are wrong, a correct difficult item is, in effect, assumed to have been guessed. Omitted items are also less likely to cause distortion of scores, as long as enough items have been answered right and wrong to establish a consistent pattern. Unlike raw scoring, which, in effect, treats omitted items as if they had been answered incorrectly, IRT procedures use the pattern of responses to estimate the probability of correct responses for all test questions. Finally, IRT scoring makes possible longitudinal measurement of gain in achievement over time, even though the tests administered are not identical at each point. The common

Table 3-1. Direct cognitive assessment: types of scores, variable names, descriptions, ranges, means, and standard deviations¹

| Type of Score | Variable | Description | Range of Values | Mean | Standard Deviation |
|-------------------------|----------|---|-----------------|------|-----------------------|
| Number Right | C1RROUNR | C1Reading Routing Test, - Number Right | 0 - 20 | 5.7 | 3.9 |
| | C1MROUNR | C1 Mathematics Routing Test, - Number Right | 0 - 16 | 4.4 | 2.9 |
| | C1GROUNR | C1 Genl Knowledge Routing Test, - # Right | 0 - 12 | 4.7 | 2.9 |
| | C2RROUNR | C2Reading Routing Test, - Number Right | 0 - 20 | 9.8 | 4.2 |
| | C2MROUNR | C2 Mathematics Routing Test, - Number Right | 0 - 16 | 7.1 | 3.3 |
| | C2GROUNR | C2 Genl Knowledge Routing Test, - # Right | 0 - 12 | 6.2 | 3.0 |
| IRT | C1RSCALE | C1 Reading IRT Scale Score | 0.0 - 72.0 | 22.0 | 8.3 |
| | C1MSCALE | C1 Math IRT Scale Score | 0.0 - 64.0 | 19.1 | 7.2 |
| | C1GSCALE | C1 General Knowledge IRT Scale Score | 0.0 - 51.0 | 22.1 | 7.4 |
| | C2RSCALE | C2 Reading IRT Scale Score | 0.0 - 72.0 | 31.6 | 10.3 |
| | C2MSCALE | C2 Math IRT Scale Score | 0.0 - 64.0 | 27.1 | 8.8 |
| | C2GSCALE | C2 General Knowledge IRT Scale Score | 0.0 - 51.0 | 26.8 | 7.8 |
| Standardized Score | C1RTSCOR | C1 Reading T-Score | 0.0 - 90.0 | 50.0 | 10.0 |
| | C1MTSCOR | C1 Math T-Score | 0.0 - 90.0 | 50.0 | 10.0 |
| | C1GTSCOR | C1 General Knowledge T-Score | 0.0 - 90.0 | 50.0 | 10.0 |
| | C2RTSCOR | C2 Reading T-Score | 0.0 - 90.0 | 50.0 | 10.0 |
| | C2MTSCOR | C2 Math T-Score | 0.0 - 90.0 | 50.0 | 10.0 |
| | C2GTSCOR | C2 General Knowledge T-Score | 0.0 - 90.0 | 50.0 | 10.0 |
| Proficiency Level Score | C1RPROF1 | C1 Prof 1 - Letter Recognition | 0 - 1 | 0.65 | 0.8 |
| | C1RPROF2 | C1 Prof 2 - Beginning Sounds | 0 - 1 | 0.30 | 0.46 |
| | C1RPROF3 | C1 Prof 3 - Ending Sounds | 0 - 1 | 0.18 | 0.38 |
| | C1RPROF4 | C1 Prof 4 - Sight Words | 0 - 1 | 0.04 | 0.20 |

¹ See chapter 7, section 7.3 for variable naming conventions.

Table 3-1. Direct cognitive assessment: types of scores, variable names, descriptions, ranges, means, and standard deviations (continued)

| Type of Score | Variable | Description | Range of Values | Mean | Standard Deviation |
|-------------------------------|----------|----------------------------------|-----------------|------|-----------------------|
| | C1RPROF5 | C1 Prof 5 - Word in Context | 0 - 1 | 0.26 | 0.44 |
| | C1MPROF1 | C1 Prof 1 - Count, Number, Shape | 0 - 1 | 0.90 | 0.31 |
| | C1MPROF2 | C1 Prof 2- Relative size | 0 - 1 | 0.55 | 0.50 |
| | C1MPROF3 | C1 Prof 3 - Ordinality, sequence | 0 - 1 | 0.20 | 0.402 |
| | C1MPROF4 | C1 Prof 4 -Add/Subtract | 0 - 1 | 0.04 | 0.197 |
| | C1MPROF5 | C1 Prof 5 - Multiply/Divide | 0 - 1 | 0.02 | 0.131 |
| | C2RPROF1 | C2 Prof 1 - Letter Recognition | 0 - 1 | 0.92 | 0.277 |
| | C2RPROF2 | C2 Prof 2 - Beginning Sounds | 0 - 1 | 0.70 | 0.46 |
| | C2RPROF3 | C2 Prof 3 - Ending Sounds | 0 - 1 | 0.50 | 0.50 |
| | C2RPROF4 | C2 Prof 4 - Sight Words | 0 - 1 | 0.14 | 0.35 |
| | C2RPROF5 | C2 Prof 5 - Word in Context | 0 - 1 | 0.24 | 0.43 |
| | C2MPROF1 | C2 Prof 1- Count, Number, Shape | 0 - 1 | 0.95 | 0.21 |
| | C2MPROF2 | C2 Prof 2 - Relative Size | 0 - 1 | 0.82 | 0.38 |
| | C2MPROF3 | C2 Prof 3 - Ordinality, Sequence | 0 - 1 | 0.54 | 0.50 |
| | C2MPROF4 | C2 Prof 4 - Add/Subtract | 0 - 1 | 0.17 | 0.38 |
| | C2MPROF5 | C2 Prof 5 - Multiply/Divide | 0 - 1 | 0.04 | 0.19 |
| Proficiency Probability Score | C1RPROB1 | C1 Prob 1 - Letter Recognition | 0.0 - 1.0 | 0.66 | 0.43 |
| | C1RPROB2 | C1 Prob 2 - Beginning Sounds | 0.0 - 1.0 | 0.29 | 0.36 |
| | C1RPROB3 | C1 Prob 3 - Ending Sounds | 0.0 - 1.0 | 0.16 | 0.27 |
| | C1RPROB4 | C1 Prob 4 - Sight Words | 0.0 - 1.0 | 0.02 | 0.13 |
| | C1RPROB5 | C1 Prob 5 - Word in Context | 0.0 - 1.0 | 0.01 | 0.08 |
| | C1MPROB1 | C1 Prob 1 - Count, Number, Shape | 0.0 - 1.0 | 0.92 | 0.20 |
| | C1MPROB2 | C1 Prob 2 - Relative Size | 0.0 - 1.0 | 0.54 | 0.38 |
| | C1MPROB3 | C1 Prob 3 - Ordinality, Sequence | 0.0 - 1.0 | 0.20 | 0.31 |
| | C1MPROB4 | C1 Prob 4 - Add/Subtract | 0.0 - 1.0 | 0.04 | 0.12 |

Table 3-1. Direct cognitive assessment: types of scores, variable names, descriptions, ranges, means, and standard deviations (continued)

| Type of Score | Variable | Description | Range of Values | Mean | Standard Deviation |
|---------------|----------|----------------------------------|-----------------|------|-----------------------|
| | C1MPROB5 | C1 Prob 5 - Multiply/Divide | 0.0 - 1.0 | 0.00 | 0.04 |
| | C2RPROB1 | C2 Prob 1 - Letter Recognition | 0.0 - 1.0 | 0.93 | 0.23 |
| | C2RPROB2 | C2 Prob 2 - Beginning Sounds | 0.0 - 1.0 | 0.70 | 0.36 |
| | C2RPROB3 | C2 Prob 3 - Ending Sounds | 0.0 - 1.0 | 0.50 | 0.36 |
| | C2RPROB4 | C2 Prob 4 - Sight Words | 0.0 - 1.0 | 0.13 | 0.27 |
| | C2RPROB5 | C2 Prob 5 - Word in Context | 0.0 - 1.0 | 0.04 | 0.16 |
| | C2MPROB1 | C2 Prob 1 - Count, Number, Shape | 0.0 - 1.0 | 0.99 | 0.08 |
| | C2MPROB2 | C2 Prob 2 - Relative Size | 0.0 - 1.0 | 0.84 | 0.26 |
| | C2MPROB3 | C2 Prob 3 - Ordinality, Sequence | 0.0 - 1.0 | 0.53 | 0.40 |
| | C2MPROB4 | C2 Prob 4 - Add/Subtract | 0.0 - 1.0 | 0.16 | 0.26 |
| | C2MPROB5 | C2 Prob 5 - Multiply/Divide | 0.0 - 1.0 | 0.02 | 0.10 |
| | C1RPRINT | C1 Print Familiarity | 0 - 3 | 1.8 | 1.1 |
| | C2RPRINT | C2 Print Familiarity | 0 - 3 | 2.3 | 0.9 |

items present in the routing test and in overlapping second-stage forms allow the test scores to be placed on the same scale, even as the two-stage test design adapts to children's growth over time.

The IRT scale scores in the database represent estimates of the number of items students would have answered correctly if they had taken all of the 72 questions in the first- and second-stage reading forms, the 64 questions in all of the mathematics forms, and the 51 general knowledge items. These scores are not integers because they are probabilities of correct answers, summed over all items in the pool. Gain scores may be obtained by subtracting the estimated number right at time 1 from the estimated number right at time 2. (Note that scores for different subject areas are not comparable to each other because they are based on different numbers of test questions; that is, it would not be correct to assume that a child is doing better in reading than in mathematics because his or her IRT scale score in reading is higher.)

See table 3-1 for variable names, ranges, means, and standard deviations for the IRT scale scores.

3.1.3 Standardized Scores (T-Scores)

T-scores provide norm-referenced measurements of achievement, that is, estimates of achievement level *relative to the population as a whole*. A high T-score mean for a particular subgroup indicates that the group's performance is high in comparison to other groups. It does not mean that group members have mastered a particular set of skills, only that their mastery level is greater than a comparison group. Similarly, a change in T-score means over time reflects a change in the group's status with respect to other groups. In other words, they provide information on *status compared to children's peers*, while the IRT scale scores and proficiency scores represent *status with respect to achievement on a particular criterion set of test items*. The T-scores can only provide an indicator of the extent to which an individual or a subgroup ranks higher or lower than the national average and how much this relative ranking changes over time.

The standardized scores reported in the database are transformations of the IRT theta (ability) estimates, rescaled to a mean of 50 and standard deviation of 10 using cross-sectional sample weights for fall- and spring-kindergarten. For example, a T-score of 55 (C1RTSCOR) represents a

reading achievement level that is one-half of a standard deviation higher than the mean for the fall-kindergarten population represented by the tested sample of ECLS-K participants.

See table 3-1 for variable names, ranges, means, and standard deviations for the standardized (T) scores.

3.1.4 Proficiency Scores

Proficiency scores provide a means of distinguishing status or gain in specific skills within a content area from the overall achievement measured by the IRT scale scores and T-scores. Since the ECLS-K direct cognitive child assessment was a two-stage design (where not all children were administered all items), information on children's specific proficiencies are presented in two ways: proficiency scores (raw scores) and proficiency probability scores (IRT-based scores). In most situations, analysts use the proficiency probability scores in analyzing children's specific reading and mathematics knowledge and skills. Clusters of assessment questions having similar content and difficulty were included at several points along the score scale of the reading and mathematics assessments. No proficiency scores were computed for the general knowledge test, because the questions did not follow a hierarchical pattern. The following proficiencies were identified in the reading and mathematics assessments.

Reading:

- **Letter recognition:** identifying upper- and lowercase letters by name;
- **Beginning sounds:** associating letters with sounds at the beginning of words;
- Ending sounds: associating letters with sounds at the end of words;
- **Sight words:** recognizing common words by sight; and
- Comprehension of words in context: reading words in context.

Mathematics:

- **Number and Shape:** identifying some one-digit numerals, recognizing geometric shapes, and one-to-one counting of up to ten objects;
- **Relative Size:** reading all single-digit numerals, counting beyond ten, recognizing a sequence of patterns, and using nonstandard units of length to compare objects;

- Ordinality, Sequence: reading two-digit numerals, recognizing the next number in a sequence, identifying the ordinal position of an object, and solving a simple word problem;
- Addition/Subtraction: solving simple addition and subtraction problems; and
- **Multiplication/Division:** solving simple multiplication and division problems and recognizing more complex number patterns.

Clusters of items provide a more reliable test of proficiency than do single items because of the possibility of guessing; it is very unlikely that a student who has not mastered a particular skill would be able to guess enough answers correctly to pass a four-item cluster. The proficiency levels were assumed to follow a Guttman model; that is, a student passing a particular skill level was expected to have mastered all lower levels; a failure should have indicated nonmastery at higher levels. Only a very small percentage of students in fall- and spring-kindergarten had response patterns that did not follow the Guttman model, that is, a failing score at a lower level followed by a pass on a more difficult item cluster. Overall, including both fall- and spring-kindergarten, 5.5 percent of the children did not follow the model for reading and 6.6 percent of the children did not follow the model for mathematics. This does not necessarily indicate a different order or learning for these children - since most of the proficiency-level items were multiple choice, many of these reversals are due to children guessing.

Proficiency level (dichotomous) scores and proficiency probability (continuous) level scores are two types of proficiency scores used in the ECLS-K. The following is a description of these scores.

Proficiency Level Scores (Dichotomous)

The proficiency level scores reflect the children's raw ECLS-K direct cognitive assessment scores. These scores are intended for very distinct kinds of analysis. Most analysts should use the proficiency probability scores.

For each proficiency level, a score of one was assigned to children who correctly answered at least three of the four items in the cluster, and a score of zero was given if at least two items were incorrect or don't know. If children did not answer enough items for pass or fail to be determined for a particular cluster, a pass/fail score was assigned only if the remaining proficiency scores indicated a level that was unambiguous. That is, a "fail" could be inferred if there were easier cluster(s) that had been failed and no higher cluster passed; and a "pass" was imputed if harder cluster(s) were passed and no

easier one failed. In the case of ambiguous (e.g., pass, blank, fail, where the blank could be either a pass or a fail) or contradictory (e.g., fail, blank, pass) patterns, missing cluster scores were left blank.

Averaging a population subgroup's zero and one scores for a particular proficiency cluster results in an estimate of the proportion of children in the subgroup who had mastered the material at that level. The difference between this average at two points in time represents the proportion of children who attained mastery during that time period. These scores are <u>not</u> designed to extrapolate to the entire population of kindergarten children. These scores simply show - of the children who took the items represented by the level, how many passed the level. For example, these scores would be used in an analysis involving only the population of children that comprehend words in context. The analyst would analyze data on the subset of children that received a value of 1 on reading proficiency level 5 (comprehension of words in context), and would base the analysis only on this group of children.

See table 3-1 for variable names, ranges, means, and standard deviations for the proficiency level scores.

Proficiency Probability Scores (Continuous)

The proficiency probability scores are based on the same clusters of items as the proficiency level scores but differ from them in several ways. They are continuous rather than dichotomous and can take on any value between zero and one. They are estimates based on overall performance rather than counts of actual item responses. They are also estimates for all children with scorable test data, not only for the ones who were administered the test items in the cluster.

Due to the two-stage format of the cognitive assessment battery, not all children received all items. An IRT model was employed to produce proficiency probability scores, which reflect the probability that a child would have passed a proficiency level. The item clusters were treated as single items for the purpose of IRT calibration, in order to estimate students' probabilities of mastery of each set of skills. The hierarchical nature of the skill sets justified the use of the IRT model in this way. Because the proficiency probabilities were based on overall performance, they could be calculated for all children who had scorable test data, not just those with relatively complete sets of responses to the necessary item clusters.

The proficiency probability scores can be averaged to produce estimates of mastery rates within population subgroups. These continuous measures can provide a closer look at individuals' status and change over time. Gains in probability of mastery at each proficiency level allow researchers to study not only the amount of gain in total scale score points but also where along the score scale different children are making their largest gains in achievement during a particular time interval. Thus, students' school experiences can be related to improvements in specific skills.

Proficiency level scores differ from proficiency probability scores. Proficiency level scores are based on the items administered to each child. Since not all children received the same items because of the two-stage assessment design, these scores only represent those children who were administered the items. The use of proficiency level scores to estimate the total population of children mastering a specific proficiency level is not recommended, because stopping rules within the test resulted in missing data for the lower-achieving children. The proficiency probability scores are more suited for estimating the total population of children mastering specific proficiency scores.

See table 3-1 for variable names, ranges, means, and standard deviations for the proficiency probability scores.

Familiarity with Conventions of Print

Some items from the child assessment measured children's familiarity with conventions of print but were not part of the set of proficiency scores because they did not fit the hierarchical pattern. The score for these questions was obtained by counting the number of correct answers (0-3) for the following three items, administered while the child was looking at an illustrated story.

- 1. Indicating that reading goes from left to right;
- 2. Going to the beginning of the next line after a line ends; and
- 3. Finding the end of the story.

These items were part of the reading score calculations in the direct cognitive assessment but were not part of the hierarchical set of proficiency and proficiency probability scores because they did not fit the proficiency scoring pattern. The proficiency levels assume that mastery of a higher level usually means that the child has mastered lower levels. This was not the case with conventions of print. Some

children scored high on conventions of print but could not recognize letters, while others had the reverse pattern. Thus, the score for familiarity with conventions of print is reported separately.

See table 3-1 for variable names, ranges, means, and standard deviations for the conventions of print scores.

3.1.5 Choosing the Appropriate Score for Analysis

Each of the types of scores described above measures children's achievement from a slightly different perspective. The choice of the most appropriate score for analysis purposes should be driven by the context in which it is to be used:

- A measure of overall achievement vs. achievement in specific skills;
- An indicator of status at a single point in time versus growth over time; and
- A criterion-referenced vs. norm-referenced interpretation.

IRT-Based Scores

The scores derived from the IRT model (IRT scale scores, T-scores, proficiency probabilities) are based on all of the child's responses to a subject area assessment. That is, the pattern of right and wrong answers, as well as the characteristics of the assessment items themselves, are used to estimate a point on an ability continuum, and this ability estimate, theta, then provides the basis for criterion-referenced and norm-referenced scores.

■ The IRT scale scores are overall, criterion-referenced measures of status at a point in time. They are useful in identifying cross-sectional differences among subgroups in overall achievement level and provide a summary measure of achievement useful for correlational analysis with status variables such as demographics, school type, or behavioral measures.

The IRT scale scores may also be used as longitudinal measures of growth, but it is important to remember that gains made at different points on the score scale have qualitatively different interpretations. For example, children who make gains in recognizing letters and letter sounds are learning very different things from those who are making the jump from reading words to reading sentences, although the gains in

number of scale score points may be the same. Comparison of gains in scale score points is most meaningful for groups that started with similar initial status. When initial status is very different, comparisons of scale score gains may be misleading because the skills being learned are qualitatively different, and comparisons of total number of points gained may be difficult to interpret.

- The **standardized scores (T-scores)** are also overall measures of status at a point in time, but they are **norm-referenced** rather than criterion-referenced. They do not answer the question, "What skills do children have?" but rather "**How do they compare with their peers**?" The transformation to a familiar metric with a mean of 50 and standard deviation of 10 facilitates comparisons in standard deviation units. T-score means may be used longitudinally to illustrate the **increase or decrease in gaps** in achievement among subgroups over time.
- **Proficiency probability scores**, although derived from the overall IRT model, are criterion-referenced measures of proficiency in specific skills. Because each proficiency score targets a particular narrow set of skills, they are ideal for studying the **details of achievement**, rather than the single summary measure provided by the scale scores and T-scores. They are useful as longitudinal measures of change because they show not only the extent of gains, but also where on the achievement scale the gains are taking place. Thus, they can provide information on differences in skills being learned by different groups, as well as the relationships with processes, both in and out of school, that correlate with learning specific skills. For example, high SES kindergarten children show very little gain in the lowest reading proficiency level, letter recognition, because they were already proficient in this skill at kindergarten entry. At the same time, low SES children are making big gains in basic skills, but most have not yet made major gains in reading words and sentences. The proficiency level at which the largest change is taking place is likely to be different for children with different initial status, background, and school setting. Changes in proficiency probabilities over time may be used to identify the process variables that are effective in promoting achievement gains in specific skills.

Non-IRT Based Scores

The routing test number right, proficiency level, and Conventions of Print scores do **not** depend on the assumptions of the IRT model. They are counts of actual number correct for specific sets of test items, rather than estimates based on patterns of overall performance.

■ Routing test number right scores for the reading, math, and general knowledge assessments are based on 20, 16, and 12 items respectively. They target specific sets of skills and cover a broad range of difficulty. These scores may be of interest to researchers because they are based on a specific set of test items, which was the same for all children who took the test.

- Proficiency level scores are based on the same sets of items as the proficiency probability scores, but are dichotomous, rather than continuous, measures of proficiency. They have a somewhat more intuitive interpretation than the probability scores, since they simply report whether children were able to answer correctly on at least three out of four actual test items in a cluster. Users of the proficiency level scores should be aware of possible bias due to missing data. Stopping rules employed in the administration of the tests to minimize stress on low-performing children results in substantial numbers of missing scores for the higher proficiency levels. Estimates based on variables with substantial amounts of missing data can be assumed to generalize to the whole sample only if "missing-ness" is unrelated to what the variable is measuring. This condition is called "MAR," or Missing-At-Random. The missing level four and five scores for low-achieving children are not missing-at-random, they were not administered based on performance. Interpretations of results based on these scores must take this into account. Similarly, missing data for the *lowest* math proficiency level are due to items in this cluster having been taken from the low second stage test, which was not taken by high-achieving children. Estimates based on proficiency level scores, without adjustments for missing data, would overstate the population performance at the high proficiency levels and understate performance at math level one.
- Conventions of print scores, like the proficiency level scores, are based on a count of the number correct for a particular set of items. Users may wish to relate this score to process variables to get a perspective that is somewhat different from that of the hierarchical levels of reading skills.

3.1.6 Reliabilities

Reliability statistics appropriate for each type of score were computed for each subject area, for fall- and spring-kindergarten assessments. For the IRT-based scores, the reliability of the overall ability estimate, theta, is based on the variance of repeated estimates of theta. These reliabilities, ranging from 0.88 to 0.95, apply to all of the scores derived from the theta estimate, namely, the IRT scale scores, T-scores, and proficiency probabilities. Alpha coefficients for the routing test number correct ranged from 0.78 to 0.88. Split half reliabilities were computed for the item clusters that made up the dichotomous proficiency level scores and the conventions of print cluster. These reliabilities were higher for the reading clusters (0.60 to 0.83) than for the math levels (0.27 to 0.66). The difference in internal consistency statistics is due to the reading items being essentially replications of the same task, while the math items had a greater diversity of content.

Note that the split half reliabilities for the low level item clusters decreased from fall- to spring-kindergarten, while the reliabilities for the clusters at the upper end increased. This is a

consequence of changes in the variance of the cluster scores as children progressed in their development of skills. By spring-kindergarten, the vast majority of children had mastered the lowest proficiency levels, so the sample variance was low, resulting in lower reliability than for the previous fall. Conversely, the sample variance for the difficult tasks was very low in the fall-kindergarten, when most children had *not* mastered these skills, and the reliability rose as some children attained high-level proficiency by the spring, increasing the total variance. This effect is more pronounced for the math than for the reading clusters for two reasons. First, the math item clusters were more heterogeneous than the reading, in terms of content and difficulty. Second, the reading item clusters were based entirely on items from the routing test, which was taken by all children, while the lowest math cluster employed items from the low level second stage test as well. By spring-kindergarten, fewer than half of the test takers were routed to the low form, and this constrained variance in ability resulted in a lower reliability for children who had this score. Tables 3-2 and 3-3 present the reliability statistics for all of the test scores.

Table 3-2. Reliability of IRT-based scores and routing test number correct

| | IRT-based Scores (Reliability of Theta) | | _ | Number Correct Coefficient) |
|-------------------|---|----------|--------|--------------------------------|
| | Fall-k | Spring-k | Fall-k | Spring-k |
| Reading | 0.93 | 0.95 | 0.86 | 0.88 |
| Math | 0.92 | 0.94 | 0.78 | 0.81 |
| General Knowledge | 0.88 | 0.89 | 0.79 | 0.79 |

Table 3-3. Split half reliability of item-cluster-based scores (proficiency level scores)

| | Fall-k | Spring-k |
|----------------------|--------|----------|
| Reading Level 1 | 0.83 | 0.79 |
| Reading Level 2 | 0.76 | 0.76 |
| Reading Level 3 | 0.72 | 0.76 |
| Reading Level 4 | 0.78 | 0.77 |
| Reading Level 5 | 0.60 | 0.69 |
| Conventions of Print | 0.70 | 0.68 |
| Math Level 1 | 0.41 | 0.27 |
| Math Level 2 | 0.58 | 0.49 |
| Math Level 3 | 0.63 | 0.66 |
| Math Level 4 | 0.54 | 0.63 |
| Math Level 5 | 0.46 | 0.53 |

3.2 Indirect Cognitive Assessment (ARS)

The ARS was developed for the ECLS-K to measure teachers' evaluations of students' academic achievement in the three domains that are also directly assessed in the cognitive battery: language and literacy (reading), general knowledge (science and social studies), and mathematical thinking. The difference between the direct and indirect cognitive assessments, and the scores available, are described below. For a discussion of the content areas and response scales of the ARS, see chapter 2, section 2.3.1.

3.2.1 Comparison to Direct Cognitive Assessment

The ARS was designed both to overlap and to augment the information gathered through the direct cognitive assessment battery. Although the direct and indirect instruments measure children's skills and behaviors within the same broad curricular domains with some intended overlap, several of the constructs they were designed to measure differ in significant ways. Most importantly, the ARS includes items designed to measure both the process and products of children's learning in school, whereas the direct cognitive battery measures only the products of children's achievement. Because of time and space limitations, the direct cognitive battery is less able to measure the process of children's thinking including the strategies they use to read, solve math problems, or investigate a scientific phenomenon.

Another major difference between the ARS and direct cognitive assessment is that the skills, knowledge, and behaviors on the ARS reflect a broader sampling of the most recent national curriculum standards and guidelines from early childhood professionals and researchers. The ARS items were not limited by the constraints of a standardized testing format as were the direct cognitive items. Therefore, the scope of curricular content represented in the indirect measures is broader than the content represented on the direct assessment battery.

3.3 IRT Scores Available for the ARS

IRT was employed to calculate scores for the ARS in order to compare performance of students from fall to spring and to be able to compare students who were not rated on all items. The Rasch

Rating Scale Model uses the pattern of ratings on the items actually administered to determine an estimate of the difficulty of each item and to place each student on a continuous ability scale.

A Rasch analysis was performed on the spring ARS data. In the fall-kindergarten, a large percentage of the teachers had not introduced at least some of the items to the classroom setting, resulting in a large number of missing ratings for all but four items.

By the spring-kindergarten, teachers had introduced the skills, knowledge, and behaviors represented in the items to their classrooms. The NA category was used in less than three percent of the cases on all items except "Composes simple stories" (7.52 percent NA); "Uses the computer" (15.83 percent NA); "Recognizes ways people rely on each other" (3.26 percent NA); and "Uses instruments for measuring" (9.82 percent NA). On the majority of the items, the use of the NA category was less than one percent.

The item difficulties from the spring analysis were applied to the fall items and ability estimates were computed for each of the children based on the difficulty estimates of the items and the pattern of ratings children received on those items. The Rasch analysis of the spring data showed that the reliability of the estimates of child ability was very high for all domains in both spring and fall (see table 3-4).

Table 3-4. Reliability for the Rasch-based score

| | Fall-Kindergarten | Spring-Kindergarten |
|---------------------------|-------------------|---------------------|
| ARS Language and Literacy | 0.87 | 0.91 |
| ARS Mathematical Thinking | 0.92 | 0.93 |
| ARS General Knowledge | 0.92 | 0.94 |

The ARS Scores were rescaled to have a low of one and a high of five to correspond to the five-point rating scale that teachers used in rating children on these items. The ARS scores in the database represent estimates of the rating students would have received in that domain if they had been rated on all of the items in the ARS. Gain scores may be obtained by subtracting the estimated rating at fall (time 1) from the estimated rating at spring (time 2).

The variable names, descriptions, value ranges, means, and standard deviations for the fall (T1) and spring (T2) kindergarten ARS scores are shown in table 3-5.

Table 3-5. ARS: variable names, descriptions, ranges, means, and standard deviations¹

| Variable Name | Description | Range of Values | Mean | Standard Deviation |
|---------------|--------------------------------|-----------------|------|--------------------|
| T1ARSLIT | T1 Literacy ARS Score | 1 - 5 | 2.6 | 0.8 |
| T1ARSMAT | T1 Math ARS Score | 1 - 5 | 2.5 | 0.8 |
| T1ARSGEN | T1 General Knowledge ARS Score | 1 - 5 | 2.6 | 1.0 |
| T2ARSLIT | T2 Literacy ARS Score | 1 - 5 | 3.3 | 0.8 |
| T2ARSMAT | T2 Math ARS Score | 1 - 5 | 3.5 | 0.9 |
| T2ARSGEN | T2 General Knowledge ARS Score | 1 - 5 | 3.6 | 1.0 |

¹ See chapter 7, section 7.3 for variable naming conventions.

The majority of teachers rated more than one student on the ARS. The number of students rated by each teacher ranged from 1 to more than 20.

3.4 The Oral Language Development Scale (OLDS)

The language assessment scores (OLDS scores) for language minority children are located with the other child scores on the file. There are a total of 16 scores – 4 English and 4 Spanish for each of the two rounds, i.e., fall-kindergarten and spring-kindergarten. Children in households speaking languages other than English were first given the English OLDS. Of that group, those scoring below the cut point of the English OLDS were administered the Spanish OLDS if the child's home language was noted as Spanish by the school. (See chapter 2, section 2.1 for more detail on the content of the OLDS items).

The variable names, descriptions, value ranges, means, and standard deviations for the OLDS are shown in table 3-6.

Table 3-6. OLDS: variable names, descriptions, ranges, means, and standard deviations¹

| Variable | Description | Range of Values | Mean | Standard Deviation |
|----------|---|-----------------|------|-----------------------|
| C1SCTOT | C1 AIQ400 Child's Total OLDS Score | 1-60 | 34.0 | 16.0 |
| C1SCORD | C1 AIQ400 Simon Says Child Score | 1-10 | 8.0 | 2.3 |
| C1SCART | C1 AIQ400 Art Show Child Score | 1-10 | 7.3 | 2.7 |
| C1SCSTO | C1 AIQ400 Tell Stories Child Score | 4-40 | 22.4 | 9.0 |
| C1SSCTOT | C1 SAIQ400 Spanish Total OLDS Scores | 2-44 | 22.2 | 6.5 |
| C1SSCORD | C1 SAIQ400 Spanish Simon Says Child Score | 1-10 | 9.7 | 1.1 |
| C1SSCART | C1 SAIQ400 Spanish Art Show Child Score | 1-10 | 8.0 | 1.8 |
| C1SSCSTO | C1 SAIQ400 Spanish Tell Stories Score | 4-24 | 10.6 | 5.3 |
| C2SCTOT | C2 AIQ400 Child's Total OLDS Score | 1-60 | 30.9 | 15.2 |
| C2SCORD | C2 AIQ400 Simon Says Child Score | 1-10 | 7.6 | 2.4 |
| C2SCART | C2 AIQ400 Art Show Child Score | 1-10 | 6.8 | 2.6 |
| C2SCSTO | C2 AIQ400 Tell Stories Child Score | 4-40 | 20.7 | 8.7 |
| C2SSCTOT | C2 SAIQ400 Spanish Total OLDS Scores | 2-44 | 23.7 | 6.4 |
| C2SSCORD | C2 SAIQ400 Spanish Simon Says Child Score | 1-10 | 9.8 | 0.6 |
| C2SSCART | C2 SAIQ400 Spanish Art Show Child Score | 1-10 | 8.5 | 1.6 |
| C2SSCSTO | C2 SAIQ400 Spanish Tell Stories Score | 4-24 | 10.0 | 5.0 |

¹ See chapter 7, section 7.3 for variable naming conventions.

3.5 Psychomotor Assessment

The psychomotor assessment includes two scales, one measuring visual motor skills (eyehand coordination) and the other measuring gross motor skills (balance and motor planning). The visual motor skills score is the sum of the points for seven tasks: build a gate, draw a person, and copy five simple figures. Children could receive up to two points for each of the first two tasks and one point for each of the figures. Gross motor skills consisted of balancing, hopping, skipping and walking backward—children could receive up to two points for each skill. Confirmatory factor analysis during the ECLS-K design phase (using LISREL) confirmed the two scales. The internal consistency of the scales was constrained by the limited number of items in each scale combined with the variety of motor skills measured and the limited variance in item scores (maximum score on items was 1-2). Alpha coefficients (reliabilities) were 0.57 for fine motor skills, 0.51 for gross motor skills, and 0.61 for the composite motor

skills. Variable names, descriptions, value ranges, means, and standard deviations for the three scales are shown in table 3-7 below.

Table 3-7. Psychomotor scales: variable names, descriptions, ranges, means, and standard deviations¹

| Variable | Description | Range of Values | Mean | Standard Deviation |
|----------|---------------------------|-----------------|------|-----------------------|
| C1FMOTOR | C1 Fine Motor Skills | 0 - 9 | 5.7 | 2.1 |
| C1GMOTOR | C1 Gross Motor Skills | 0 - 8 | 6.3 | 1.9 |
| C1CMOTOR | C1 Composite Motor Skills | 0 - 17 | 12.1 | 3.1 |

¹ See chapter 7, section 7.3 for variable naming conventions.

3.6 SRS

The SRS asked both teachers and parents to tell how often a student exhibited certain social skills and behaviors. Teachers and parents used a frequency scale (see table 3-8) to report on how often the student demonstrated the behavior described. See chapter 2, section 2.2 and 2.3.2 for additional information on the parent and teacher SRS instruments. The scale scores on all SRS scales are the mean rating on the items included in the scale. Scores were computed only if the student was rated on at least two-thirds of the items in that scale. The same items were administered in the fall and in the spring so change scores may be computed by subtracting time 1 (fall) from time 2 (spring). The reliability for the teacher SRS scales is high (see table 3-9). The reliability is lower for the parent scales (see table 3-10).

Table 3-8. SRS response scale

| 1. | Never | Student never exhibits this behavior. |
|------|----------------|--|
| 2. | Sometimes | Student exhibits this behavior occasionally or sometimes. |
| 3. | Often | Student exhibits this behavior regularly but not all the time. |
| 4. | Very Often | Student exhibits this behavior most of the time. |
| N/O. | No Opportunity | No opportunity to observe this behavior. |

Table 3-9. Split half reliability for the teacher SRS scale scores

| | Fall- Kindergarten | Spring- Kindergarten |
|---------------------------------|-----------------------|-------------------------|
| Approaches to Learning | 0.89 | 0.89 |
| Self-Control | 0.79 | 0.80 |
| Interpersonal | 0.89 | 0.89 |
| Externalizing Problem Behaviors | 0.90 | 0.90 |
| Internalizing Problem Behaviors | 0.80 | 0.78 |

Table 3-10. Split half reliability for the parent SRS scale scores

| | Fall- Kindergarten | Spring- Kindergarten |
|------------------------|-----------------------|-------------------------|
| Approaches to Learning | 0.68 | 0.69 |
| Self-Control | 0.74 | 0.75 |
| Social Interaction | 0.70 | 0.68 |
| Impulsive/Overactive | 0.46 | 0.47 |
| Sad/Lonely | 0.60 | 0.61 |

3.6.1 Teacher SRS

Teachers rated individual students as part of a self-administered questionnaire. The five social skill teacher scales are: approaches to learning, self-control, interpersonal skills, externalizing problem behaviors, and internalizing problem behaviors. (See chapter 2, section 2.3.2 for a description of the teacher scales.)

Variable names for the teacher scores, descriptions, ranges, means, and standard deviations for these scales are shown in table 3-11.

Table 3-11. Teacher social rating scores: variable names, descriptions, ranges, means, and standard deviations¹

| Variable | Description | Range of Values | Mean | Standard Deviation |
|----------|------------------------------------|-----------------|------|-----------------------|
| T1LEARN | T1 Approaches to Learning | 1-4 | 3.0 | 0.7 |
| T1CONTRO | T1 Self-Control | 1-4 | 3.1 | 0.6 |
| T1INTERP | T1 Interpersonal | 1-4 | 3.0 | 0.6 |
| T1EXTERN | T1 Externalizing Problem Behaviors | 1-4 | 1.6 | 0.6 |
| T1INTERN | T1 Internalizing Problem Behaviors | 1-4 | 1.6 | 0.5 |
| T2LEARN | T2 Approaches to Learning | 1-4 | 3.1 | 0.7 |
| T2CONTRO | T2 Self-Control | 1-4 | 3.2 | 0.6 |
| T2INTERP | T2 Interpersonal | 1-4 | 3.1 | 0.6 |
| T2EXTERN | T2 Externalizing Problem Behaviors | 1-4 | 1.7 | 0.7 |
| T2INTERN | T2 Internalizing Problem Behaviors | 1-4 | 1.6 | 0.5 |

¹ See chapter 7, section 7.3 for variable naming conventions.

Care should be taken when entering these scales into the same analysis due to problems of multicollinearity. The factor intercorrelations among the scales for social skills are high. The factor intercorrelations with the internalizing problem behaviors are the lowest. The correlations between the teacher SRS factors range from 0.25 to 0.78 in fall-kindergarten and from 0.30 to 0.80 in spring-kindergarten (absolute values).

3.6.2 Parent SRS

The items on the parent SRS were administered as part of a longer telephone or in-person survey. (See chapter 2, section 2.2 for a description of the parent scales.) The factors on the parent SRS are similar to the teacher SRS; however, the items in the parent SRS are geared to the home environment and thus are not the same items. It is also important to keep in mind that parents and teachers observe the children in very different environments. The five social skill parent scales are: approaches to learning, self-control, social interaction, impulsive/overactive, and sad/lonely. The correlations between the parent SRS factors were not as high as the teacher SRS factors. They ranged from 0.05 to 0.45 in fall-kindergarten, and from 0.08 to 0.45 in spring-kindergarten (absolute values).

Variable names for the parent scores, descriptions, ranges, means, and standard deviations for these scales are shown in table 3-12.

Table 3-12. Parent social rating scores: variable names, descriptions, ranges, means, and standard deviations¹

| Variable | Description | Range of Values | Mean | Standard Deviation |
|----------|---------------------------|-----------------|------|-----------------------|
| P1LEARN | P1 Approaches to Learning | 1-4 | 3.1 | 0.5 |
| P1CONTRO | P1 Self-Control | 1-4 | 2.8 | 0.5 |
| P1SOCIAL | P1 Social Interaction | 1-4 | 3.3 | 0.6 |
| P1SADLON | P1 Sad/Lonely | 1-4 | 1.5 | 0.4 |
| P1IMPULS | P1 Impulsive/Overactive | 1-4 | 2.0 | 0.7 |
| P2LEARN | P2 Approaches to Learning | 1-4 | 3.1 | 0.5 |
| P2CONTRO | P2 Self-Control | 1-4 | 2.9 | 0.5 |
| P2SOCIAL | P2 Social Interaction | 1-4 | 3.4 | 0.5 |
| P2SADLON | P2 Sad/Lonely | 1-4 | 1.6 | 0.4 |
| P2IMPULS | P2 Impulsive/Overactive | 1-4 | 2.0 | 0.7 |

¹ See chapter 7, section 7.3 for variable naming conventions.

4. SAMPLE DESIGN AND IMPLEMENTATION

The Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K) employed a multistage probability sample design to select a nationally representative sample of children attending kindergarten in 1998-99. The primary sampling units (PSUs) were geographic areas consisting of counties or groups of counties. The second-stage units were schools within sampled PSUs. The third and final stage units were students within schools.

4.1 Selecting the Area Sample

The point of departure for the ECLS-K area sample frame development was an existing multipurpose frame of PSUs created using 1990 county-level population data. This frame contained 1,404 PSUs that were counties or groups of contiguous counties. PSUs did not cut across census regional boundaries but were allowed to cross state boundaries. Each 1990 Metropolitan Statistical Area (MSA) constituted a single PSU except where an MSA crossed census regions, and it was split into two PSUs. The minimum size of a PSU in the multipurpose frame was 15,000 persons.

Since the focus of the ECLS-K is kindergarten students, the existing PSU frame was updated with 1994 population estimates of five-year-olds by race-ethnicity, the most up-to-date estimates available from the U.S. Census Bureau at the time. The counts of five-year-olds by race-ethnicity were used to revise PSU definitions relative to a different minimum PSU size and to construct a measure of size that facilitated the oversampling of Asians and Pacific Islanders (APIs).

Each PSU in the frame that did not have at least 320 five-year-olds was collapsed with an adjacent PSU. This minimum PSU size was developed based on assumptions concerning anticipated school response rates, the average number of schools that would be selected per PSU, and the target number of students to be sampled per school. After this collapsing, the final ECLS-K PSU frame contained 1,335 records.

The measure of size used for selecting PSUs took into account the amount of oversampling of APIs required to meet the ECLS-K precision goals. The weighted measure of size was calculated as follows:

$$MOS = 2.5 \times n_{API} + n_{other}$$

where 2.5 is the oversampling rate for APIs and n_{API} and n_{other} are the counts of five-year-old APIs and all others, respectively. The oversampling rate for APIs was calculated as the target number of completed API cases divided by the expected number of completed API cases without oversampling.

In all, 100 PSUs were selected for the ECLS-K. The 24 PSUs with the largest measures of size were designated as certainty selections or self-representing (SR) and were set aside. Once the SR PSUs were removed, the remaining PSUs were partitioned into 38 strata of roughly equal measure of size. The frame of non-SR PSUs was first sorted into eight superstrata by MSA/nonMSA status and by Census region. Within the four MSA superstrata, the variables used for further stratification were race-ethnicity (high concentration of API, Black, or Hispanic), size class (MOS >= 13,000 and MOS < 13,000) and 1988 per capita income. Within the four non-MSA superstrata, the stratification variables were race-ethnicity and per capita income. Details of the stratification of non-self-representing strata are presented in table 4-1.

Two PSUs were selected from each non-SR stratum using Durbin's Method.¹ This method selects two first-stage units per stratum without replacement, with probability proportional to size and a known joint probability of inclusion. The Durbin method was used because it allows variances to be estimated as if the units were selected with replacement. Table 4-2 summarizes the characteristics of the ECLS-K PSU sample.

4.2 Selecting the School Sample

In the second stage of sampling, public and private schools offering kindergarten programs were selected. For each ECLS-K PSU, a frame of public and private schools offering kindergarten

-

¹ Durbin, J. (1967). Design of Multi-Stage Surveys for the Estimation of Sampling Errors. *Journal of the Royal Statistical Society* C, 16, 152-164.

Table 4-1. Stratum definitions for the 38 non-self-representing strata

| Metro | Census | | PSU size | Per capita ii | ncome |
|--------|-----------|--------------------|----------|---------------|--------|
| status | region | Race-ethnicity (%) | (MOS) | Range (| \$) |
| | | | ≥13,000 | 22,062 | 25,424 |
| | | | | 16,342 | 22,030 |
| | Northeast | - | | 18,128 | 29,084 |
| | | | <13,000 | 16,697 | 18,032 |
| | | | | 12,279 | 16,616 |
| | | | ≥13,000 | 17,277 | 18,150 |
| | | | | 16,103 | 17,092 |
| | Midwest | - | | 16,552 | 24,009 |
| | | | <13,000 | 15,732 | 16,475 |
| | | | | 14,450 | 15,693 |
| | | | | 10,185 | 14,433 |
| | | Hispanic ≥30 | - | - | - |
| MSA | | Black ≥40 | - | - | - |
| | | 26≤ Black <40 | - | 14,743 | 18,731 |
| | | | - | 10,892 | 14,573 |
| | South | | | 16,435 | 16,601 |
| | | Black <26 | ≥13,000 | 14,586 | 16,337 |
| | | | | 15,572 | 22,824 |
| | | | <13,000 | 14,194 | 15,432 |
| | | | | 11,262 | 13,979 |
| | | API ≥15 | - | - | - |
| | | API <15 | - | - | - |
| | West | Hispanic ≥30 | - | - | - |
| | | 12≤ Hispanic <30 | - | - | - |
| | | Hispanic <12 | - | 15,048 | 21,840 |
| | | | - | 9,993 | 14,839 |
| | Northeast | - | - | - | - |
| | | | | 14,124 | 17,446 |
| | Midwest | - | - | 13,277 | 14,121 |
| | | | | 12,169 | 13,272 |
| NonMSA | | | | 6,992 | 12,147 |
| | | Black ≥42 | - | - | - |
| | | 25≤ Black <42 | - | - | _ |
| | South | | | 12,727 | 20,059 |
| | | Black <25 | - | 11,165 | 12,676 |
| | | | | 6,018 | 11,142 |
| | West | - | - | 12,887 | 23,286 |
| | | | | 6,959 | 12,884 |

Table 4-2. Distribution of the ECLS-K PSU sample by SR status, MSA status, and census region

| SR | MSA | Census Region | | | | |
|--------|---------|---------------|---------|-------|------|-------|
| status | status | Northeast | Midwest | South | West | Total |
| SR | MSA | 6 | 5 | 6 | 7 | 24 |
| Non-SR | MSA | 10 | 12 | 18 | 12 | 52 |
| Non-SR | Non-MSA | 2 | 8 | 10 | 4 | 24 |
| Total | | 18 | 25 | 34 | 23 | 100 |

programs was constructed using existing school universe files: the 1995-96 Common Core of Data² (CCD) and the 1995-96 Private School Universe Survey³ (PSS). The school frame was freshened in the spring of 1998 to include newly opened schools that were not included in the CCD and PSS and schools that were in the CCD and PSS but did not offer kindergarten according to those sources. A school sample supplement was selected from the freshened frame.

4.2.1 Frame Construction

The 1995-96 CCD Public School Universe File was the primary source for the ECLS-K public school sampling frame. Most schools run by the Bureau of Indian Affairs (BIA) and the schools run by the Department of Defense (DOD) are not included on the CCD. The 1995-96 Office of Indian Education Programs Education Directory was consulted in order to complete the list of BIA schools in the CCD file. For the DOD schools, a 1996 list of schools obtained directly from the DOD was used. The 1995-96 PSS Universe File was used as the primary source of the private school sampling frame.

The first step in frame construction involved subsetting the file to schools located in counties that constituted the ECLS-K PSU sample. Further subsetting retained only those schools that offered transitional kindergarten, kindergarten, or transitional first grade, or which were strictly ungraded, as indicated by the school's gradespan.

U.S. Department of Education, National Center for Education Statistics, Common Core of Data, Public School Universe Survey, 1995-96.

³ U.S. Department of Education, National Center for Education Statistics. *Private School Universe Survey*, 1995-96, NCES 98-229, by Stephen P. Broughman and Lenore A. Colaciello. Washington, DC: 1998.

The constructed ECLS-K school frame included 18,911 public-school records and 12,412 private-school records. The school frame was freshened in the spring of 1998 to include schools that would be operational in fall 1998 but that were not included in the frame just described. The freshening procedures are given later in this section.

4.2.2 School Measure of Size, Stratification, and Sample Selection

Within each PSU, schools with fewer than a predetermined minimum number of kindergarten students were clustered together before sampling in order to obtain a sample that is closer to self-weighting. The minimum was 24 kindergartners for public schools and 12 for private schools. For simplicity's sake, the term "schools" will be used in reference to both individual schools and clusters of schools in the remainder of this discussion.

Schools were selected with probability proportional to size. As with the PSU sample, a weighted measure of size was constructed taking into account the oversampling of APIs.

The target number of sampled schools per PSU was calculated separately for public and for private schools and was adjusted upward to offset anticipated school response and eligibility rates. The number of schools allocated to each PSU was set proportional to the weighted measure of size of the PSU. A minimum of one school per PSU was imposed for any PSU so small that it would not otherwise have been allocated a school.

Public and private schools constituted distinct sampling strata. Within each of these strata, schools were sorted to ensure good sample representation across other characteristics.

The public school sample was selected using a traditional nested two-stage design of schools within the 100 PSUs. Within each PSU, public schools were ranked by measure of size and partitioned into three classes of roughly equal aggregate measure of size. Within each size class, schools were sorted in a serpentine manner by the proportion of APIs.

The private school sample was nested within PSUs only for the 76 non-SR PSUs, where schools were grouped within PSU by affiliation (religious vs. nonsectarian) and then sorted in a serpentine manner by the measure of size. To better control the sample distribution of religious/

nonsectarian schools, schools in the 24 SR PSUs were treated as if they were sampled from a single PSU and the sort was by affiliation and measure of size alone.

The selection of both public and private schools was systematic, with probability proportional to the measure of size. A total of 1,280 schools were selected for the ECLS-K, of which 934 were public and 346 were private schools.

4.2.3 Freshening the School Sample

Each public school district having one or more schools sampled was sent a sampling frame-based list of all schools offering kindergarten and was asked whether any school expected to offer kindergarten in academic year 1998-1999 was missing from the list. For each such school identified, school name, address, telephone number, grade span, and kindergarten enrollment were obtained. Also contacted were districts that fell within the boundaries of the ECLS-K PSUs but for which the CCD file listed no schools offering kindergarten, unless it was clear from their name that they were strictly secondary school districts (e.g., Middlebury Union High School District). The information obtained from the school districts was checked against the ECLS-K public school frame to confirm that these schools were truly new or newly eligible. Bona fide new schools were given an appropriate chance of being sampled. A new school's chance of selection was conditioned on the school district's probability of selection, which had been calculated exactly, based on the sampling intervals used during the systematic selection of the main school sample, and the positions in the frame and measures of size of all schools in the frame. Overall 252 new public schools were identified, and 19 were selected using systematic sampling with probability proportional to size.

The procedure for obtaining new school information from Catholic dioceses was exactly the same as for public schools. Since a diocese may cut across county or even state lines, each school identified by a diocese had to be associated with the correct county, and hence the correct PSU, before checking to see whether it was truly new. Since dioceses may cross PSU boundaries, a new Catholic school's chance of being sampled had to be conditioned on the diocese probability of selection within the PSU where the new school was located. There were 126 new Catholic schools identified, and 6 were selected using systematic sampling with probability proportional to size.

The search for non-Catholic private schools was considerably more complicated. Three classes of PSS schools that had previously not been given a chance of selection were reconsidered. Those were schools that had an unknown grade span because they had not responded to the 1995-96 PSS, those that responded but did not report offering kindergarten, and those that appeared for the first time on the 1997-98 PSS file. All told these accounted for 2,544 potential new non-Catholic private schools. Beyond these additions from PSS, procedures similar to those used by the Census Bureau in the PSS area frame search⁴ were followed. These procedures included collecting lists of schools from different sources, matching them against the PSS list frame to remove duplicates, and further screening by telephone to verify new school status. The majority of new schools found by the Census Bureau for PSS came from Yellow Pages listings. The Yellow Pages search was the main source of new non-Catholic private schools in the ECLS-K as well, yielding an additional 8,861 possible new private schools. Since the number of kindergartners enrolled in these schools was unknown, a minimum kindergarten enrollment was assumed for sampling purposes (typically 24, unless the name was suggestive of daycare in which case 12 was assumed). From the 11,405 schools, a sample of 279 schools was selected using systematic sampling with a probability proportional to these imputed enrollments. The sampled schools were screened, during which process it was ascertained whether each school was public or private; if it was private, whether it would be open in academic year 1998-1999; and if it would be open in 1999-2000, whether it would offer kindergarten. If the answer to the last question was yes and the school was not Catholic, the school was released for data collection.

Local Education Agencies (LEAs) and local government offices were contacted for information on non-Catholic private schools, only in the smallest ECLS-K PSUs, on the theory that if these PSUs had coverage problems their large weights were likely to introduce a larger bias in the estimates. All LEAs within these PSUs were contacted by telephone. For each city/town within the PSU, a list of local government offices was compiled using the Blue Pages. Successive government offices were called within a city or town until one was found that could provide information on private schools. As with the Yellow Pages, new schools identified by LEAs and local government offices were unduplicated against the PSS file before being added to the new school frame. Since kindergarten enrollment was unknown, it was imputed as described in the previous paragraph and sampling was performed using systematic sampling with probability proportional to size. The LEA search resulted in the identification of 30 new private schools after unduplication, of which 14 were sampled. The local government search yielded 19 new schools, of which 8 were sampled. Finally, three additional new

⁴ ibid.

private schools were reported by field staff based on personal knowledge. Of these, two schools were sampled. All told, there were 109 new non-Catholic private schools selected.

The characteristics of the ECLS-K original school sample are presented in table 4-3. Schools that were discovered to be ineligible during recruitment have been omitted from the tabulation. For counts of responding schools and a discussion of the limited use of school substitution within the ECLS-K, see chapter 5, sections 5.5, Fall-Kindergarten Response Rates, and 5.8, Spring-Kindergarten Response Rates.

4.2.4 Sampling Children, Parents, and Teachers within Schools

The goal of the student sample design was to obtain an approximately self-weighting sample of students and at the same time to achieve a minimum required sample size for each targeted subpopulation. As mentioned earlier, APIs were the only subgroup that needed to be oversampled to meet the sample size goals. For each sampled school, the field staff obtained a complete list of kindergartners enrolled, taking special care that no child was excluded from the list because of disability or language problems.

Two independent sampling strata were formed within each school, one containing API students and the second, all other students. Within each stratum, students were selected using equal probability systematic sampling with twins being sampled as a unit rather than as individuals, i.e. if one twin was sampled, both were included. In general, the target number of children sampled at any one school (not including the second twin) was 24. In some schools the oversampling goal for API students could not be met. For example, in a school with 24 kindergartners enrolled, all students would be sampled, which meant that API students could not be sampled at 2.5 times the rate of non-API students in that school. To offset shortfalls of this kind, the oversampling rate for APIs was increased to three at this stage of sampling.

Once the sampled children were identified, parent contact information was obtained from the school. The information was used to locate a parent or guardian and gain parental consent for the child assessment and for the parent interview.

Table 4-3. Characteristics of the ECLS-K original school sample

| | Public | Private | Total |
|-------------------------------|--------|---------|-------|
| Total | 914 | 363 | 1,277 |
| Region | | | |
| Northeast | 161 | 82 | 243 |
| Midwest | 210 | 88 | 298 |
| South | 306 | 112 | 418 |
| West | 237 | 81 | 318 |
| Urbanicity | | | |
| Large central city | 168 | 77 | 245 |
| Mid-size central city | 172 | 76 | 248 |
| Urban fringe of large city | 265 | 117 | 382 |
| Urban fringe of mid-size city | 78 | 21 | 99 |
| Large town | 24 | 9 | 33 |
| Small town | 76 | 36 | 112 |
| Rural | 131 | 27 | 158 |
| KG enrollment | | | |
| 1 - 24 | 51 | 187 | 238 |
| 25 - 49 | 95 | 110 | 205 |
| 50 – 99 | 402 | 59 | 461 |
| 100 - 149 | 226 | 7 | 233 |
| 150 - 169 | 49 | 0 | 49 |
| 170 + | 91 | 0 | 91 |
| Religious affiliation | | | |
| Catholic | - | 120 | 120 |
| Other religious | - | 149 | 149 |
| Nonreligious, private | - | 94 | 94 |
| Free Lunch Program | | | |
| Low (<=25% eligible students) | 268 | - | 268 |
| Medium low (>25% and <=50%) | 157 | - | 157 |
| Medium high (>50% and <=75%) | 129 | - | 129 |
| High (>75%) | 114 | - | 114 |
| Missing | 246 | _ | 246 |

During the fall 1998 data collection, a census of kindergarten teachers was taken at each school. Each sampled child was linked to his or her kindergarten teacher. A child could be linked to only one teacher. If a child was taught by more than one teacher, a "primary" teacher was identified for the child. For the specifics of how this was done, see section 5.4.2, Fall-Kindergarten Data Collection, Distribution of Teacher Questionnaires. In spring 1999, teacher-child linkages were reviewed and updated. If new kindergarten teachers had joined the school, they were added to the census of

kindergarten teachers. Special education teachers who taught one or more sampled children were included in the spring of kindergarten data collection. If a sampled child received special education services from such a teacher, the teacher was linked to that child. As with regular teachers, a child could be linked to only one special education teacher.

4.3 Calculation and Use of Sample Weights

The ECLS-K data were weighted to compensate for differential probabilities of selection at each sampling stage and to adjust for the effects of nonresponse. In general, there are three types of weights: child, teacher, and school-level weights. The use of these weights is essential to produce estimates that are representative of the population of kindergarten children, kindergarten teachers, and schools offering kindergarten programs. Data collected from different sources can be used to produce estimates at these three levels. For example, data collected from parents are used to produce estimates of characteristics of children as reported by parents.

Several sets of weights were computed for each of the two rounds of data collection (falland spring-kindergarten). Longitudinal weights were also computed for children with complete data from
both rounds of the study. Unlike surveys that have only one type of survey instrument aimed at one type
of sampling unit, the ECLS-K is a complex study with multiple types of sampling units, each having its
own survey instrument. Each type of unit was selected into the sample through a different mechanism:
children were sampled directly through a sample of schools; parents of the sampled children were
automatically included in the survey; all kindergarten teachers in the sampled schools were included;
special education teachers were in the sample if they taught any of the sampled children. Each sampled
unit had its own survey instrument: children were assessed directly using a series of cognitive and
physical assessments; parents were interviewed with a parent instrument; teachers filled out at least two
different types of questionnaires depending on the round of data collection and on whether they were
regular or special education teachers; school principals reported their school characteristics using the
school administrator questionnaire. The stages of sampling in conjunction with the different nonresponse
level at each stage and the diversity of survey instruments require that multiple sampling weights be
computed for use in analyzing the ECLS-K data.

This section describes the different types of sample weights computed for the ECLS-K, how they were calculated, how they should be used, and their statistical characteristics.

4.3.1 Types of Sample Weights

Weighting was carried out in stages to produce child, teacher, and school weights. Several sets of child-level weights were computed for each round of data collection and for children with complete data from both rounds. While it is straightforward to use school- and teacher-level weights to produce school- and teacher-level estimates, careful consideration should be given to the choice of a child-level weight since it depends on the type of data analyzed. Each set of child-level weights is appropriate for a different set of data or combination of sets of data. Teacher-level weights were computed for each round of data collection, but there are no longitudinal teacher-level weights. School level weights were computed for use with data collected in spring-kindergarten through the school administrator questionnaires. These weights can also be used with any school-level data such as data from the school facilities checklists.

Tables 4-4 and 4-5 summarize the different types of cross-sectional weights and how they should be used. Cross-sectional weights provide an accurate estimate for the specific round of data collection. Table 4-4 describes weights for fall-kindergarten estimates, and table 4-5 describes weights for spring-kindergarten estimates, and table 4-6 describes weights for base-year or longitudinal estimates.

These tables are designed to help users choose appropriate weights for their analysis. Answers to the following three questions can help in the selection of the correct weight.

- 1. Is the analysis concerned with one point in time or two?
- 2. What is the population of interest or unit of analysis (i.e. child, teacher or school)?
- 3. What instruments do the data to be used in the analysis come from?
- 1. Is the analysis concerned with one point in time or two? If the analysis pertains only to fall kindergarten (single point in time) then table 4-4 guides the selection of weights, spring kindergarten (single point in time) then go to table 4-5, and both fall- and spring-kindergarten (two points in time) then go to table 4-6.

Table 4-4. The ECLS-K: fall-kindergarten cross-sectional weights

| | Fall-kindergarten cross-sectional weights | | | | | | | | |
|----------------------|--|--|--|--|--|--|--|--|--|
| Child-level weight | to be used for analysis of | | | | | | | | |
| C1CW0 | fall-kindergarten direct child assessment data alone or in conjunction with any combination of a) a limited set of child characteristics (e.g. age, sex, race-ethnicity), b) any fall-kindergarten teacher questionnaire A, B or C data, and c) data from the school administrator questionnaire or facilities checklist | | | | | | | | |
| C1PW0 | fall-kindergarten parent interview data alone or in combination with a) fall child assessment data, b) fall-kindergarten teacher questionnaire A, B, or C data, and c) data from the school administrator questionnaire or facilities checklist. Exception: If data from the parent AND child assessment AND teacher questionnaire A or B (not C) are used then C1CPTW0 should be used. | | | | | | | | |
| C1CPTW0 | fall-kindergarten direct child assessment data combined with fall-kindergarten parent interview data AND fall-kindergarten teacher questionnaire A or B (not C) data alone or conjunction with data from the school administrator questionnaire or facilities checklist | | | | | | | | |
| Teacher-level weight | to be used for analysis of | | | | | | | | |
| B1TW0 | fall-kindergarten teacher data, questionnaire part A or B alone or with data from the school administrator questionnaire or facilities checklist. <i>Exception</i> : When using items that were in the spring-kindergarten teacher questionnaire B (i.e. questions asked of teachers who were not present during fall-kindergarten data collection) B2TW0 weight should be used. | | | | | | | | |

Table 4-5. The ECLS-K: spring-kindergarten cross-sectional weights

| Spring-kindergarten | cross-sectional w | eights |
|----------------------|--------------------|--------|
| Spring kinder garten | ci oss sectional w | cignes |

<u>Child-level weight</u> <u>to be used for analysis of ...</u>

C2CW0 spring-kindergarten direct child assessment data, alone or in conjunction

with any combination of a) a limited set of child characteristics (e.g. age, sex, race-ethnicity), b) any spring-kindergarten teacher questionnaire A, B or C data, and c) data from the school administrator questionnaire or

facilities checklist

C2PW0 spring-kindergarten parent interview data alone or in combination with a)

spring child assessment data, b) spring-kindergarten teacher questionnaire A, B, or C data, and c) data from the school administrator questionnaire or

facilities checklist.

Exception: If data from the parent AND child assessment AND teacher questionnaire A or B (not C) are used then C2CPTW0 should be used

C2CPTW0 spring-kindergarten direct child assessment data combined with spring-

kindergarten parent interview data AND spring-kindergarten teacher data alone or in conjunction with data from the school administrator or

facilities checklist

<u>Teacher-level weight</u> <u>to be used for analysis of ...</u>

B2TW0 spring-kindergarten data from questionnaire part A;

fall- or spring-kindergarten data from questionnaire part B; or combination of data from fall- and spring-kindergarten teacher

questionnaires A and/or B (there is no longitudinal teacher weight) alone or in conjunction with data from the school administrator questionnaire or

facilities checklist

School administrator weight to be used for analysis of ...

S2SAQW0 school administrator data or facility checklist data

- 2. What is the population of interest or unit of analysis (i.e. child, teacher or school)? After identifying the appropriate table based on the response to question 1, the next step involves whether the analysis requires a child-, teacher- or school-level weight. If the population of inference is kindergarten children, then the child-level weights will be appropriate. If generalizing to kindergarten teachers or classrooms, then the teacher-level weights should be used, and if generalizing to the population of schools with kindergartens, the school-level weight will be appropriate.
- 3. What instruments do the data to be used in the analysis come from? There are several options when deciding on which child-level weights to use, and the source of the data affect which weight to use. In each of the tables details under "to be used in the analysis of . . ." provide guidance based on whether the data were collected through the child assessments, parent interviews or teacher questionnaires.

Weight C1CW0 is used to estimate child-level characteristics or assessment scores for fall-kindergarten, and C2CW0 is for spring-kindergarten. Examples of such estimates are the percent of kindergarten children who are male, the percent of children who are API, the percent of children who are 6 when they enter kindergarten, the mean reading score of children, and the mean math score of children. These weights are also used for estimates of child characteristics for language minority (LM)/not Spanish children and children with disabilities. Some of these children were not assessed but their background characteristics such as age, gender, race-ethnicity, and characteristics of parents, teachers, and classrooms are available from the parent interview and the teacher questionnaires. The social rating scores (see chapter 3, section 3.5) from parents and teachers are also available for LM/not Spanish children and children with disabilities, regardless of whether they were assessed. In this chapter the terminology "LM/not Spanish" refers to those children who spoke a non-English and non-Spanish language at home and did not pass the cut score in the OLDS. For these children, only height and weight measurements were taken. Similarly, in this chapter, the terminology "children with disabilities" refer to those children who were not able to participate in the assessment due to reasons of disability as specified in their IEP. Both these groups of children were assigned child weights even though they did not have cognitive assessment data.

When analyzing child data in conjunction with teacher data (e.g., teacher characteristics from teacher questionnaires A or B or social rating scores reported by teachers from teacher questionnaire C) and classroom data from teacher questionnaire A, weights C1CW0 (for fall-kindergarten) and C2CW0 (for spring-kindergarten) should be used. An example for the use of C1CW0 is in the analysis of the relationship between children's approaches to learning as rated by their teachers, the teacher's type of

teaching certification, and the children's cognitive skills and knowledge. Some data may be missing because some teachers did not complete the questionnaire, but these are the most appropriate weights for this type of analysis. However, different weights should be used for analysis of child data in conjunction with both parent and teacher data (CPTW0).

C1PW0 (for fall-kindergarten) and C2PW0 (for spring-kindergarten) are used for child-level estimates associated with data collected through the parent interview. Examples are the percent of children whose mothers are currently employed, the percent of children who are in a particular type of child care, and the percent of children who are read to at least every day. These weights should not be used for estimates solely using direct child assessment data but should be used when analyzing parent and child assessment data together, for example, when exploring the relationship between home literacy behaviors and children's reading skills.

C1CPTW0 (for fall-kindergarten) and C2CPTW0 (for spring-kindergarten) are used when child direct assessment <u>and</u> teacher <u>and</u> parent data are combined in an analysis; for example, in the analysis of the relationship between parent education, teacher education and children's reading knowledge and skills. These weights should be not be used for estimates using only direct child assessment data or only parent interview data. Also, any analysis of the subgroup of children who moved to a different school between fall- and spring-kindergarten should be done using C2CW0 or C2PW0 because these movers were treated separately in the nonresponse adjustment of C2CW0 and C2PW0.

B1TW0 (for fall-kindergarten) and B2TW0 (for spring-kindergarten) are used for teacherand classroom-level estimates. For example, these weights would be used to estimate the percent of
kindergarten teachers who teach a particular type of kindergarten program, the percent of teachers who
use a language other than English in their classroom, or the percent of teachers who do not have any
teacher certification. These weights would also be used in the estimation of classroom characteristics such
as the percent of kindergarten classrooms with computer areas. Weights for the corresponding round
should be used to produce round specific estimates; for example, B1TW0 should be used to estimate the
number of teachers teaching kindergarten programs in fall 1998; B2TW0 should be used to estimate the
number of kindergarten teachers in spring 1999. Teachers who were new to the study in the spring were
asked a subset of questions from the fall-kindergarten teacher questionnaires A and B (springkindergarten teacher questionnaire B). When analyzing data from these items B2TW0 should be used
(even though the variables start with the B1 preface, see chapter 7 for details). A panel weight was not
created as there were very few repeated measurements between fall- and spring-kindergarten. Most of the

data collected from the teachers about themselves and their classrooms were meant to pertain to the school year.

S2SAQW0 is used in the estimation of school characteristics such as the percent of schools that offer programs for children with special needs, or the percent of schools that use a standardized achievement tests as a requirement for admission, or the percent of school administrators who believe that their school computer resources are inadequate.

The longitudinal or panel weights (table 4-6) are used for estimates of differences at two points in time. Examples of analysis using longitudinal weights include:

- Kindergarten fall-spring difference in mean child assessment scores (BYCW0);
- Kindergarten fall-spring difference in mean social skills as rated by children's teachers (BYCW0) (Data collected using the teacher questionnaire C are at a child-level and are considered as part of the child assessment data.);
- Kindergarten fall-spring difference in mean social skills as rated by children's parents (BYPW0);
- The relationship between the gains children make in their reading knowledge and skills, how often their parents read to them, how often their parents take them to the library, teacher certification, and how much class time teachers spend on reading (BYCPTW0) (This weight is used when the analysis includes data from all six components- fall and spring child assessment, teacher and parent data.); and
- The relationship between the gains children make in their reading knowledge and skills and parent and teacher beliefs on kindergarten readiness (BYCOMW0).

The difference between BYCPTW0 and BYCOMW0 is that BYCPTW0 is used for analysis of both rounds of child direct assessment data in conjunction with both rounds of parent interview data and both rounds of teacher data, while BYCOMW0 is used when analyzing a *single round* of parent interview or teacher data in conjunction with *both rounds* of child direct assessment data.

Table 4-6. The ECLS-K: base year longitudinal weights

| Base year longitudinal (panel) weights | | | | | | | |
|--|---|--|--|--|--|--|--|
| Child-level weight | to be used for analysis of | | | | | | |
| BYCW0 | child direct assessment data and child characteristics from both fall- and spring-kindergarten, alone or in conjunction with any combination of a) a limited set of child characteristics (e.g. age, sex, race-ethnicity), b) fall-and/or spring- kindergarten teacher questionnaires A, B or C data, and c) data from the school administrator questionnaire or facilities checklist | | | | | | |
| BYPW0 | parent interview data from BOTH fall- and spring-kindergarten alone or in combination with a) fall- and/or spring-kindergarten child assessment data, b) fall- and/or spring-kindergarten teacher questionnaire A, B, or C data, and c) data from the school administrator questionnaire or facilities checklist. <i>Exception</i> : If data from the fall- AND spring-kindergarten parent, child assessment, AND teacher questionnaire A or B (not C) are used then BYCPTW0 should be used | | | | | | |
| BYCPTW0 | fall- AND spring-kindergarten parent, child assessment, AND teacher questionnaire A or B (not C) data | | | | | | |
| BYCOMW0 | both rounds of child assessment data in conjunction with at least one or more rounds (fall- and/or spring-kindergarten) of parent and/or teacher questionnaires A and B (not C) data. This may or may not be in conjunction with the school administrator questionnaire and facilities checklist data. | | | | | | |
| | Exception: Whenever BOTH rounds of parent data are used in the analysis either BYPW0 or BYCPTW0 is used. | | | | | | |

Minimal teacher data were collected repeatedly in both rounds that would allow analysis of change over time for those data. In the absence of the teacher panel weights, the spring-kindergarten teacher weights can be used to cross-tabulate the fall- and spring-kindergarten teacher data from questionnaire part A (TQA).

Careful consideration should be given to which set of weights is appropriate for the desired analysis. Using the wrong weights will result in more biased or inefficient estimates. For example, if C1CPTW0 were used in an analysis of child and teacher/classroom data only, then the resulting estimates will be inefficient compared to estimates using C1CW0. The lower parent response causes C1CPTW0 to result in lower sample size with positive weights. There may be combinations of data from a different source for which no weights were developed, but most analyses are possible from the weights provided. For example, no parent-level weights were calculated but parents are linked one-to-one to children so that

the child-level weights can be used for parent-level analysis, e.g., education levels of parents of kindergartners. No child-teacher weights were computed for analyzing child data in conjunction with teacher data because the response rates for the teachers are high; for the analysis of child assessment data in conjunction with teacher data, the child-level weights should be used. For further advice on which weights to use when analyzing a complex combination of data, contact NCES at ECLS@ed.gov.

For each type of weight, table 4-7 gives the distribution of schools by number of sampled students with nonzero weights and the mean number of sampled students with nonzero weights per school. This is useful in analysis using hierarchical linear modeling. For spring-kindergarten, the increase in the count of schools with one to five sampled students is due to students transferring to other schools from the original sampled schools. For the longitudinal weights, schools are classified on the basis of the number of students who did not transfer schools between rounds of data collection.

Table 4-7. Distribution of schools by number of cases (children) with nonzero weights

| | | | | | | Mean cases |
|---------------------|-------|--------|---------|---------|---------|------------|
| | 1 - 5 | 6 - 10 | 11 - 15 | 16 - 20 | 21 - 27 | per school |
| Fall-kindergarten | | | | | | |
| C1CW0 | 32 | 42 | 52 | 187 | 636 | 20 |
| C1PW0 | 39 | 45 | 78 | 301 | 486 | 19 |
| C1CPTW0 | 41 | 53 | 109 | 328 | 401 | 18 |
| Spring-kindergarten | | | | | | |
| C2CW0 | 398 | 45 | 63 | 348 | 520 | 15 |
| C2PW0 | 439 | 51 | 114 | 421 | 387 | 13 |
| C2CPTW0 | 85 | 59 | 163 | 428 | 300 | 17 |
| Longitudinal | | | | | | |
| for base year | | | | | | |
| BYCW0 | 36 | 40 | 74 | 373 | 423 | 19 |
| BYPW0 | 41 | 57 | 149 | 431 | 267 | 17 |
| BYCPTW0 | 46 | 80 | 190 | 414 | 198 | 17 |
| BYCOMW0 | 42 | 48 | 112 | 404 | 324 | 18 |

4.3.2 Weighting Procedures

In general, weights were computed in two stages. In the first stage, base weights were computed. They are the inverse of the probability of selecting the unit—if units were sampled at a rate of 1 in 100, sampled units must be weighted by 100 to represent the entire population. In the second stage,

base weights were adjusted for nonresponse. Nonresponse leads to bias in the survey estimates when the characteristics of the nonrespondents are very different from those of the respondents. Adjusting for nonresponse is intended to reduce the bias.

Nonresponse adjustment cells were generated using variables with known values for both respondents and nonrespondents. Analyses using the Chi-squared Automatic Interaction Detector (CHAID) were conducted to identify variables most highly related to nonresponse. At the school level, school characteristics used for constructing nonresponse cells were the type of school (public, Catholic private, non-Catholic private, or nonsectarian private), the school locale (large city, mid-size city, suburb of large city, suburb of mid-size city, large town, small town, or rural area), the region where the school is located (Northeast, Midwest, South, or West), and the size classification of the school in terms of school enrollment. At the child level, the variables used for constructing nonresponse cells were the type of school, the locale and the geographic region where the school is located; the size classification of the school; and child characteristics such as age group, gender and race-ethnicity, and whether the child moved from the original sampled school (spring-kindergarten only). For the teachers, nonresponse cells were constructed using the type of school, the school locale, region, and the school size classification.

Once the nonresponse cells were determined, the nonresponse adjustment factors are the reciprocals of the response rates within the selected nonresponse cells. A detailed technical description of the nonresponse adjustment procedure can be found in the ECLS-K methodology report (forthcoming).

Response rates are presented in chapter 5 for the different populations and different types of instruments. A detailed analysis of response rates is available that includes a study of nonresponse bias. In this study, the ECLS-K survey estimates are compared with estimates from the sampling frames; they are also compared with estimates from other surveys such as the Current Population Survey (CPS) and the National Household Education Survey (NHES). The study also includes comparison of estimates using the nonresponse adjusted weights with estimates using unadjusted weights. Finally, a nonresponse simulation study is also provided to estimate the potential nonresponse bias.

4.3.3 Computation of School and Teacher Weights

School Base Weights

School base weights were used in calculating teacher and child weights for teacher- and child-level estimates and school administrator weights for school-level estimates. The base weight for each school was the inverse of the probability of selecting the PSU (county or group of counties) multiplied by the inverse of the probability of selecting the school within the PSU.

If schools were selected through the freshening procedure, as described in section 3.2.3, an additional factor equal to the inverse of the selection probability of the district or diocese was included in the base weight. This factor is necessary because new public and Catholic schools were identified through the freshening procedure with the district/diocese, and their selection probability must be conditioned on the probability of selecting that district/diocese within the stratum. This additional factor did not apply to non-Catholic private schools; these were selected directly from lists, and the school base weights were the simple inverse of the school selection probability.

School Administrator Weights (S2SAQW0)

School administrator weights were computed for schools sampled at the beginning of the study (fall-kindergarten) that completed the school administrator questionnaire in spring-kindergarten. The school administrator weight is the school base weight adjusted for school administrator nonresponse.

Teacher Weights (B1TW0 and B2TW0)

At each school sampled at the beginning of the study, all kindergarten teachers were included in the study. Each of these schools was considered a respondent if it had at least one completed teacher questionnaire, part B. The teacher weights were computed in two stages. First, the school base weights were adjusted for school nonresponse. Then, the teacher weights were computed as the school nonresponse adjusted weights adjusted for teacher nonresponse.

4.3.4 Computation of Child Weights

Child Weights

In general, child weights were computed in two stages. In the first stage, school base weights were adjusted for school nonresponse and then multiplied by the poststratified within-school child weights. In the second stage, the resulting weights were adjusted for child nonresponse. The poststratified, within-school child weight is equal to the total number of children in the school divided by the number of children sampled in the school. This is calculated separately for API and non-API children because different sampling rates were used for these two groups of children. Within a school, all API children have the same base weights and all non-API children have the same base weights.

A school was classified as responding using different criteria for fall-kindergarten, spring-kindergarten, and the base year. In fall-kindergarten, responding schools were eligible schools that agreed to cooperate. A school was considered cooperating if it agreed to provide lists of students (for sampling) and teachers (for distributing the teacher questionnaires) and certain information on students that would be used to plan for the assessment. In spring-kindergarten, schools that satisfied at least one of the following conditions were considered respondents: (1) have at least one child assessed in spring-kindergarten, or (2) have at least one sampled LM/not Spanish child who did not pass the Oral Language Development Scale (OLDS) cut score, or (3) have at least one sampled child with disabilities who could not be assessed according to the child's IEP, or (4) have at least one parent interviewed in spring-kindergarten. For the base year, a responding school was one that satisfied at least one of the following conditions: (1) have at least one child assessed in either round, or (2) have at least one sampled LM/not Spanish child in either round, or (3) have at least one sampled child with disabilities in either round, or (4) have at least one parent interviewed in either round. For each set of first-stage child weights, the appropriate school base weights were adjusted for school nonresponse, and then used in the computation of the final child weights.

Child Weights To Be Used with Direct Child Assessment Data (C1CW0, C2CW0, BYCW0)

In fall-kindergarten, responding children for this type of weight were eligible children who had fall-kindergarten scorable cognitive assessment data, or LM/not Spanish children who did not score at

or above the OLDS cut score, but height and weight measurements were collected from them, or children with disabilities who according to specifications in their IEP could not participate in the assessments. A child was eligible if he or she was in kindergarten during fall 1998. A child who transferred to kindergarten in another school between sampling and assessment was considered to be a nonrespondent. In contrast, children who moved to first grade between sampling and assessment were considered ineligible. The fall-kindergarten child weights C1CW0 are the fall-kindergarten first-stage child weights adjusted for fall-kindergarten child nonresponse.

In spring-kindergarten, responding children were classified using rules similar to those used in fall-kindergarten. A child who transferred to another school between rounds and was not followed was considered a nonrespondent; children who moved outside the country were considered ineligible. The spring-kindergarten child weights C2CW0 are the spring-kindergarten first-stage child weights adjusted for spring-kindergarten child nonresponse. The child longitudinal weights BYCW0 were computed as the base year first-stage child weights adjusted for nonresponse. A respondent is defined as a child for whom both C1CW0 and C2CW0 were nonzero.

Table 4-8 shows the number of children who were not assessed due to the following special situations: children who were LM/not Spanish, children with disabilities, children who moved to another school between fall- and spring-kindergarten and who could not be located or because the new school was in a nonsampled county, and children who moved outside of the country or who were deceased. Only the LM/not Spanish and children with disabilities had child weights.

Table 4-8. Number of children who were not assessed due to special situations

| | Number of children | | | | |
|-----------------------------|--------------------|----------|--|--|--|
| | Unweighted | Weighted | | | |
| Fall-kindergarten | | | | | |
| With disabilities | 88 | 18,106 | | | |
| LM/Not Spanish | 415 | 39,148 | | | |
| Spring-kindergarten | | | | | |
| With disabilities | 70 | 13,693 | | | |
| LM/Not Spanish | 229 | 20,211 | | | |
| Moved schools in spring | 606 | 129,562 | | | |
| Became ineligible in spring | 67 | 13,340 | | | |

Child Weights To Be Used with Parent Data (C1PW0, C2PW0, BYPW0)

The child weights C1PW0 (fall-kindergarten) and C2PW0 (spring-kindergarten) to be used with parent interview data are the corresponding first-stage child weights adjusted for nonresponse to the parent interview. In both fall- and spring-kindergarten, a respondent was defined as a child for whom the family structure section (FSQ) in that child's parent interview for the corresponding round was completed. The child longitudinal weights BYPW0 were computed as the base year first-stage child weights adjusted for nonresponse. A respondent is defined as a child for whom both C1PW0 and C2PW0 are nonzero. Note that these weights are at the child level even though the data were collected from the parents; they sum to all kindergarten children.

Child Weights To Be Used for Any Cross-Round Combination of Child Direct Assessment Data and Parent Interview Data and Teacher Data (C1CPTW0, C2CPTW0, BYCPTW0)

The child weights C1CPTW0 (fall-kindergarten) and C2CPTW0 (spring-kindergarten) to be used for analysis involving child, parent, and teacher data are the corresponding first-stage child weights adjusted for nonresponse. In both fall- and spring-kindergarten, a respondent for this type of weight was defined as a child who had scorable cognitive assessment data for the corresponding round (or LM/not Spanish children or children with disabilities), whose parent completed the FSQ section of the parent interview for the corresponding round, and whose teacher completed part B of the teacher questionnaire. The child longitudinal weights BYCPTW0 are the first-stage child weights for the base year adjusted for nonresponse. A respondent is defined as a child for whom both C1CPTW0 and C2CPTW0 are nonzero. Again, these weights are used to produce estimates of children even though the source of the data may be parent or teacher.

Child Weights To Be Used With a Single Round of Parent Interview or Teacher Data in Conjunction with Both Rounds of Child Direct Assessment Data (BYCOMW0)

These child longitudinal weights are the base year first-stage child weights adjusted for nonresponse. For this type of weight, a respondent is defined as a child whose (a) fall- and spring-kindergarten cross-sectional weights C1CW0 and C2CW0 are nonzero, and (b) either fall- or spring-

kindergarten cross-sectional weight C1PW0 or C2PW0 is nonzero, and (c) either fall- or spring-kindergarten cross-sectional weight B1TW0 or B2TW0 is nonzero.

4.3.5 Replicate Weights

For each weight included in the data file, a set of replicate weights was calculated. Replicate weights are used in the jackknife replication method to estimate the standard errors of survey estimates. Any adjustments done to the full sample weights were repeated for the replicate weights. For each full sample weight, there are 90 replicate weights with the same weight prefix. For example, the replicate weights for C1CW0 are C1CW1 through C1CW90. The method used to compute the replicate weights and how they can be used to compute the sampling errors of the estimates are described in the section on variance estimation.

4.3.6 Characteristics of Sample Weights

The statistical characteristics of the sample weights are presented in table 4-9 (teacher- and school-level weights) and in table 4-10 (child-level weights). For each type of weight, the number of cases with nonzero weights is presented together with the mean weight, the standard deviation, the coefficient variation (i.e., the standard deviation as a percentage of the mean weight), the minimum weight, the maximum weight, the skewness, the kurtosis, and the sum of weights.

Table 4-9. Characteristics of teacher- and school-level weights

| | Number of cases | Mean | Standard deviation | CV (× 100) | Minimum | Maximum | Skewness | Kurtosis | Sum |
|--------------|-----------------|-------|--------------------|---------------|---------|---------|----------|----------|---------|
| Teacher | | | | | | | | | |
| Fall-kinderg | garten | | | | | | | | |
| B1TW0 | 3,047 | 62.47 | 44.04 | 70.50 | 1.61 | 506.40 | 2.59 | 11.13 | 190,337 |
| Spring-kind | ergarten | | | | | | | | |
| B2TW0 | 3,243 | 58.64 | 39.67 | 67.64 | 1.60 | 453.44 | 2.43 | 10.09 | 190,166 |
| School | | | | | | | | | |
| Spring-kind | ergarten | | | | | | | | |
| S2SAQW0 | 866 | 83.44 | 53.07 | 63.60 | 6.42 | 484.64 | 2.24 | 8.32 | 72,260 |

Table 4-10. Characteristics of child-level weights

| | Number of cases | Mean | Standard deviation | CV (× 100) | Minimum | Maximum | Skewness | Kurtosis | Sum |
|---------------|-----------------|--------|--------------------|---------------|---------|----------|----------|----------|-----------|
| Fall-kinderga | rten | | | | | | | | |
| C1CW0 | 19,173 | 201.63 | 91.94 | 45.60 | 1.64 | 755.65 | 1.35 | 4.85 | 3,865,946 |
| C1PW0 | 18,097 | 213.62 | 96.19 | 45.03 | 2.03 | 832.40 | 1.47 | 5.71 | 3,865,946 |
| C1CPTW0 | 17,124 | 225.76 | 104.57 | 46.32 | 2.17 | 1,018.25 | 1.45 | 5.49 | 3,865,946 |
| Spring-kinder | rgarten | | | | | | | | |
| C2CW0 | 19,967 | 193.49 | 104.72 | 54.12 | 1.60 | 900.00 | 2.16 | 8.20 | 3,863,512 |
| C2PW0 | 18,950 | 203.88 | 98.75 | 48.44 | 1.98 | 900.00 | 1.62 | 5.91 | 3,863,512 |
| C2CPTW0 | 17,454 | 221.35 | 107.58 | 48.60 | 2.17 | 918.89 | 1.47 | 5.43 | 3,863,512 |
| Longitudinal | for base year | | | | | | | | |
| BYCW0 | 18,211 | 212.14 | 119.54 | 56.35 | 1.59 | 900.00 | 2.45 | 9.82 | 3,863,204 |
| BYPW0 | 16,906 | 228.51 | 109.75 | 48.03 | 2.22 | 900.00 | 1.62 | 5.63 | 3,863,204 |
| BYCPTW0 | 15,420 | 250.53 | 121.33 | 48.43 | 2.54 | 1,146.11 | 1.58 | 6.07 | 3,863,204 |
| BYCOMW0 | 17,060 | 226.45 | 126.48 | 55.85 | 1.59 | 900.00 | 2.33 | 8.82 | 3,863,204 |

The difference in the estimate of the population of teachers or students (sum of weights) between rounds of data collection is due to a combination of factors, among them: (1) the increase in the number of responding schools in spring-kindergarten that resulted from the refusal conversion efforts, and (2) the number of teachers and students who became ineligible after fall-kindergarten. The population of inference for all child-level weights is always the population of kindergartners in the school year 1998-99.

4.4 Variance Estimation

The precision of the sample estimates derived from a survey can be evaluated by estimating the variances of these estimates. For a complex sample design such as the one employed in the ECLS-K, replication and Taylor Series methods have been developed. These methods take into account the clustered, multistaged characteristics of sampling and the use of differential sampling rates to oversample targeted subpopulations. For the ECLS-K, in which the first-stage self-representing sampling units were selected with certainty and the first-stage non-self-representing sampling units were selected with two units per stratum, the paired jackknife replication method (JK2) is recommended. This section describes the JK2 and the Taylor Series estimation methods.

4.4.1 Paired Jackknife Replication Method

In this method, a survey estimate of interest is calculated from the full sample. Subsamples of the full sample are then selected to calculate subsample estimates of the same parameter. The subsamples are called *replicates*, and the subsample estimates are called *replicate estimates*. The variability of the replicate estimates about the full sample estimate is used to estimate the variance of the full sample estimate. The variance estimator is computed as the sum of the squared deviations of the replicate estimates from the full sample estimate:

$$v(\hat{\theta}) = \sum_{g=1}^{G} (\hat{\theta}_{(g)} - \hat{\theta})^2$$

where θ is the survey estimate of interest,

 $\hat{\theta}$ is the estimate of θ based on the full sample,

G is the number of replicates formed, and

 $\hat{\theta}_{(g)}$ is the g^{th} replicate estimate of θ based on the observations included in the g^{th} replicate.

The variance estimates of selected survey items presented in section 3.5 were produced using WesVar and the paired jackknife replication method.

Replicate Weights

Replicate weights were created to be used in the calculation of replicate estimates. Each replicate weight was calculated using the same adjustment steps as the full sample weight but using only the subsample of cases that constitute each replicate. For the ECLS-K, replicate weights were created taking into account the Durbin method of PSU selection.⁵ As mentioned in section 4.1, the Durbin method selects two first-stage units per stratum without replacement, with probability proportional to size and a known joint probability of inclusion.

⁵ Durbin, J. (1967). Design of Multi-Stage Surveys for the Estimation of Sampling Errors. *Journal of the Royal Statistical Society C*, 16, 152-164.

In the ECLS-K PSU sample design, there were 24 SR strata and 38 non-self-representing (NSR) strata. Among the 38 NSR strata, 11 strata were identified as Durbin strata and were treated as SR strata for variance estimation. The purpose of the Durbin strata is to allow variances to be estimated as if the first-stage units were selected with replacement. This brings the number of SR PSUs to 46 (24 original SR PSUs and 22 Durbin PSUs from the 11 Durbin strata). The remaining 54 NSR PSUs are in 27 NSR strata; thus 27 replicates were formed, each corresponding to one NSR stratum. For the SR strata, 63 replicates were formed. The 90 replicates will yield about 76 degrees of freedom for calculating confidence intervals for many survey estimates.

As stated above, the sample of PSUs was divided into 90 replicates or variance strata. The 27 NSR strata formed 27 variance strata of two PSUs each; each PSU formed a variance unit within a variance stratum. All schools within an NSR PSU were assigned to the same variance unit and variance stratum. Sampled schools in the 46 SR PSUs were grouped into 63 variance strata. In the SR PSUs, schools were directly sampled and constituted PSUs. Public schools were sampled from within PSU while private schools were pooled into one sampling stratum and selected systematically (except in the SR PSUs identified through the Durbin method where private schools were treated as if they were sampled from within PSU). Schools were sorted by sampling stratum, type of school (from the original sample or newly selected as part of freshening), type of frame (for new schools only), and their original order of selection (within stratum). From this sorted list, they were grouped into pairs within each sampling stratum; the last pair in the stratum may be a triplet if the number of schools in the stratum is odd. This operation resulted in a number of ordered preliminary variance strata of two or three units each. The first ordered 63 strata were then numbered sequentially from 1 to 63; the next ordered 63 strata were also numbered sequentially from 1 to 63, and so on until the list was exhausted, thus forming the desired 63 variance strata.

In strata with two units, a unit being a PSU in the case of NSR PSUs and a school in the case of SR PSUs, the base weight of the first unit was doubled to form the replicate weight, while the base weight of the second unit was multiplied by zero. In strata with three units, two variance strata were created: in the first variance stratum, the base weight of two of the three units was multiplied by 1.5 to form the replicate weight and the base weight of the last unit was multiplied by zero; in the second variance stratum, the base weight of a different group of two units was multiplied by 1.5, and the base weight of the third unit was multiplied by zero. Any adjustments done to the full sample weights were repeated for the replicate weights. For each full sample weight, there are 90 replicate weights with the

same weight prefix. For example, the replicate weights for child-level weights C1CW0 are C1CW1 through C1CW90.

4.4.2 Taylor Series Method

The Taylor Series method produces a linear approximation to the survey estimate of interest; then the variance of the linear approximation can be estimated by standard variance formulas. The stratum and first-stage unit identifiers needed to use the Taylor Series method were assigned taking care to ensure that there were at least two responding units in each stratum. A stratum that did not have at least two responding units was combined with an adjacent stratum. For the ECLS-K, the method of stratifying first-stage units was the same for each type of weight in each round of data collection and in the panel, while the combining of strata due to inadequate sample size and the sequential numbering of strata and first-stage units were done separately. Consequently, there is a different set of stratum and first-stage unit identifiers for each set of weights.

Stratum and first-stage unit identifiers are provided as part of the ECLS-K data file and can be used with software such as SUDAAN and STATA. They are described in table 4-11.

4.4.3 Specifications for Computing Standard Errors

Specifications for computing standard errors are given in table 4-12. For each type of analysis described in the table, users can choose between the replication method or the Taylor Series method for computing standard errors.

For the replication method using WesVar, the case identification (ID), the full sample weight, the replicate weights, and the method of replication are required parameters. All analysis of the ECLS-K data should be done using the paired jackknife method (JK2). As an example, to compute child level estimates (e.g., mean reading scores) and their standard errors, users need to specify CHILDID in the ID box of the WesVar data file screen, C1CW0 as the full sample weight, C1CW1 to C1CW90 as the replicate weights, and JK2 as the method of replication.

Table 4-11. ECLS-K Taylor Series stratum and first-stage unit identifiers

| _ | Variable name | Description |
|---------------|---------------|--|
| Child level | C1TCWSTR | Sampling stratum – fall-kindergarten C-weights |
| | C1TCWPSU | First-stage sampling unit within stratum – fall-kindergarten C-weights |
| | C1TPWSTR | Sampling stratum – fall-kindergarten P-weights |
| | C1TPWPSU | First-stage sampling unit within stratum – fall-kindergarten P-weights |
| | CICPTSTR | Sampling stratum – fall-kindergarten CPT-weights |
| | C1CPTPSU | First-stage sampling unit within stratum – fall-kindergarten CPT-weights |
| | C2TCWSTR | Sampling stratum – spring-kindergarten C-weights |
| | C2TCWPSU | First-stage sampling unit within stratum – spring-kindergarten C-weights |
| | C2TPWSTR | Sampling stratum – spring-kindergarten P-weights |
| | C2TPWPSU | First-stage sampling unit within stratum – spring-kindergarten P-weights |
| | C2CPTSTR | Sampling stratum – spring-kindergarten CPT-weights |
| | C2CPTPSU | First-stage sampling unit within stratum – spring-kindergarten CPT-weights |
| | BYCWSTR | Sampling stratum – base year panel C-weights |
| | BYCWPSU | First-stage sampling unit within stratum – base year panel C-weights |
| | BYPWSTR | Sampling stratum – base year panel P-weights |
| | BYPWPSU | First-stage sampling unit within stratum – base year P-weights |
| | BYCPTSTR | Sampling stratum – base year panel CPT-weights |
| | BYCPTPSU | First-stage sampling unit within stratum – base year CPT-weights |
| | BYCOMSTR | Sampling stratum – base year panel COM-weights |
| | BYCOMPSU | First-stage sampling unit within stratum – base year COM-weights |
| Teacher level | B1TTWSTR | Sampling stratum – fall-kindergarten weights |
| | B1TTWPSU | First-stage sampling unit within stratum – fall-kindergarten |
| | B2TTWSTR | Sampling stratum – spring-kindergarten |
| | B2TTWPSU | First-stage sampling unit within stratum – spring-kindergarten |
| School level | S2SAQSTR | Sampling stratum |
| | S2SAQPSU | First-stage sampling unit within stratum |

4-30

Table 4-12. Specifications for computing standard errors

| | | | Computing Standard Errors | | | | | | |
|---------------------|--------------------|---------------------|--------------------------------------|-----------------|---------------|--|---------------------------------|--|--|
| | | | Replication Method (WesVarPC) | | | Taylor Series Method (SUDAAN & STATA) | | | |
| Type of Analysis | Full Sample Weight | ID | Replicate Weights | Jacknife Method | Sample Design | Nesting Variables | (Average Root Design Effect) | | |
| Fall-Kindergarten | | | | | | | | | |
| Cross-sectional | | | | | | | | | |
| # G1 11 1 1 | | | | | | | 2.154 | | |
| # Child-level | C1 CWO | CHILL DID | G1 CW1 G1 CW00 | 11/2 | IVD | CATCHICTE CATCHING | | | |
| | C1CW0 | CHILDID | C1CW1 - C1CW90 | JK2 | WR | C1TCWSTR C1TCWPSU | | | |
| | C1PW0 C1CPTW0 | PARENTID CHILDID | C1PW1 - C1PW90 C1CPTW1 - C1CPTW90 | JK2 JK2 | WR WR | C1TPWSTR C1TPWPSU C1CPTSTR C1CPTPSU | | | |
| | CICPIWU | CHILDID | CICPIWI - CICPIW90 | JK2 | WK | CICPISIR CICPIPSU | | | |
| # Teacher-level | B1TW0 | T ID | B1TW1 - B1TW90 | JK2 | WR | B1TTWSTR B1TTWPSU | 1.629 | | |
| Spring-Kindergarten | | _ | | | | | | | |
| Cross-sectional | | | | | | | | | |
| | | | | | | | 2.096 | | |
| # Child-level | | | | | | | 2.000 | | |
| | C2CW0 | CHILDID | C2CW1 - C2CW90 | JK2 | WR | C2TCWSTR C2TCWPSU | | | |
| | C2PW0 | PARENTID | C2PW1 - C2PW90 | JK2 | WR | C2TPWSTR C2TPWPSU | | | |
| | C2CPTW0 | CHILDID | C2CPTW1 - C2CPTW90 | JK2 | WR | C2CPTSTR C2CPTPSU | | | |
| | | | | | | | 1.612 | | |
| # Teacher-level | B2TW0 | T_ID | B2TW1 - B2TW90 | JK2 | WR | B2TTWSTR B2TTWPSU | | | |
| # School-level | S2SAQW0 | S ID | S2SAQW1 - S2SAQW90 | JK2 | WR | S2SAQSTR S2SAQPSU | 1.279 | | |
| Base Year Panel | 525110 110 | 5_12 | 525/10/11 525/10/11/5 | 0112 | **** | 525/105/11 525/10/155 | | | |
| Dusc Tear Tuner | | | | | | | 1.884 | | |
| # Child-level | | | | | | | 1.004 | | |
| | BYCW0 | CHILDID | BYCW1 - BYCW90 | JK2 | WR | BYCWSTR BYCWPSU | | | |
| | BYPW0 | PARENTID | BYPW1 - BYPW90 | JK2 | WR | BYPWSTR BYPWPSU | | | |
| | BYCPTW0 | CHILDID | BYCPTW1 - BYCPTW90 | JK2 | WR | BYCPTSTR BYCPTPSU | | | |
| | BYCOMW0 | CHILDID | BYCOMW1 - BYCOMW90 | JK2 | WR | BYCOMSTR BYCOMPSU | | | |

For the Taylor Series method using either SUDAAN or STATA, the full sample weight, the sample design, the nesting stratum and PSU variables are required. For the same example above, the full sample weight (C1CW0), the without replacement sample design (WR), the stratum variable (C1TCWSTR) and the PSU variable (C1TCWPSU) must be specified.

The last column in table 4-12 gives the average root design effect that can be used to approximate the standard errors for each type of analysis. For a discussion of the use of design effects, see section 4.5.

4.5 Design Effects

An important analytic device is to compare the statistical efficiency of survey estimates with what would have been obtained in a hypothetical and usually impractical simple random sample (SRS) of the same size. In a stratified clustered design like the ECLS-K, stratification generally leads to a gain in efficiency over simple random sampling, but clustering has the opposite effect because of the positive intracluster correlation of the units in the cluster. The basic measure of the relative efficiency of the sample is called the *design effect*, defined as the ratio, for a given statistic, of the variance estimate under the actual sample design to the variance estimate that would be obtained with an SRS of the same sample size:

$$DEFF = \frac{Var_{DESIGN}}{Var_{SRS}}$$

The root design effect, *DEFT*, is defined as:

$$DEFT = \frac{SE_{DESIGN}}{SE_{SRS}}$$

where SE is the standard error of the estimate.

4.5.1 Use of Design Effects

One method of computing standard errors for the ECLS-K is the paired jackknife method, as described in section 4.4, using programs designed specifically for analyzing complex survey data such as WesVar. Another approach, Taylor Series linearization (and software designed for it), is also discussed in the same section. If a statistical analysis software package such as SPSS (Statistical Program for the Social Sciences) and SAS (Statistical Analysis System) is used, the standard errors should be corrected using *DEFT*, since these programs calculate standard errors, assuming the data were collected with a simple random sample. The standard error of an estimate under the actual sample design can be calculated as follows:

$$SE_{DESIGN} = \sqrt{DEFF \times Var_{SRS}} = DEFT \times SE_{SRS}$$

Packages such as SAS or SPSS can be used to obtain Var_{SRS} and SE_{SRS} . Alternatively, Var_{SRS} and SE_{SRS} can be computed using the formulas below for means and proportions.

Means

$$Var_{SRS} = \frac{1}{n} \frac{\sum_{i=1}^{n} w_i \left(x_i - \overline{x_w}\right)^2}{\sum_{i=1}^{n} w_i} = SE_{SRS}^2$$

where w_i are the sampling weights, n is the number of respondents in the sample, and the sample mean \bar{x}_w is calculated as follows:

$$\overline{x}_{w} = \frac{\sum_{1}^{n} w_{i} x_{i}}{\sum_{1}^{n} w_{i}}$$

Proportions

$$Var_{srs} = \frac{p(1-p)}{n} = SE_{SRS}^2$$

where p is the weighted estimate of proportion for the characteristic of interest and n is the number of cases in the sample.

In both cases of means and proportions, the standard error assuming SRS should be multiplied by *DEFT* to get the standard error of the estimate under the actual design.

4.5.2 Average Design Effects for the ECLS-K

In the ECLS-K, a large number of data items were collected from students, parents, teachers, and schools. Each item has its own design effect that can be estimated from the survey data. One way to produce design effects for analysts' use is to calculate them for a number of variables and average them. The averaging can be done overall and for selected subgroups. The tables that follow show estimates, standard errors, and design effects for selected means and proportions based on the ECLS-K child, parent, teacher, and school data. For each survey item, the tables present the number of cases, the estimate, the standard error taking into account the actual sample design (Design SE), the standard error assuming SRS (SRS SE), the root design effect (DEFT), and the design effect (DEFF). Standard errors (Design SE) were produced using the paired jackknife replication method (JK2).

For each survey estimate, the variable name as it appears in the ECLS-K Base Year Public-Use Electronic Code Book (ECB) is also provided in the table. If multiple variables were combined to arrive at the estimate, then the names of all the variables used are provided. For example, the estimate of the proportion of fall-kindergarten children whose home language was not English was computed using two different survey items, P1ANYLNG (parent questionnaire item PLQ020, whether another language was used at home) and P1PRMLNG (parent questionnaire item PLQ060, what was the primary language used at home). The first letter of the variable name indicates the source of the item: C – child assessment, P – parent instrument, A – teacher instrument part A, B – teacher instrument part B, T – teacher instrument part C, and S – school administrator questionnaire. The second letter of the variable name indicates when the data were collected: 1 – round 1, fall-kindergarten; 2 – round 2, spring-kindergarten. For more information on the variables used in this section, refer to chapter 3, which describes the assessment and rating scale scores used in the ECLS-K, and chapter 7, which has a detailed discussion of the other variables.

Child-Level Design Effects

Standard errors and design effects for the child-level items are presented in tables 4-13 to 4-15 for fall-kindergarten, spring-kindergarten, and for the base year. The survey items were selected so that there was a mix of items common to both fall- and spring-kindergarten and items that were specific to each round of data collection. For fall- and spring-kindergarten, the student-level items include the different scores from the assessment data, the social rating scores as provided by the parents and teachers, some characteristics of the parents, and some characteristics of the students as reported by the parents. For a small number of estimates, the data were subset to cases where the estimate is applicable; for example, the score for the Spanish math assessment applies only to students who were assessed in Spanish; the type of primary child care is only for children who had regular scheduled child care; the number of hours that the mothers work is only for women in the labor force; and the question on whether the parents have a happy relationship is only for parents in current relationships. For the base year student panel, design effects were calculated for the difference in scores between the two rounds of data collection, and also for some spring-kindergarten items.

The median design effect is 4.7 for fall-kindergarten (compared with 2.2 for the NELS:88 base year student questionnaire data) and 4.1 for spring-kindergarten (compared with 3.4 for the NELS:88 first followup). The size of the ECLS-K design effects is largely a function of the number of children sampled per school. With about 20 children sampled per school, an intraclass correlation of 0.2 might result in a design effect of about 5. The median design effect is 3.4 for the panel of students common to both fall- and spring-kindergarten, and the lower median design effect is due to the smaller cluster size in the panel. The ECLS-K design effects are slightly higher than the average of 3.8 that was anticipated during the design phase of the study, both for estimates for proportions and for score estimates.

Table 4-16 presents the median design effects for subgroups based on school type, child's gender and race-ethnicity, geographic region, and level of urbanicity. For fall-kindergarten, the median design effects vary from 2.0 (Hispanic) to 5.9 (children in small towns and rural areas). For spring-kindergarten and the panel, the range of variability of the median design effects is similar to that for fall-kindergarten; that is, 2.0 for Hispanic children to 6.7 for children in small towns and rural areas for spring-kindergarten and 1.6 for children of other race-ethnicity to 5.3 for children in small towns and rural areas for the panel. Once again, the variation in the design effects is largely a function of the sample size as well as the homogeneity of the children within schools.

Table 4-13. ECLS-K, fall-kindergarten: standard errors and design effects for the full sample – child level

| | | Number | | Design | SRS | | |
|---|----------------------|------------------|--------------|----------------|----------------|----------------|----------------|
| Survey item | Variable name | of cases | Estimate | SE | SE | DEFT | DEFF |
| Child scores (Mean) | | | | | | | |
| Reading score (English) | C1RSCALE | 17,625 | 22.02 | 0.156 | 0.063 | 2.480 | 6.148 |
| Math score (English) | C1MSCALE | 17,615 | 19.52 | 0.141 | 0.054 | 2.606 | 6.789 |
| Math score (Spanish) | C1MSCALE | 1,021 | 12.88 | 0.279 | 0.132 | 2.115 | 4.472 |
| General knowledge (English) | C1GSCALE | 17,566 | 22.09 | 0.171 | 0.056 | 3.077 | 9.471 |
| Composite motor skills | C1CMOTOR | 18,422 | 12.08 | 0.050 | 0.023 | 2.176 | 4.734 |
| Approaches to learning-Parent | P1LEARN | 18,029 | 3.11 | 0.006 | 0.004 | 1.678 | 2.816 |
| Self-control-Parent | P1CONTRO | 18,023 | 2.83 | 0.006 | 0.004 | 1.430 | 2.045 |
| Social interaction-Parent | P1SOCIAL | 18,026 | 3.32 | 0.007 | 0.004 | 1.702 | 2.896 |
| Withdrawn-Parent | P1SADLON | 18,010 | 1.54 | 0.006 | 0.003 | 2.131 | 4.542 |
| Impulsive/overactive-Parent | P1IMPULS | 17,902 | 1.98 | 0.011 | 0.005 | 2.156 | 4.647 |
| Approaches to learning-Teacher | T1LEARN | 18,839 | 2.96 | 0.010 | 0.005 | 2.110 | 4.452 |
| Self-control-Teacher | T1CONTRO | 18,135 | 3.07 | 0.011 | 0.005 | 2.371 | 5.623 |
| Interpersonal-Teacher | T1INTERP | 17,923 | 2.96 | 0.010 | 0.005 | 2.125 | 4.516 |
| Externalizing problems-Teacher | T1EXTERN | 18,609 | 1.64 | 0.010 | 0.005 | 2.006 | 4.025 |
| Internalizing problems-Teacher | T1INTERN | 18,356 | 1.55 | 0.007 | 0.004 | 1.867 | 3.484 |
| Child characteristics (Percent) | | | | | | | |
| Lived in single-parent family | P1HFAMIL | 18,097 | 23.57 | 0.728 | 0.315 | 2.309 | 5.331 |
| Lived in two-parent family | P1HFAMIL | 18,097 | 74.43 | 0.728 | 0.313 | 2.438 | 5.942 |
| Home language is non-English | P1ANYLNG, | 18,057 | 12.09 | 0.730 | 0.324 | 2.438 | 8.896 |
| Home language is non-English | P1PRMLNG | 10,039 | 12.09 | 0.724 | 0.243 | 2.963 | 0.070 |
| Primary care is center-based | P1PRIMNW | 8,173 | 36.82 | 1.195 | 0.533 | 2.240 | 5.019 |
| Primary care is bome-based | P1PRIMNW | 8,173 | 63.18 | 1.195 | 0.533 | 2.240 | 5.019 |
| Expected to graduate from college | P1EXPECT | 17,968 | 74.74 | 0.703 | 0.333 | 2.168 | 4.702 |
| Being read to every day | P1READBO | 18,068 | 44.44 | 0.765 | 0.324 | 1.774 | 3.146 |
| Was in excellent/very good/good health | P1HSCALE | 18,055 | 96.92 | 0.050 | 0.370 | 1.774 | 1.624 |
| Parents had high school or less | WKPARED | 17,754 | 37.99 | 0.104 | 0.123 | 2.503 | 6.267 |
| Mom worked 35 hours+/week | P1HMEMP | 12,519 | 64.17 | 0.701 | 0.429 | 1.635 | 2.672 |
| Child abareatoristics (Maan) | | | | | | | |
| Child characteristics (Mean) | D1 VACE | 10.072 | 69.50 | 0.077 | 0.022 | 2 270 | 5 656 |
| Age of child in months | R1_KAGE | 19,073 | 68.50 | 0.077 | 0.032 | 2.378 | 5.656 |
| Child's household size Number of children <18 in child's HH | P1HTOTAL P1LESS18 | 18,097 18,097 | 4.52 2.50 | 0.022 0.020 | 0.010 0.009 | 2.106 2.247 | 4.436 5.047 |
| Number of children <18 in child 8 HH | PILESSIO | 18,097 | 2.30 | 0.020 | 0.009 | 2.247 | 3.047 |
| Median | | | | | | 2.162 | 4.675 |
| Mean | | | | | | 2.154 | 4.801 |
| Standard deviation | | | | | | 0.406 | 1.775 |
| Coefficient of variation | | | | | | 0.188 | 0.370 |
| Minimum | | | | | | 1.274 | 1.624 |
| Maximum | | | | | | 3.077 | 9.471 |

Table 4-14. ECLS-K, spring-kindergarten: standard errors and design effects for the full sample – child level

| | | Number | | Design | SRS | | |
|--|---------------|----------|----------|--------|-------|-------|-------|
| Survey item | Variable name | of cases | Estimate | SE | SE | DEFT | DEFF |
| Child scores (Mean) | | | | | | | |
| Reading score (English) | C2RSCALE | 18,937 | 31.64 | 0.213 | 0.075 | 2.855 | 8.151 |
| Math score (English) | C2MSCALE | 18,925 | 27.43 | 0.173 | 0.063 | 2.728 | 7.443 |
| Math score (Spanish) | C2MSCALE | 724 | 18.76 | 0.454 | 0.242 | 1.874 | 3.513 |
| General knowledge (English) | C2GSCALE | 18,903 | 26.81 | 0.158 | 0.056 | 2.801 | 7.844 |
| Approaches to learning-Parent | P2LEARN | 18,252 | 3.12 | 0.005 | 0.004 | 1.279 | 1.637 |
| Self-control-Parent | P2CONTRO | 18,251 | 2.87 | 0.006 | 0.004 | 1.685 | 2.839 |
| Social interaction-Parent | P2SOCIAL | 18,270 | 3.42 | 0.006 | 0.004 | 1.579 | 2.494 |
| Withdrawn-Parent | P2SADLON | 18,232 | 1.55 | 0.006 | 0.003 | 1.966 | 3.867 |
| Impulsive/overactive-Parent | P2IMPULS | 18,091 | 1.96 | 0.010 | 0.005 | 1.856 | 3.445 |
| Approaches to learning-Teacher | T2LEARN | 18,979 | 3.08 | 0.010 | 0.005 | 1.992 | 3.967 |
| Self-control-Teacher | T2CONTRO | 18,847 | 3.15 | 0.011 | 0.005 | 2.294 | 5.261 |
| Interpersonal-Teacher | T2INTERP | 18,767 | 3.09 | 0.009 | 0.005 | 1.999 | 3.997 |
| Externalizing problems-Teacher | T2EXTERN | 18,907 | 1.69 | 0.010 | 0.005 | 2.173 | 4.723 |
| Internalizing problems-Teacher | T2INTERN | 18,806 | 1.59 | 0.008 | 0.004 | 2.062 | 4.251 |
| Child characteristics (Percent) | | | | | | | |
| Lived in single-parent family | P2HFAMIL | 18,906 | 23.51 | 0.584 | 0.308 | 1.895 | 3.591 |
| Lived in two-parent family | P2HFAMIL | 18,906 | 74.33 | 0.645 | 0.318 | 2.030 | 4.120 |
| Home language is non-English | P2ANYLNG, | 18,862 | 12.53 | 0.739 | 0.241 | 3.064 | 9.391 |
| | P2PRMLNG | , | | | | | |
| Child used home computer | P2HOMECM | 18,910 | 52.61 | 0.818 | 0.363 | 2.253 | 5.078 |
| Child read outside school everyday | P2CHREAD | 18,877 | 39.82 | 0.649 | 0.356 | 1.823 | 3.322 |
| Parents had high school or less | WKPARED | 17,607 | 37.14 | 0.910 | 0.364 | 2.499 | 6.244 |
| Parent attended PTA | P2ATTENP | 18,914 | 33.12 | 0.902 | 0.342 | 2.635 | 6.941 |
| Parent thinks not safe for child to play | P2SAFEPL | 18,898 | 96.17 | 0.220 | 0.140 | 1.574 | 2.479 |
| outside | | | | | | | |
| Parents had happy relationship | P2MARRIG | 14,291 | 97.77 | 0.164 | 0.123 | 1.333 | 1.776 |
| Parent too busy to play with child | P2TOOBUS | 18,600 | 45.55 | 0.591 | 0.365 | 1.618 | 2.617 |
| Child characteristics (Mean) | | | | | | | |
| Age of child in months | R2_KAGE | 19,890 | 74.76 | 0.070 | 0.032 | 2.209 | 4.881 |
| Child's household size | P2HTOTAL | 18,906 | 4.54 | 0.023 | 0.010 | 2.218 | 4.919 |
| Number of children <18 in child's HH | P2LESS18 | 18,906 | 2.52 | 0.020 | 0.009 | 2.302 | 5.298 |
| Median | | | | | | 2.030 | 4.120 |
| Mean | | | | | | 2.096 | 4.596 |
| Standard deviation | | | | | | 0.458 | 1.993 |
| Coefficient of variation | | | | | | 0.218 | 0.434 |
| Minimum | | | | | | 1.279 | 1.637 |
| Maximum | | | | | | 3.064 | 9.391 |

Table 4-15. ECLS-K, panel: standard errors and design effects for the full sample – child level

| | | Number | | Design | SRS | | |
|--------------------------------------|------------------------|----------|----------|--------|-------|-------|-------|
| Survey item | Variable name | of cases | Estimate | SE | SE | DEFT | DEFF |
| Child scores | | | | | | | |
| (Difference between fall- and spring | g-kindergarten scores) | | | | | | |
| Reading score (English) | C2RSCALE – C1RSCALE | 16,751 | 9.88 | 0.123 | 0.047 | 2.603 | 6.778 |
| Math score (English) | C2MSCALE – C1MSCALE | 16,748 | 8.18 | 0.084 | 0.040 | 2.126 | 4.520 |
| Math score (Spanish) | C2MSCALE – C1MSCALE | 637 | 6.28 | 0.165 | 0.175 | 0.944 | 0.892 |
| General knowledge (English) | C2GSCALE – C1GSCALE | 16,697 | 5.16 | 0.070 | 0.031 | 2.255 | 5.084 |
| Approaches to learning-Parent | P2LEARN - P1LEARN | 16,326 | 0.01 | 0.005 | 0.003 | 1.467 | 2.151 |
| Self-control-Parent | P2CONTRO - P1CONTRO | 16,326 | 0.05 | 0.005 | 0.003 | 1.461 | 2.135 |
| Social interaction-Parent | P2SOCIAL - P1SOCIAL | 16,331 | 0.10 | 0.006 | 0.005 | 1.315 | 1.729 |
| Withdrawn-Parent | P2SADLON – PISADLON | 16,298 | 0.01 | 0.005 | 0.003 | 1.652 | 2.730 |
| Impulsive/overactive-Parent | P2IMPULS - P1IMPULS | 16,109 | -0.01 | 0.009 | 0.005 | 1.670 | 2.790 |
| Approaches to learning-Teacher | T2LEARN - T1LEARN | 17,208 | 0.11 | 0.007 | 0.004 | 1.861 | 3.462 |
| Self-control-Teacher | T2CONTRO - T1CONTRO | 16,538 | 0.07 | 0.008 | 0.004 | 1.840 | 3.387 |
| Interpersonal-Teacher | T2INTERP - T1INTERP | 16,296 | 0.12 | 0.008 | 0.004 | 1.919 | 3.681 |
| Externalizing problems-Teacher | T2EXTERN - T1EXTERN | 16,944 | 0.06 | 0.005 | 0.003 | 1.481 | 2.193 |
| Internalizing problems-Teacher | T2INTERN - T1INTERN | 16,681 | 0.04 | 0.007 | 0.004 | 1.707 | 2.915 |
| Child characteristics (Percent) | | | | | | | |
| Lived in single-parent family | P2HFAMIL | 16,870 | 23.11 | 0.603 | 0.325 | 1.857 | 3.447 |
| Lived in two-parent family | P2HFAMIL | 16,870 | 74.80 | 0.671 | 0.334 | 2.007 | 4.029 |
| Home language is non-English | P2ANYLNG, P2PRMLNG | 16,906 | 11.65 | 0.706 | 0.247 | 2.860 | 8.182 |
| Child used home computer | P2HOMECM | 16,881 | 53.54 | 0.860 | 0.384 | 2.242 | 5.025 |
| Child read outside school everyday | P2CHREAD | 16,855 | 39.73 | 0.663 | 0.377 | 1.760 | 3.099 |
| Parents had high school or less | WKPARED | 15,733 | 36.19 | 0.939 | 0.383 | 2.451 | 6.006 |
| Parent attended PTA | P2ATTENP | 16,880 | 33.24 | 0.940 | 0.362 | 2.594 | 6.727 |
| Parent thinks not safe for child to | | , | | | | | |
| play outside | P2SAFEPL | 16,866 | 96.19 | 0.219 | 0.147 | 1.487 | 2.212 |
| Parents had happy relationship | P2MARRIG | 12,823 | 97.83 | 0.168 | 0.129 | 1.305 | 1.702 |
| Parent too busy to play with child | P2TOOBUS | 16,642 | 45.73 | 0.590 | 0.386 | 1.528 | 2.335 |
| Child characteristics (Mean) | | | | | | | |
| Age of child in months | R2_KAGE | 18,146 | 74.76 | 0.072 | 0.033 | 2.171 | 4.713 |
| Child's household size | P2HTOTAL | 16,870 | 4.55 | 0.023 | 0.011 | 2.141 | 4.585 |
| Number of children <18 in child's | | , | | | | | |
| НН | P2LESS18 | 16,870 | 2.52 | 0.020 | 0.009 | 2.167 | 4.695 |
| Median | | | | | | 1.857 | 3.447 |
| Mean | | | | | | 1.884 | 3.748 |
| Standard deviation | | | | | | 0.454 | 1.767 |
| Coefficient of variation | | | | | | 0.241 | 0.471 |
| Minimum | | | | | | 0.944 | 0.892 |
| Maximum | | | | | | 2.860 | 8.182 |

Table 4-16. ECLS-K: median design effects for subgroups – child level

| | Fall-kindergarten ^a | | Spring-kir | ndergarten ^b | Panel ^c | | |
|-----------------------------|--------------------------------|-------|------------|-------------------------|--------------------|-------|--|
| Subgroups | DEFT | DEFF | DEFT | DEFF | DEFT | DEFF | |
| All students | 2.162 | 4.675 | 2.030 | 4.120 | 1.857 | 3.447 | |
| Type of school | | | | | | | |
| Public | 2.064 | 4.258 | 1.932 | 3.734 | 1.781 | 3.171 | |
| Private | 1.995 | 3.979 | 1.954 | 3.817 | 1.782 | 3.174 | |
| Catholic private | 1.771 | 3.136 | 1.738 | 3.022 | 1.654 | 2.736 | |
| Other private | 1.937 | 3.754 | 1.706 | 2.910 | 1.709 | 2.920 | |
| Gender | | | | | | | |
| Male | 1.771 | 3.135 | 1.735 | 3.011 | 1.533 | 2.349 | |
| Female | 1.645 | 2.704 | 1.656 | 2.741 | 1.572 | 2.471 | |
| Race-ethnicity | | | | | | | |
| White | 1.777 | 3.159 | 1.802 | 3.246 | 1.654 | 2.736 | |
| Black | 1.594 | 2.546 | 1.462 | 2.137 | 1.417 | 2.009 | |
| Hispanic | 1.397 | 1.952 | 1.406 | 1.977 | 1.366 | 1.865 | |
| Asian/Pacific Islander | 1.971 | 3.883 | 2.107 | 4.438 | 1.422 | 2.021 | |
| Other | 1.629 | 2.654 | 1.503 | 2.260 | 1.279 | 1.635 | |
| Region | | | | | | | |
| Northeast | 1.760 | 3.099 | 1.824 | 3.328 | 1.541 | 2.374 | |
| Midwest | 2.366 | 5.599 | 2.306 | 5.319 | 2.102 | 4.418 | |
| South | 2.122 | 4.502 | 1.969 | 3.876 | 1.945 | 3.784 | |
| West | 1.647 | 2.712 | 1.666 | 2.775 | 1.532 | 2.347 | |
| Urbanicity | | | | | | | |
| Central city | 2.136 | 4.563 | 1.952 | 3.812 | 1.752 | 3.068 | |
| Urban fringe and large town | 1.814 | 3.291 | 1.775 | 3.151 | 1.586 | 2.516 | |
| Small town and rural area | 2.421 | 5.861 | 2.594 | 6.727 | 2.306 | 5.319 | |

^aEach median is based on 28 items.

Items with the highest design effects are those related to teacher data. For example, in spring-kindergarten, the estimate of the percent of children whose teachers have a master's degree or a higher degree is 35.6 percent with a design effect of 16.814; the estimate of the percent of children whose teachers spoke only English in class is 89.5 percent with a design effect of 17.871; the estimate of the mean number of years that these children's teachers taught in schools is nine years with a design effect of 12.157. The median design effect for these three items is about 14.8 for fall-kindergarten and 16.8 for

^bEach median is based on 27 items.

^cEach median is based on 27 items.

spring-kindergarten. The high design effects are reasonable for this type of data because children in the same class have the same teacher, and the intraclass correlation is thus high.

Teacher-Level Design Effects

Standard errors and design effects for the teacher-level items are presented in table 4-17 for fall-kindergarten and table 4-18 for spring-kindergarten. Survey items were selected from both teacher instruments, part A and part B. In part A of the teacher instrument, teachers were asked to report about their children's and class's characteristics, for classes that they taught, whether they were morning, afternoon, or all day classes. In part B, they were asked about class organization, class activities, evaluation methods and also about their views on kindergarten readiness, school environment, and overall school climate. The topics covered in part B are not class-specific. Based on data collected in part A, teachers were classified as full-day (if they taught all day classes) or part-day teachers (if they taught morning, or afternoon, or both morning and afternoon classes). For both fall- and spring-kindergarten, a small number of teachers who filled out information for morning and all day classes or afternoon and all day classes could not be classified as part-day or full-day teachers and were excluded from the computation of design effects. This affects items such as the language that the teachers spoke in class and the class size since these estimates were computed over all classes taught, whether they were morning, afternoon, or all day classes.

The median design effect is 2.5 for both fall- and spring-kindergarten. These are lower than the child-level design effects because the number of responding teachers per school is relatively small. The design effect for teachers is largely a result of selecting a sample using a design most effective for child-level statistics.

Table 4-19 presents the median design effects for subgroups based on school type, geographic region, level of urbanicity, teacher type, and percent of minority enrollment in the school. For fall-kindergarten, the median design effect varies from 1.4 (teachers in Catholic private schools) to 3.2 (teachers in schools with 75 percent minority enrollment or more). The median design effects are generally lower for spring-kindergarten, but the range of variability is similar to that for fall-kindergarten (from 1.3 for teachers in Catholic private schools to 3.0 for teachers in schools with 25 to 49 percent minority enrollment).

Table 4-17. ECLS-K, fall-kindergarten: standard errors and design effects for the full sample – teacher level

| | | Number | | Design | SRS | | |
|--|---------------|----------|----------|--------|-------|----------------|----------------|
| Survey item | Variable name | of cases | Estimate | SE | SE | DEFT | DEFF |
| Teacher characteristics (Percent) | | | | | | | |
| Used only English in class | A1ATNOOT, | 2,828 | 84.97 | 1.008 | 0.672 | 1.501 | 2.252 |
| | A1PTNOOT, | | | | | | |
| | A1DTNOOT | | | | | | |
| Used Spanish in class | A1ATSPNH, | 2,828 | 13.83 | 0.925 | 0.649 | 1.425 | 2.031 |
| | A1PTSPNH, | | | | | | |
| | A1DTSPNH | | | | | | |
| Had math area in class | B1MATHAR | 3,037 | 94.71 | 0.712 | 0.406 | 1.753 | 3.072 |
| Had computer area in class | B1COMPAR | 3,031 | 83.31 | 1.095 | 0.677 | 1.617 | 2.615 |
| Used 5-9 unpaid prep hours | B1NOPAYP | 3,032 | 37.14 | 1.022 | 0.877 | 1.165 | 1.357 |
| Had preschoolers in kindergarten | B1INKNDR | 2,975 | 43.00 | 1.629 | 0.908 | 1.795 | 3.221 |
| Teacher is Hispanic | B1HISP | 2,973 | 6.53 | 0.766 | 0.453 | 1.692 | 2.862 |
| Had at least a bachelor's degree | B1HGHSTD | 2,919 | 95.20 | 0.627 | 0.395 | 1.587 | 2.517 |
| Had no teaching certification | B1TYPCER | 2,923 | 3.20 | 0.401 | 0.325 | 1.233 | 1.520 |
| Had highest teaching certification | B1TYPCER | 2,923 | 62.05 | 1.409 | 0.897 | 1.570 | 2.464 |
| Certified in early childhood | B1ERLYCT | 2,941 | 52.95 | 1.607 | 0.920 | 1.746 | 3.048 |
| Taught all day class only | A1ACLASS, | 2,860 | 62.38 | 2.231 | 0.906 | 2.463 | 6.068 |
| | A1PCLASS, | | | | | | |
| | A1DCLASS | | | | | | |
| Teacher characteristics (Mean) | | | | | | | |
| Age of teacher | B1AGE | 2,923 | 41.29 | 0.249 | 0.191 | 1.301 | 1.693 |
| Class size | A1ATOTAG, | 2,398 | 19.70 | 0.305 | 0.121 | 2.511 | 6.303 |
| | A1PTOTAG, | | | | | | |
| | A1DTOTAG | | | | | | |
| Had control of teaching techniques and discipline (scale 1 to 5) | B1CNTRLC | 3,023 | 4.43 | 0.021 | 0.015 | 1.423 | 2.026 |
| Number of years teaching kindergarten | B1YRSKIN | 3,024 | 8.11 | 0.173 | 0.135 | 1.281 | 1.642 |
| Median | | | | | | 1.570 | 2 401 |
| Mean Mean | | | | | | 1.579 1.629 | 2.491 2.793 |
| Standard deviation | | | | | | 0.386 | 2.793 1.444 |
| Coefficient of variation | | | | | | 0.386 | 0.517 |
| Minimum | | | | | | 1.165 | 1.357 |
| Maximum | | | | | | 2.511 | 6.303 |
| IVIGAIIIIUIII | | | | | | 2.311 | 0.303 |

Table 4-18. ECLS-K, spring-kindergarten: standard errors and design effects for the full sample – teacher level

| | | Number | | Design | SRS | | |
|--|----------------------------------|----------|----------|--------|-------|-------|-------|
| Survey item | Variable name | of cases | Estimate | SE | SE | DEFT | DEFF |
| Teacher characteristics (Percent) | | | | | | | |
| Used only English in class | A2AENGLS A2PENGLS A2DENGLS | 3,037 | 89.22 | 0.925 | 0.563 | 1.643 | 2.700 |
| Used Spanish in class | A2ACSPNH A2PCSPNH A2DCSPNH | 3,037 | 11.68 | 0.935 | 0.583 | 1.604 | 2.573 |
| Directed 2 hours of whole class activities | A2WHLCLS | 3,032 | 33.80 | 1.132 | 0.859 | 1.318 | 1.737 |
| Had daily reading and language arts | A2OFTRDL | 3,063 | 94.82 | 0.720 | 0.400 | 1.798 | 3.234 |
| Had math 3-4 times per week | A2OFTMTH | 3,051 | 15.30 | 0.926 | 0.652 | 1.421 | 2.018 |
| Had physical education 1-2 times per week | A2TXPE | 3,060 | 54.61 | 2.301 | 0.900 | 2.557 | 6.539 |
| Had adequate child size furniture | A2FURNIT | 3,061 | 72.30 | 1.137 | 0.809 | 1.406 | 1.977 |
| Attended 3 or more in-service training days | A2INSRVC | 3,044 | 87.32 | 0.975 | 0.603 | 1.617 | 2.615 |
| Parents see child's work 15 times or more | A2SHARED | 3,046 | 22.36 | 1.226 | 0.755 | 1.624 | 2.637 |
| Had math area in class | B1MATHAR | 3,225 | 94.67 | 0.749 | 0.395 | 1.894 | 3.588 |
| Had computer area in class | B1COMPAR | 3,220 | 82.85 | 1.039 | 0.664 | 1.565 | 2.448 |
| Used 5-9 unpaid prep hours | B1NOPAYP | 2,970 | 37.13 | 1.054 | 0.887 | 1.188 | 1.412 |
| Had preschoolers in kindergarten | B1INKNDR | 3,170 | 43.42 | 1.582 | 0.880 | 1.797 | 3.230 |
| Teacher is Hispanic | B1HISP | 3,167 | 6.43 | 0.754 | 0.436 | 1.729 | 2.991 |
| Had at least a bachelor's degree | B1HGHSTD | 3,113 | 94.76 | 0.606 | 0.399 | 1.517 | 2.302 |
| Had no teaching certification | B1TYPCER | 3,114 | 3.44 | 0.445 | 0.326 | 1.363 | 1.858 |
| Had highest teaching certification | B1TYPCER | 3,114 | 61.50 | 1.290 | 0.872 | 1.479 | 2.187 |
| Certified in early childhood | B1ERLYCT | 3,137 | 52.50 | 1.565 | 0.892 | 1.755 | 3.079 |
| Teacher characteristics (Mean) | | | | | | | |
| Age of teacher | B1AGE | 3,111 | 41.11 | 0.253 | 0.187 | 1.354 | 1.834 |
| Number of paid aides | A2PDAIDE | 3,053 | 0.90 | 0.030 | 0.014 | 2.148 | 4.615 |
| Had control on teaching techniques and discipline (scale 1 to 5) | B1CNTRLC | 2,962 | 4.43 | 0.022 | 0.015 | 1.461 | 2.134 |
| Number of years teaching kindergarten | B1YRSKIN | 3,219 | 8.09 | 0.162 | 0.131 | 1.234 | 1.522 |
| Median | | | | | | 1.585 | 2.511 |
| Mean | | | | | | 1.612 | 2.692 |
| Standard deviation | | | | | | 0.311 | 1.139 |
| Coefficient of variation | | | | | | 0.193 | 0.423 |
| Minimum | | | | | | 1.188 | 1.412 |
| Maximum | | | | | | 2.557 | 6.539 |

Table 4-19. ECLS-K: median design effects for subgroups – teacher level

| Subgroups | Fall-kind | dergartena | Spring-kindergarten ^b | | |
|-----------------------------|-----------|------------|----------------------------------|-------|--|
| | DEFT | DEFF | DEFT | DEFF | |
| All teachers | 1.579 | 2.491 | 1.585 | 2.511 | |
| Type of school | | | | | |
| Public | 1.542 | 2.379 | 1.548 | 2.397 | |
| Private | 1.319 | 1.738 | 1.243 | 1.544 | |
| Catholic private | 1.162 | 1.360 | 1.147 | 1.315 | |
| Other private | 1.226 | 1.503 | 1.212 | 1.467 | |
| Region | | | | | |
| Northeast | 1.410 | 1.987 | 1.415 | 2.005 | |
| Midwest | 1.518 | 2.305 | 1.512 | 2.284 | |
| South | 1.561 | 2.437 | 1.559 | 2.429 | |
| West | 1.532 | 2.349 | 1.549 | 2.398 | |
| Urbanicity | | | | | |
| Central city | 1.682 | 2.830 | 1.547 | 2.393 | |
| Urban fringe and large town | 1.534 | 2.356 | 1.484 | 2.202 | |
| Small town and rural area | 1.617 | 2.616 | 1.700 | 2.893 | |
| Type of teacher | | | | | |
| Full day | 1.513 | 2.290 | 1.638 | 2.683 | |
| Part day | 1.411 | 1.990 | 1.339 | 1.793 | |
| Minority enrollment | | | | | |
| 0 - 25% | 1.368 | 1.871 | 1.367 | 1.869 | |
| 25 – 49% | 1.765 | 3.113 | 1.738 | 3.022 | |
| 50 - 74% | 1.424 | 2.027 | 1.406 | 1.977 | |
| 75 – 100% | 1.776 | 3.166 | 1.453 | 2.110 | |

^a Each median is based on 16 items.

School-Level Design Effects

Standard errors and design effects for the school-level items are presented in table 4-20. Survey items are selected from the school administrator questionnaire. For items having to do with children with limited English proficiency (LEP), the data were subset to schools with LEP children. The median design effect is 1.6. Table 4-21 presents the median design effects for subgroups based on school type, geographic region, level of urbanicity, and percent of minority enrollment in the school. They vary from 1.1 for schools in the Northeast region to 2.1 for schools in small towns and rural areas.

^b Each median is based on 22 items.

Table 4-20. ECLS-K, spring-kindergarten: standard errors and design effects for the full sample – school level

| | | Number | | Design | SRS | | |
|--|---------------|----------|----------|--------|-------|-------|-------|
| Survey item | Variable name | of cases | Estimate | SE | SE | DEFT | DEFF |
| School characteristics (Percent) | | | | | | | |
| Had a particular focus or emphasis | S2FOCUS | 859 | 19.94 | 1.736 | 1.363 | 1.274 | 1.622 |
| Used standardized achievement | | | | | | | |
| assessment as requirement for | S2STNDTE | | 10.84 | 1.392 | 1.063 | 1.310 | 1.715 |
| admission | | 856 | | | | | |
| Funding levels decreased significantly | S2FUNDLV | 854 | 12.50 | 1.382 | 1.132 | 1.221 | 1.491 |
| Received federal Title 1 funds this year | S2TT1 | 862 | 51.51 | 1.450 | 1.704 | 0.851 | 0.725 |
| Required kindergartners to wear | S2UNIFRM | | 18.92 | 1.936 | 1.337 | 1.448 | 2.096 |
| uniform | | 858 | | | | | |
| Gave children readiness or placement | S2RDITST | | 61.74 | 2.391 | 1.657 | 1.443 | 2.082 |
| assessment | | 860 | | | | | |
| Tested kindergartners with | S2TESTK | | 33.40 | 2.030 | 1.629 | 1.246 | 1.552 |
| standardized assessments | | 838 | | | | | |
| Offered after- school child care | S2AFTSCH | 856 | 56.61 | 2.187 | 1.694 | 1.291 | 1.666 |
| Offered pre-kindergarten | S2PREKIN | 856 | 45.47 | 2.149 | 1.702 | 1.263 | 1.594 |
| Had LEP children | S2LIMENG | 857 | 39.07 | 1.980 | 1.667 | 1.188 | 1.412 |
| Had translators for LM-LEP families | S2TRANSL | 414 | 77.69 | 2.928 | 2.046 | 1.431 | 2.047 |
| Offered IEP to disabled children | S2ONIEP | 853 | 80.77 | 1.714 | 1.350 | 1.270 | 1.613 |
| Principal is male | S2GNDER | 848 | 39.16 | 2.186 | 1.676 | 1.304 | 1.701 |
| Principal is black | S2RACE3 | 820 | 6.94 | 0.991 | 0.888 | 1.116 | 1.246 |
| Principal has master's degree | S2EDLVL | 806 | 87.49 | 1.665 | 1.166 | 1.428 | 2.040 |
| School characteristics (Mean) | | | | | | | |
| Percent LEP students | S2LEPSCH | 387 | 11.99 | 1.542 | 1.002 | 1.539 | 2.370 |
| Total years as principal | S2TOTPRI | 840 | 10.38 | 0.300 | 0.268 | 1.118 | 1.249 |
| Median | | | | | | 1.274 | 1.622 |
| Mean | | | | | | 1.279 | 1.660 |
| Standard deviation | | | | | | 0.162 | 0.395 |
| Coefficient of variation | | | | | | 0.127 | 0.238 |
| Minimum | | | | | | 0.851 | 0.725 |
| Maximum | | | | | | 1.539 | 2.370 |

Table 4-21. ECLS-K: median design effects for subgroups – school level

| Subgroups | Spring-kir | ndergarten ^a |
|-----------------------------|------------|-------------------------|
| | DEFT | DEFF |
| | | |
| All schools | 1.274 | 1.622 |
| | | |
| Type of school | | |
| Public | 1.312 | 1.721 |
| Private | 1.150 | 1.323 |
| Catholic private | 1.105 | 1.220 |
| Other private | 1.079 | 1.165 |
| Region | | |
| Northeast | 1.045 | 1.092 |
| Midwest | 1.202 | 1.445 |
| 111411450 | | |
| South | 1.374 | 1.888 |
| West | 1.414 | 2.000 |
| Urbanicity | | |
| Central city | 1.279 | 1.635 |
| Urban fringe and large town | 1.223 | 1.496 |
| Small town and rural area | 1.445 | 2.088 |
| Minority enrollment | | |
| 0-25% | 1.213 | 1.471 |
| 0 – 23% 25 – 49% | 1.246 | 1.471 |
| | | |
| 50 – 74% | 1.182 | 1.396 |
| 75 – 100% | 1.422 | 2.023 |
| /3 - 10070 | 1.422 | 2.023 |

^a Each median is based on 17 items.

5. DATA COLLECTION METHODS AND RESPONSE RATES

5.1 Data Collection Methods

The following sections discuss the procedures used in the data collection phase of the Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K) base year.

The ECLS-K base year data collection was conducted in the fall and spring of the 1998-99 school year. The timeline for base year data collection is shown in exhibit 5-1. Computer-assisted personal interviewing (CAPI) was the mode of data collection for the child assessment, and computer-assisted telephone/personal interviewing (CATI/CAPI) was the mode of data collection for the parent interview; self-administered questionnaires were used for gathering information from teachers, school administrators, student records, and about teacher salary and benefits. The field staff was organized into 100 work areas, each with a data collection team consisting of one field supervisor and three assessors. The data collection teams were responsible for all data collection activities in their work areas; they conducted the direct child assessments and the parent interviews, distributed and collected all school and teacher questionnaires, and completed a school facilities checklist.

5.2 Study Endorsements and School Recruitment

Prior to contacting state agencies or dioceses for a commitment to participate, key educational organizations were contacted for endorsement. The ECLS-K study received the endorsement of many national associations and organizations representing parents, school administrators, teachers, and private religious and nonreligious schools.

Before the data collection effort could begin, it was first necessary to secure a commitment to participate in the study from the administrator of each sampled school. Several levels of cooperation were sought before school administrators were approached. The process of notifying states, districts, dioceses, and schools about the study began in January 1998. The contact procedures varied for public, Catholic, and non-Catholic private schools. Public schools had three levels of contact—state, school district, and school; Catholic schools had two levels—diocese and school; and non-Catholic private schools had one—the school.

School Recruitment Kindergarten 1998 1999 Winter - Winter Fall Winter Spring Fall 1998 1999 State Baseline Child **Head Start** Contacts assessment data assessments verification Parent Parent District/Diocese interviews interviews Contacts conducted conducted Teacher School Teacher Contacts information information collected collected School and school administrator data Student record data

Exhibit 5-1. Timeline of base year data collection

State Contacts for Public Schools

Letters were sent to the chief state school officer of each of the 41 states that contained ECLS-K sampled schools to explain the objectives of the study and the data collection procedures, especially those for protecting individual and institutional confidentiality. All states agreed to participate. The letter indicated the state test director would be called to discuss the study. Information packets that included a list of the public school districts and sampled public schools within the state were then sent to the state test directors. The state test directors were called to identify the procedures to be followed in contacting public school districts. Once approval was obtained at the state level, contact was made with the district superintendents.

¹ The ECLS-K area sample was not stratified by state and as a result not all states contain sampled schools. The smallest geographic area for which direct representation was guaranteed is Census region. For more information concerning the sample design see chapter 4.

District and Catholic Diocese Contacts

For the public schools, a letter that included a list of the sampled schools within the district was sent to the district superintendent. A similar package of materials was sent to the Catholic dioceses and Archdioceses in the sample to obtain permission to contact Catholic schools about the study. Beginning in late January, calls were placed to district superintendents and Catholic dioceses to explain the study, answer questions, and obtain permission to contact sampled schools within the district or diocese. Once approval was obtained at the district or diocesan level, contact was made with each school administrator. A total of 584 public school districts contained sampled schools, and 75 percent of them cooperated with the study. (See table 5-4 for school response rates.) A total of 55 Catholic dioceses or Archdioceses contained sampled schools, and 93 percent of them cooperated with the study (see table 5-4 for school response rates).

School Contacts

A letter and other study materials were mailed to school administrators in all the sampled schools. The school administrators in non-Catholic private schools were also contacted at this time. Telephone contacts began in March 1998 and continued through the end of the school year in June 1998; school recruitment continued in fall 1998 with the start of the new school year. To increase the number of participating public schools, substitute schools were recruited in primary sampling units (PSUs) where the public school response rate was less than 65 percent. Once the school administrator agreed to participate, he or she was asked to set an appointment for two visits by the ECLS-K field staff to the school in the fall of the 1998-99 school year. The first visit, the preassessment visit, was to select the sample of children (see section 5.4.2 for more detail on this visit), and the second visit was to conduct the child assessments (see section 5.4.3 for more detail on this visit). The school administrator was also asked to identify an individual, referred to as the school coordinator, to act as the school liaison with the ECLS-K.

Increasing Response Rates for Originally Sampled Schools

Recruitment of originally sampled schools continued into winter 1999 to improve school response rates before school substitution. Beginning in January 1999, a small group of highly experienced field supervisors converted originally sampled schools that had initially refused to participate in the fall-

kindergarten assessments. Refusal conversion materials were developed that included endorsements from school principals, kindergarten teachers, and parents. Also, a fact sheet presented general information about the direct child assessment and the response to it by children, teachers, and parents who participated in the fall ECLS-K. Field supervisors made telephone or in-person contacts to refusal schools to encourage them to participate in the study. The refusal conversion effort continued through March 1999 and improved original school response rates by five percentage points.

5.3 Field Staff Training

In-person training sessions were conducted to prepare field staff for fall data collection tasks. Three different training sessions for fall-kindergarten were conducted: one for staff recruiting schools into the study, one for field supervisors, and one for assessors. Two different training sessions for spring-kindergarten were conducted: one for continuing staff and one for new staff.

School Recruitment Training

School recruitment staff—primarily field supervisors with experience on other education studies such as the National Assessment of Educational Progress (NAEP) and the Third International Mathematics and Science Study (TIMSS)—were trained for three days in March 1998 to recruit public school districts, Catholic dioceses, and private schools into the study. The topics covered in the training included an introduction to the study, practice exercises in recruiting schools, refusal avoidance techniques, and exercises on scheduling schools efficiently within a work area.

Fall-Kindergarten Field Staff Training

Field supervisor and assessor training was held during two time periods between late August and late September 1998. Field staff were selected who had experience on NAEP and TIMSS, as well as the Panel Study of Income Dynamics—Child Supplement and the Monitoring the Future Study. The majority of selected field staff were retired teachers, former educators, people experienced in conducting assessments, or people experienced in working in schools or with school-age children. Prior to the inperson training session, all field staff received eight hours of home study training on the study design,

including a training video demonstrating the conduct of the direct child assessment, the field procedures, and computer keyboard skills, and eight hours of general interviewing techniques training. Field supervisors were trained to conduct supervisor activities in groups of 15. Field supervisors and assessors were trained for assessment activities and parent interviewing in groups of 20 to 24. In total, 112 field supervisors and 343 assessors completed training.

Field Supervisor Training. Field supervisor training preceded the assessor training and lasted for two days. Field supervisor training was conducted using the automated field management system (FMS). The FMS was used throughout the data collection period to enter information about the sampled children, parents, teachers, and schools and to monitor production on all data collection activities. The field supervisors entered information into the FMS during training presentations, providing them with hands-on experience with the FMS and all field procedures prior to beginning data collection. The topics covered in the field supervisor training session included reviewing materials for prior contacts with schools; role plays to practice contacting school coordinators; conducting the preassessment activities such as selecting the student samples, identifying student home language, obtaining parent consent, and parent contacting procedures; meeting with teachers; and quality control observation procedures.

Assessor Training. One major goal of the assessor training was to train field staff in the proper procedures to conduct the direct child assessment. This included following standardized procedures for administration of all assessment items as well as maintaining a neutral rapport with the sampled children. Another major goal was to engage parents in the study to obtain consent to conduct the direct child assessment and complete the parent interview. The topics covered in the assessor training session included an introduction to the study, interactive lectures based on the direct child assessment and parent interview, practicing parent interviews in pairs using role-play scripts, practicing the direct child assessment using role-play scripts, techniques for parent refusal avoidance, and strategies for building rapport with kindergarten children. The sessions provided trainees with hands-on experience with all the direct child assessment materials and procedures and the CAPI programs prior to beginning data collection. Assessor training lasted for five days; field supervisors were also trained to perform all assessor activities. Trainees practiced entering information into the CAPI system on laptop computers during training presentations on conducting the direct child assessment and parent interview. The majority of training time (about 30 hours) was spent on conducting the direct child assessment, establishing rapport with the child, and maintaining a neutral approach. The trainees practiced the direct child assessment with kindergarten children brought onsite to the training session. These practice sessions and direct interactions with children provided useful experience prior to assessing sample children. The rest of the time was spent on conducting the parent interview. Spanish bilingual interviewers underwent an additional six hours of training during which they practiced the Spanish version of the direct child assessment [a Spanish Oral Language Development Scale (OLDS), a Spanish warm-up booklet, and translated versions of the mathematics and the psychomotor assessment] and the parent interview, and practiced gaining cooperation and answering parents' questions in Spanish (see section 5.7 on data collection quality control.)

Spring-Kindergarten Training

Field supervisors and assessors were trained over a four-week period in March 1999. The majority of field staff was trained primarily using a home study training program. The purpose of the home study training program was to introduce changes to the instruments between the fall and spring data collection and provide sufficient practice with the instruments and provide review and practice of the procedures to conduct child assessments and parent interviews. An in-person attrition training session was conducted for staff new to the study in the spring. This training session replicated the comprehensive fall training program using the revised instruments for the spring data collection. In total, 101 field supervisors and 321 assessors completed training.

Home Study Training Program. Field supervisor training was again conducted using the FMS. The field supervisor home study program was 24 hours long. The topics covered in the field supervisor training session included conducting the preassessment activities such as selecting the student samples in converted schools, identifying children who moved from the originally sampled school, identifying regular and special education teachers, linking them to children and distributing teacher questionnaires, distributing school administrator questionnaires and completing the facility checklist, and following quality control observation procedures. The field supervisors again entered training information into the FMS during the home study training exercises. The topics covered in the field supervisor training session included contacts with schools, conducting the preassessment activities, identifying children no longer in their originally sampled school, and following quality control observation procedures. A total of 89 field supervisors completed the home study training.

Child assessment home study materials included written exercises, self-study role-plays, scripted role-plays with partners, a training video focusing on improving assessment skills, and a final

practice direct child assessment observed by the field supervisor. Parent interview home study materials included written exercises and trainees practicing the parent interviews in pairs on the telephone and completing a final role-play on the parent interview with their field supervisor. Assessors again entered training information into the CAPI system on laptop computers using role-play scripts to complete the home study exercises. The assessor home study program was 16 hours long. Field supervisors ensured that the assessors on their teams were proficient in conducting the direct child assessment by observing a practice assessment with a child and the parent interview by conducting the final role play. A total of 223 assessors completed the home study training (see section 5.7 on data collection quality control).

Attrition Training Session. The in-person attrition training for new interviewers was held in March 1999 for nine days. The fall-kindergarten training materials were slightly modified for this attrition training to incorporate some spring-kindergarten changes, such as the elimination of the psychomotor assessment in the direct child assessment. The new spring-kindergarten parent and child home study materials were also incorporated into the attrition training sessions. A total of eight field supervisors and 98 assessors completed the attrition training.

5.4 Fall-Kindergarten Data Collection

5.4.1 Advance Mailings

Beginning in late summer 1998, letters were mailed to school administrators to confirm scheduled visits for the schools. A packet of material was also mailed to the school coordinators asking them to prepare for the preassessment visit to the school. Beginning in September, field supervisors called school coordinators to confirm the dates of the preassessment and assessment visits, answer any questions, and prepare for the preassessment visits. The school coordinators were asked to prepare a list of kindergartners for selecting the sample and to distribute materials such as the study brochure, summary sheets describing the role of teachers and parents in the study, and a letter to teachers to the kindergarten teachers.

5.4.2 Preassessment Visits

Most preassessment visits were scheduled two weeks before the assessment visit to allow time to contact parents to obtain their consent for the sampled children to participate in the study. During the preassessment visit, the field supervisor met with the school coordinator to obtain the lists of kindergarten children and teachers, draw the student sample (see chapter 4, section 4.2.4), meet with kindergarten teachers to secure their cooperation, distribute teacher questionnaires, and identify home language and accommodations information about the sampled children. In year-round schools, which comprised four percent of cooperating schools, field supervisors selected the child sample across the multiple tracks within the school. Field supervisors also prepared and distributed parent information packets that included consent forms.

Distribution of Teacher Questionnaires

During the meeting with the kindergarten teachers, the self-administered teacher questionnaires were distributed. All kindergarten teachers were asked to complete teacher questionnaire A and teacher questionnaire B; teacher questionnaire C was child-specific and completed by the teacher about each of the sampled children. If more than one teacher was in the kindergarten classroom, supervisors determined the primary teacher for completing teacher questionnaire C. The primary teacher was defined as the teacher who had primary academic responsibility for the children and could best report on the information being sought about the sampled children. Field supervisors made arrangements with the kindergarten teachers to collect completed questionnaires during the assessment visit.

Identifying Home Language and Accommodations for the Direct Assessment of Sampled Children

Field supervisors obtained information about each child who was scheduled to be assessed to determine whether the measure of oral English language (OLDS) would be administered and whether any administrative accommodations had to be made in the direct assessment. The reading and general knowledge assessment batteries were designed to be administered only in English. The warm-up booklet, mathematics, and psychomotor assessments were, however, translated into Spanish for children who could not be assessed in English but were able to take the assessment in Spanish. To determine whether

language minority children could be validly and reliably assessed in English using the core direct assessment battery, the OLDS, a measure of basic oral English proficiency, was administered (see chapter 2, section 2.1 for details on the OLDS).

To determine whether languages other than English were used in the home, the school coordinator was asked to consult school records of the sampled children. If the information was not in the school records, the field supervisor asked the teachers to report on home language during the group teacher meeting. A series of four questions was used to ask the teacher about the children's home language:

- What are the names of the children in your classroom who speak a language other than English?
- What other children in the classroom have families who speak a language other than English in the home?
- What other children in your classroom have you observed participating in a conversation with peers or adults where a language other than English was used?
- What language other than English does the child speak?

Children identified with a home language other than English were first assessed using the English OLDS. Depending on the child's English OLDS score, the laptop was programmed to administer the appropriate version of the assessment (see section 5.4.3 for details on data collection for children with a home language other than English).

Field supervisors identified what accommodations, if any, needed to be made for children with disabilities to administer the direct assessment battery appropriately. For the purpose of the ECLS-K, children with disabilities are those who meet the federal eligibility requirements for participation in special education programs or services. All children with disabilities are expected to have an Individualized Education Plan (IEP), an Individualized Family Service Plan (IFSP), or a 504 Plan on file with the school district as it is a required component of the eligibility process.

The ECLS-K permitted the following accommodations for children with disabilities:

■ **Setting.** Any environmental modification typically used by the student to do his or her schoolwork, such as special lighting, a quiet room, an adaptive chair or table was used for the assessment.

- **Scheduling/timing.** Assessments of children with disabilities were scheduled at particular times of the day that were best suited for the child or for longer or shorter (split) periods.
- Health care aides (personal attendants). Individuals who were actually written into the student's IEP to perform a variety of services for both the student and his or her teacher were allowed to be present during the assessment, but they could not provide answers or hints to the student. A form entitled "Guidelines for Health Care Aides" was reviewed with the aide prior to the assessment.
- **Assistive devices.** Assistive devices such as a brace, a hearing aid, a cane, or a voice synthesizer were legitimate to use during the ECLS-K to improve access to the assessment without providing answers.

Braille administration, enlarged print, and sign language administration were not valid accommodations for the ECLS-K. Children who required these accommodations were excluded from the direct assessment portion of the ECLS-K. These children, however, remain in the sample and all other data are captured for them.

A series of questions was asked of the teacher to determine if the student would be:

- Included in the assessment without accommodations;
- Included in the assessment with accommodations; or
- **Excluded** from a part or all of the assessment.

The questions were:

- 1. What are the names of the children in your class who have an IEP, IFSP, or 504 Plan on file?
- 2. Does the child's IEP or equivalent state that the child cannot participate in standardized assessments?
- 3. Does the child normally use and require any of the accommodations that are NOT offered in the ECLS-K? (Braille, enlarged print, sign language)?
- 4. Does the child normally use any of the accommodations that ARE offered in the ECLS-K (setting, scheduling/timing, health care aide, assistive device)?
- 5. What are the names of the children in your class who cannot perform the following fine and gross motor tasks?
 - a. Hold a pencil or crayon to make marks on a piece of paper?

- b. Grasp small objects and release them at will?
- c. Demonstrate his or her skill at hopping, skipping, and/or walking backward due to impaired mobility or use of assistive devices such as wheelchairs, crutches, and braces?
- 6. What are the names of the children in your class who normally wear glasses or hearing aids?
- 7. Are there any children with other kinds of special needs that should be noted for the assessment (e.g., medications, allergies, shyness, etc.)?

Question 5 was asked to determine if the child could perform the fine and gross motor activities for the psychomotor assessment. If the child had an IEP or equivalent that required the use of an accommodation not offered by the ECLS-K, or could not perform the question 5 activities, the laptop computer was programmed to exclude the child from those sections of the assessment battery in which the child could not participate.

Obtaining Parent Contact Information and Consent

Obtaining parental contact information and consent was another important procedure of the preassessment period. Parent contact information was necessary to obtain consent and to conduct the parent interview. Two types of consent forms—implicit and explicit—were developed for the ECLS-K. Implicit consent did not require parent/guardian signature for the child to participate. Approximately one-half of the cooperating schools required implicit parent consent forms. If the consent form was not returned to the school with a signature and indicating that the child was not to participate by the date recorded, permission for the child to participate was assumed. Explicit consent required a parent/guardian's signature to allow his or her child to participate in the study. The consent form was included in parent information packets, which were mailed directly to the parents of sampled children. The study followed the consent procedure required by the school or district.

Preassessment visits to schools requiring explicit consent were scheduled as early as possible in the field period to allow for sufficient time to obtain consent before the assessment date. If a parent indicated that he or she did not want the child to participate in the assessment or did not return the consent form, refusal conversion attempts were made. Generally, a team member would place up to four calls to the home to gain the parent's cooperation. If there was no positive response to the telephone contacts, a visit to the home was made to encourage participation. The assessment team also attempted to contact

parents to obtain parent consent while they were dropping off their children before school or picking them up after school. If the parent refusal could not be converted, the child was not assessed.²

5.4.3 Conducting the Direct Child Assessment

For the fall-kindergarten wave, the direct child assessment was administered during a 14-week field period that began in September and ended in early December. In year-round schools, assessment teams made multiple visits to the school to conduct direct child assessments. The assessment team visited the school when each track was in session to assess the sampled children. The direct child assessment was normally conducted in a school classroom or library. Before conducting the assessment, field supervisors and assessors set up the room for the assessment. They followed procedures for meeting children that were agreed upon during the preassessment visit at the school. Each child was signed out of his or her classroom prior to the assessment and signed back into the classroom upon the conclusion of the assessment. When scheduling schools in the fall and the spring, an attempt was made to conduct the direct child assessments at about the same point in time from the beginning of school year and at the end of the year to increase the chances that children's exposure to instruction was about the same for all children.

The direct child assessment took approximately 50 to 70 minutes per child. Children identified as having a home language other than English were administered the OLDS prior to the assessment. Children passing the cut score for the OLDS were administered the English direct child assessment. Children who fell below the cut score for the OLDS and whose language was Spanish were administered the Spanish language version of the OLDS and parts of the direct child assessment that were translated into Spanish (the warm-up booklet, math, and psychomotor). These children also had their height and weight measured. Children who fell below the cut score for the OLDS and whose language was other than Spanish had only their height and weight measured. Table 5-1 presents the percentage of children who were routed into the various assessment alternatives in fall-kindergarten. Overall 15 percent of the sampled children were screened using the OLDS in the fall-kindergarten. Of the children whose home language was Spanish, 42 percent were at or above the cut score, and of the children whose home language was a language other than English or Spanish, 61 percent were at or above the cut score.

² Schools requiring signed explicit parent consent forms accounted for 69 percent of the final refusals.

Table 5-1. OLDS routing results in fall-kindergarten

| | Total screened (%) | At or above cut score on OLDS (%) | Below cut score on OLDS (%) |
|------------------|--------------------|-----------------------------------|-----------------------------|
| Total screened | 15 | 49 | 51 |
| Spanish language | 62 | 42 | 58 |
| Other language | 38 | 61 | 39 |

Fewer than 1 percent of participating children were excluded from the direct child assessment or required an accommodation offered in the assessment. Table 5-2 presents the number of children excluded from or requiring an accommodation to the direct child assessment.

Table 5-2. Number of children excluded from or accommodated in the fall-kindergarten assessment

| | Number of children |
|-------------------------|--------------------|
| Excluded for disability | 88 |
| Setting | 48 |
| Scheduling/timing | 93 |
| Health care aide | 37 |
| Assistive device | 4 |

A very small number of children who participated in the ECLS-K assessment were excluded from different parts of the psychomotor assessment because they could not physically perform the task. Table 5-3 presents the number of children excluded from different parts of the psychomotor assessment.

Table 5-3. Number of children excluded from parts of the psychomotor assessment

| | Number of children |
|--|--------------------|
| Excluded from gross motor assessment | 70 |
| Excluded from fine motor assessment | 5 |
| Excluded from both gross and fine motor assessment | 7 |

5.4.4 Conducting the Parent Interview

For the fall-kindergarten wave, the parent interview was administered from September 1998 through January 1999. The parent interview averaged 50 minutes. To administer the parent interview, assessors began by locating parents using the contact information obtained from the school. The contact information contained parents' names, addresses, and telephone numbers. Upon completing the interview, parents were mailed a thank-you letter and a copy of "Learning Partners – A Guide to Educational Activities for Families," May 1997, U.S. Department of Education, Office of Educational Research and Improvement.

The ECLS-K parent interview was conducted primarily by telephone, by field staff using a CATI. The parent interview was conducted in person if the respondent did not have a telephone. Three percent of all completed parent interviews were conducted in person. The parent interview was conducted primarily in English, but provisions were made to interview parents who spoke only Spanish, Lakota, Hmong, or Chinese. The questionnaire was translated into Spanish, Lakota, Hmong, and Chinese and printed on a hard copy parent interview form. Bilingual interviewers were trained to conduct the parent interview in either English or the other language they spoke. When the person answering the telephone was not able to speak English, and the field staff were not bilingual and were unable to identify an English-speaking household member, the case was coded as a "language problem." The field supervisor reviewed the case and assigned it to a bilingual field staff person if the language was offered by the ECLS-K. Slightly more than seven percent of the parent interviews were conducted in a language other than English; 94 percent of the non-English parent interviews were conducted in Spanish. One percent of parent interviews could not be conducted because of language problems.

In order to build response rates for the parent interview, a special refusal conversion effort was implemented. A refusal conversion workshop was developed from three focus groups with field staff to determine the types of resistance being expressed by parents. The focus group information was used to generate a framework for the workshop materials and procedures. A written conference guide was distributed to field staff identified as effective at converting refusals, and they completed written exercises on refusal conversion. Conference calls were held with the identified field staff to review the refusal conversion exercises and discuss strategies for converting refusals.

In addition to the specialized field staff training, a parent refusal conversion mailing was prepared that included a refusal conversion letter; copies of letters from participating school principals and kindergarten teachers endorsing the study; and the parent thank-you incentive, "Learning Partners – A Guide to Educational Activities for Families." These endorsement letters from principals and teachers were addressed to the parents in the school with very positive statements about the study, encouraging the parents to cooperate and participate in the ECLS-K. The school principals and teachers agreed to allow the use of their letters and quotes about the study. The refusal conversion cases were assigned to a group of specially trained field staff. All refusal cases were reviewed by the field managers, and a refusal conversion strategy was discussed with the refusal converter. The refusing parents were all called, and a conversion attempt was made. The refusal conversion effort was implemented for a month, from December 20, 1998, to January 19, 1999, and response rates improved by five percentage points.

5.4.5 Teacher Data Collection

Data were collected from teachers between September and December 1998. Field supervisors distributed the teacher questionnaires to kindergarten teachers in the sampled schools during the preassessment visit. The field supervisors collected the teacher questionnaires while at school during the assessment visits. Field supervisors contacted teachers by telephone or by visiting the school to collect completed teacher questionnaires that were not available during the assessment visits. Teachers were asked to complete individual ratings for the sampled children in their classrooms, and they were reimbursed five dollars for each child rating (Teacher Questionnaire C) they completed.

5.5 Fall-Kindergarten Response Rates

Table 5-4 presents the number of schools cooperating during the fall-kindergarten data collection, as well as weighted and unweighted before-substitution school response rates. Substitute schools were recruited in PSUs where the public school response rate was low, i.e., where the unweighted school response rate was less than 65 percent and fewer than six originally selected schools were cooperating. Substitutes were purposively selected. For each refusing school, the frame was searched for a suitable replacement school, if any, based on characteristics such as size, percent minority, and type of locale. The number of cooperating schools was increased from 879 to 953 by recruiting substitutes. Substitutes were not selected for private schools. The ECLS-K design called for 20 percent of the base year student sample to come from private schools. Projections indicated that 20 percent would be attained

Table 5-4. The ECLS-K, fall-kindergarten: number of cooperating schools and before-substitution school-level response rates

| | Number co | ooperatingb | Before-substitution response rates | | |
|------------------------------------|--------------|--------------|------------------------------------|------------|--|
| | Before | After | School weight × | | |
| School characteristic ^a | substitution | substitution | KG enrollment | Unweighted | |
| All schools | 879 | 953 | 69.4 | 68.8 | |
| School type | | | | | |
| Public | 641 | 715 | 70.1 | 70.1 | |
| Private | 238 | 238 | 65.9 | 65.6 | |
| Catholic | 100 | 100 | 83.0 | 83.3 | |
| Other private | 138 | 138 | 56.2 | 56.8 | |
| Type of locale | | | | | |
| Large city | 191 | 198 | 78.1 | 78.0 | |
| Mid-size city | 180 | 197 | 73.6 | 72.9 | |
| Urban fringe of large city | 255 | 271 | 67.8 | 66.8 | |
| Urban fringe of mid-size city | 59 | 66 | 62.1 | 60.8 | |
| Large town | 20 | 20 | 57.5 | 60.6 | |
| Small town | 71 | 82 | 65.3 | 63.4 | |
| Rural | 103 | 119 | 64.2 | 64.0 | |
| School size (Kindergartners) | | | | | |
| 1 to 12 | 55 | 55 | 74.5 | 69.6 | |
| 13 to 24 | 96 | 98 | 63.2 | 64.0 | |
| 25 to 36 | 75 | 79 | 71.5 | 74.3 | |
| 37 or more | 653 | 721 | 69.7 | 69.0 | |
| Percent minority enrolled | | | | | |
| 0 - 10% | 225 | 249 | 66.1 | 64.8 | |
| 11 - 49% | 285 | 324 | 68.4 | 67.5 | |
| 50 - 89% | 180 | 188 | 70.9 | 72.0 | |
| 90 - 100% | 135 | 138 | 78.5 | 78.5 | |
| Unknown | 54 | 54 | 62.9 | 62.8 | |
| Region | | | | | |
| Northeast | 160 | 181 | 65.1 | 65.8 | |
| Midwest | 231 | 238 | 77.4 | 77.5 | |
| South | 268 | 294 | 67.0 | 64.1 | |
| West | 220 | 240 | 68.7 | 69.2 | |
| High grade | | | | | |
| Trans K, K or trans 1 | 40 | 40 | 78.4 | 78.4 | |
| 01-12 | 800 | 874 | 69.4 | 69.0 | |
| Ungraded | 4 | 4 | 100.0 | 100.0 | |
| Unknown | 35 | 35 | 57.5 | 56.5 | |

aBased on frame data.

^bOne or more children or parents participated, or school is one of two schools in the Archdiocese of New Orleans where student sampling was performed too late in fall to field child or parent data collection.

through the private school freshening process (see section 4.2.3), without resorting to substitution, and those projections were later borne out by experience. The response rates presented in table 5-4 reflect levels of school cooperation prior to substitution. The presence of substitutes increases the sample size and, if chosen skillfully, may also reduce nonresponse bias. However, the bedrock upon which the study's quality rests is the originally selected sample of schools.

Since the primary analytic focus of the ECLS-K is the child, weighted school response rates are reported in terms of eligible children. For example, overall, the kindergartners enrolled in the ECLS-K fall-kindergarten cooperating schools are weighted up to 69.4 percent of the fall 1998 kindergarten population. The unweighted response rate is 68.8 percent. The weighted response rate for public schools (70.1 percent) was about four points higher than for private (65.9 percent). However, within the private school domain there was a much greater disparity between Catholic schools (83.0 percent) and other private schools (56.2 percent). During the computation of sampling weights, nonresponse adjustment cells were constructed with an eye toward reducing the potential biases associated with these rates.

Table 5-5 presents weighted and unweighted child-level completion rates for fall-kindergarten data collection, broken out by school characteristics. A completion rate is a response rate conditioned on the results of an earlier stage of data collection. For example, a weighted 89.9 percent of all children sampled in cooperating schools completed the child assessment. Of course as noted earlier, not all sampled schools cooperated. In this table and the ones that follow, data from cooperating substitute schools have been included along with those from original schools. Since parent and teacher data appear on the child data file (see chapter 8), rates have been presented at the child-level for these instruments as well. If one looks at subpopulations defined by school characteristics, it is striking how characteristics that were important during school recruitment are no longer so for schools that agreed to participate. For example, comparing public and private schools, the completion rate for the child assessment differs only by 0.3 percent, with private schools having the higher rate (90.2 vs. 89.9), and Catholic and other private schools differ by 2.2 percent (91.3 vs. 89.1).

Table 5-6 continues presenting child-level fall-kindergarten weighted and unweighted completion rates, this time broken out by child characteristics. Again, completion rates do not differ greatly except possibly for the parent interview where Asian and Pacific Islander parents responded at a rate of 74.1 percent, largely because of language problems, in contrast with a rate of 85.3 percent for parents overall.

5-18

Table 5-5. The ECLS-K fall-kindergarten: number of completed child-level cases and child-level completion rates, by school characteristic

| | | Child assessmen | | Parent interview | | |
|------------------------------------|------------|-----------------|-------------|------------------------|----------|----------------|
| | <u>.</u> | Compl | etion rates | | Comple | etion rates |
| School characteristic ^a | Completesb | Weighted | Unweighted | Completes ^c | Weighted | Unweighted |
| All children | 19,173 | 89.9 | 89.8 | 18,097 | 85.3 | 84.7 |
| School type | | | | | | |
| Public | 15,229 | 89.9 | 89.7 | 14,283 | 85.0 | 84.1 |
| Private | 3,944 | 90.2 | 90.1 | 3,814 | 87.5 | 87.2 |
| Catholic | 2,007 | 91.3 | 91.3 | 1,947 | 88.6 | 88.6 |
| Other private | 1,937 | 89.1 | 88.9 | 1,867 | 86.5 | 85.7 |
| Гуре of locale | | | | | | |
| Large city | 3,954 | 88.2 | 88.1 | 3,611 | 80.8 | 80.5 |
| Mid-size city | 4,135 | 91.1 | 91.1 | 3,977 | 87.8 | 87.6 |
| Urban fringe of large city | 5,452 | 89.5 | 89.0 | 5,092 | 84.4 | 83.1 |
| Urban fringe of mid-size city | 1,359 | 89.5 | 90.1 | 1,302 | 85.6 | 86.3 |
| Large town | 416 | 91.8 | 92.0 | 415 | 91.9 | 91.8 |
| Small town | 1,601 | 91.0 | 91.1 | 1,532 | 86.9 | 87.2 |
| Rural | 2,256 | 90.8 | 90.6 | 2,168 | 87.6 | 87.1 |
| School size (Kindergartners) | , | | | , | | |
| 1 to 12 | 366 | 86.1 | 85.7 | 358 | 85.7 | 83.8 |
| 13 to 24 | 1,550 | 90.5 | 91.7 | 1,478 | 86.9 | 87.5 |
| 25 to 36 | 1,640 | 91.8 | 91.6 | 1,577 | 88.0 | 88.1 |
| 37 or more | 15,617 | 89.8 | 89.5 | 14,684 | 84.9 | 84.2 |
| Percent minority enrolled | - , | | | , | | |
| 0 - 10% | 5,134 | 90.0 | 89.9 | 5,027 | 88.2 | 88.1 |
| 11 - 49% | 6,704 | 90.0 | 89.6 | 6,405 | 85.8 | 85.6 |
| 50 – 89% | 3,637 | 90.0 | 89.8 | 3,381 | 84.6 | 83.5 |
| 90 - 100% | 2,905 | 89.9 | 89.7 | 2,514 | 78.8 | 77.7 |
| Unknown | 793 | 88.9 | 90.3 | 770 | 87.9 | 87.7 |
| Region | | | | | | |
| Northeast | 3,605 | 89.0 | 88.9 | 3,373 | 83.4 | 83.2 |
| Midwest | 4,769 | 89.8 | 90.1 | 4,575 | 86.1 | 86.5 |
| South | 6,126 | 91.5 | 91.1 | 5,853 | 87.7 | 87.1 |
| West | 4,673 | 88.4 | 88.3 | 4,296 | 82.3 | 81.2 |
| High grade | -, | | | -, | | ~ - |
| Trans K, K or trans 1 | 552 | 90.4 | 88.9 | 526 | 85.8 | 84.7 |
| 01-12 | 18,174 | 90.0 | 89.9 | 17,135 | 85.3 | 84.7 |
| Ungraded | 40 | 74.6 | 71.4 | 35 | 56.7 | 62.5 |
| Unknown | 407 | 90.0 | 89.8 | 401 | 88.7 | 88.5 |

Table 5-5. The ECLS-K, fall-kindergarten: number of completed child-level cases and child-level completion rates, by school characteristic (continued)

| | Tea | cher questionna | ire A | Tea | Teacher questionnaire B | | | Teacher questionnaire C | | |
|------------------------------------|------------|-----------------|-------------|------------|-------------------------|-------------|------------|-------------------------|-------------|--|
| | | Compl | etion rates | _ | Compl | etion rates | _ | Compl | etion rates | |
| School characteristic ^a | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted | |
| All children | 19,444 | 90.8 | 91.0 | 20,647 | 96.6 | 96.7 | 19,492 | 91.4 | 91.3 | |
| School type | | | | | | | | | | |
| Public | 15,468 | 90.7 | 91.1 | 16,382 | 96.6 | 96.5 | 15,489 | 91.4 | 91.2 | |
| Private | 3,976 | 91.2 | 90.9 | 4,265 | 97.1 | 97.5 | 4,003 | 91.5 | 91.5 | |
| Catholic | 2,015 | 91.1 | 91.7 | 2,186 | 99.4 | 99.5 | 2,036 | 92.2 | 92.6 | |
| Other private | 1,961 | 91.4 | 90.0 | 2,079 | 95.0 | 95.5 | 1,967 | 90.9 | 90.3 | |
| Type of locale | | | | | | | | | | |
| Large city | 4,022 | 88.8 | 89.7 | 4,215 | 93.1 | 94.0 | 3,996 | 88.8 | 89.1 | |
| Mid-size city | 4,314 | 95.7 | 95.0 | 4,496 | 99.4 | 99.1 | 4,238 | 93.2 | 93.4 | |
| Urban fringe of large city | 5,372 | 89.0 | 87.7 | 5,836 | 95.6 | 95.3 | 5,522 | 90.6 | 90.2 | |
| Urban fringe of mid-size city | 1,452 | 97.0 | 96.3 | 1,497 | 99.4 | 99.3 | 1,388 | 91.5 | 92.0 | |
| Large town | 425 | 96.3 | 94.0 | 452 | 100.0 | 100.0 | 423 | 93.5 | 93.6 | |
| Small town | 1,589 | 91.3 | 90.4 | 1,746 | 99.7 | 99.4 | 1,631 | 92.9 | 92.8 | |
| Rural | 2,270 | 85.3 | 91.2 | 2,405 | 95.7 | 96.6 | 2,294 | 92.4 | 92.1 | |
| School size (Kindergartners) | | | | | | | | | | |
| 1 to 12 | 415 | 97.8 | 97.2 | 420 | 98.4 | 98.4 | 371 | 87.7 | 86.9 | |
| 13 to 24 | 1,561 | 82.3 | 92.4 | 1,604 | 92.0 | 94.9 | 1,564 | 91.0 | 92.5 | |
| 25 to 36 | 1,660 | 92.3 | 92.7 | 1,766 | 98.5 | 98.6 | 1,668 | 93.5 | 93.1 | |
| 37 or more | 15,808 | 91.3 | 90.6 | 16,857 | 96.9 | 96.6 | 15,889 | 91.3 | 91.1 | |
| Percent minority enrolled | | | | | | | | | | |
| 0 - 10% | 5,190 | 91.3 | 90.9 | 5,601 | 98.4 | 98.1 | 5,196 | 91.3 | 91.0 | |
| 11 – 49% | 6,808 | 91.8 | 91.0 | 7,254 | 97.1 | 97.0 | 6,804 | 91.2 | 91.0 | |
| 50 – 89% | 3,856 | 95.2 | 95.2 | 3,948 | 97.8 | 97.5 | 3,744 | 92.7 | 92.4 | |
| 90 - 100% | 2,839 | 87.7 | 87.7 | 2,972 | 91.1 | 91.8 | 2,943 | 90.6 | 90.9 | |
| Unknown | 751 | 73.4 | 85.5 | 872 | 95.4 | 99.3 | 805 | 90.3 | 91.7 | |
| Region | | | | | | | | | | |
| Northeast | 3,657 | 90.8 | 90.2 | 3,858 | 95.3 | 95.2 | 3,626 | 89.2 | 89.5 | |
| Midwest | 4,997 | 94.0 | 94.4 | 5,203 | 98.4 | 98.3 | 4,858 | 91.4 | 91.8 | |
| South | 6,209 | 91.2 | 92.4 | 6,515 | 96.7 | 96.9 | 6,258 | 93.6 | 93.1 | |
| West | 4,581 | 86.9 | 86.6 | 5,071 | 95.8 | 95.8 | 4,750 | 89.6 | 89.8 | |
| High grade | | | | | | | | | | |
| Trans K, K or trans 1 | 527 | 88.1 | 84.9 | 615 | 99.6 | 99.0 | 561 | 92.6 | 90.3 | |
| 01-12 | 18,464 | 90.9 | 91.3 | 19,536 | 96.6 | 96.6 | 18,479 | 91.4 | 91.4 | |
| Ungraded | 43 | 70.1 | 76.8 | 43 | 70.1 | 76.8 | 38 | 63.3 | 67.9 | |
| Unknown | 410 | 92.9 | 90.5 | 453 | 100.0 | 100.0 | 414 | 91.9 | 91.4 | |

aBased on frame data

^bReading, math, or general knowledge assessment was scorable or child was language minority (not Spanish) and scored below cut score in OLDS or disabled (IEP).

^cFamily structure portion of parent interview was completed.

dQuestionnaire was not blank.

5-2(

Table 5-6. The ECLS-K, fall-kindergarten: number of completed child-level cases and child-level completion rates, by child characteristic

| | | Child assessmen | nt | | Parent interview | V |
|-----------------------------------|------------|-----------------|-------------|------------|------------------|------------|
| | | Comple | etion rates | | Completion rates | |
| Child characteristic ^a | Completesb | Weighted Unweig | | Completesc | Weighted | Unweighted |
| All children | 19,173 | 89.9 | 89.8 | 18,097 | 85.3 | 84.7 |
| Gender | | | | | | |
| Male | 9,751 | 89.5 | 89.4 | 9,171 | 84.6 | 84.1 |
| Female | 9,367 | 90.4 | 90.2 | 8,884 | 86.3 | 85.6 |
| Unknown gender | 55 | 79.1 | 76.4 | 42 | 52.7 | 58.3 |
| Race-ethnicity | | | | | | |
| White (not Hispanic) | 10,975 | 90.2 | 90.2 | 10,692 | 87.8 | 87.9 |
| Black (not Hispanic) | 3,021 | 90.8 | 90.6 | 2,784 | 84.3 | 83.5 |
| Hispanic | 2,631 | 89.6 | 89.4 | 2,428 | 82.7 | 82.5 |
| Asian or Pacific Islander | 1,652 | 88.6 | 88.5 | 1,392 | 74.1 | 74.6 |
| American Indian or Alaskan Native | 339 | 93.4 | 93.1 | 292 | 80.0 | 80.2 |
| Other | 221 | 83.3 | 85.3 | 206 | 79.5 | 79.5 |
| Unknown race-ethnicity | 334 | 79.5 | 78.0 | 303 | 68.9 | 70.8 |
| Year of birth | | | | | | |
| 1992 | 5,466 | 91.3 | 91.1 | 5,206 | 87.2 | 86.7 |
| 1993 | 13,410 | 89.8 | 89.8 | 12,611 | 85.0 | 84.5 |
| 1994 | 53 | 83.5 | 86.9 | 49 | 77.6 | 80.3 |
| Other/unknown | 244 | 71.7 | 67.8 | 231 | 65.1 | 64.2 |
| Kindergarten type | | | | | | |
| Full-day | 10,640 | 90.4 | 90.2 | 10,061 | 85.8 | 85.3 |
| Part-day | 8,533 | 89.5 | 89.5 | 8,036 | 84.9 | 84.3 |
| Kindergarten type unknown | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |

Table 5-6. The ECLS-K, fall-kindergarten: number of completed child-level cases and child-level completion rates, by child characteristic (continued)

| | Teacher questionnaire A | | Teacl | Teacher questionnaire B | | | Teacher questionnaire C | | |
|-----------------------------------|-------------------------|----------|-------------|-------------------------|----------|-------------|-------------------------|----------|-------------|
| | | | etion rates | _ | | etion rates | | | etion rates |
| Child characteristic ^a | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted |
| All children | 19,444 | 90.8 | 91.0 | 20,647 | 96.6 | 96.7 | 19,492 | 91.4 | 91.3 |
| Gender | | | | | | | | | |
| Male | 9,871 | 90.3 | 90.5 | 10,536 | 96.6 | 96.6 | 9,942 | 91.2 | 91.2 |
| Female | 9,524 | 91.6 | 91.7 | 10,062 | 96.9 | 96.9 | 9,504 | 91.8 | 91.5 |
| Unknown gender | 49 | 59.6 | 68.1 | 49 | 59.6 | 68.1 | 46 | 55.7 | 63.9 |
| Race-ethnicity | | | | | | | | | |
| White (not Hispanic) | 11,114 | 91.0 | 91.4 | 11,861 | 97.5 | 97.5 | 11,104 | 91.4 | 91.3 |
| Black (not Hispanic) | 3,089 | 92.8 | 92.7 | 3,224 | 96.9 | 96.7 | 3,103 | 93.5 | 93.1 |
| Hispanic | 2,579 | 88.1 | 87.6 | 2,776 | 94.1 | 94.3 | 2,673 | 91.1 | 90.8 |
| Asian or Pacific Islander | 1,731 | 92.9 | 92.7 | 1,816 | 97.4 | 97.3 | 1,721 | 92.4 | 92.2 |
| American Indian or Alaskan | | | | | | | | | |
| Native | 359 | 98.6 | 98.6 | 337 | 94.0 | 92.6 | 344 | 94.3 | 94.5 |
| Other | 237 | 89.3 | 91.5 | 251 | 97.1 | 96.9 | 225 | 85.3 | 86.9 |
| Unknown race-ethnicity | 335 | 78.8 | 78.3 | 382 | 87.3 | 89.3 | 322 | 73.8 | 75.2 |
| Year of birth | | | | | | | | | |
| 1992 | 5,551 | 91.9 | 92.5 | 5,845 | 97.1 | 97.4 | 5,552 | 92.7 | 92.5 |
| 1993 | 13,581 | 90.8 | 90.9 | 14,449 | 96.8 | 96.8 | 13,635 | 91.3 | 91.3 |
| 1994 | 54 | 90.7 | 88.5 | 57 | 92.9 | 93.4 | 52 | 82.3 | 85.2 |
| Other/unknown | 258 | 71.1 | 71.7 | 296 | 83.0 | 82.2 | 253 | 71.4 | 70.3 |
| Kindergarten type | | | | | | | | | |
| Full-day | 10,930 | 93.0 | 92.6 | 11,370 | 96.4 | 96.4 | 10,866 | 92.2 | 92.1 |
| Part-day | 8,514 | 88.4 | 89.3 | 9,277 | 97.1 | 97.3 | 8,626 | 90.6 | 90.5 |
| Kindergarten type unknown | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |

^aDemographic data were captured from school records prior to student sampling.

^bReading, math, or general knowledge assessment was scorable or child was language minority (not Spanish) and scored below cut score in OLDS or disabled (IEP).

^cFamily structure portion of parent interview was completed.

dQuestionnaire was not blank.

Table 5-7 presents the results of the fall-kindergarten teacher data collection, with teachers, not children, considered the unit of analysis. As all kindergarten teachers within a school were sampled, the weight used to calculate weighted completion rates is the school weight. Teachers were slightly more willing to complete questionnaire B that asked for personal background information (94.3 percent overall) than questionnaire A that focused on classroom characteristics (90.8 percent).

The school-level response rates presented in table 5-4 can be combined with the child-level and teacher-level completion rates from tables 5-5 and 5-7 to produce overall response rates at the child and teacher levels, by school characteristic. Table 5-8 displays the results at the child level. Children enrolled in Catholic schools are noteworthy for having high response rates across all survey instruments. Also notable are the relatively high response rates for children in schools with over 90 percent minority enrollment, schools in the Midwest, and schools whose highest grade is kindergarten. Table 5-9 presents overall response rates at the teacher level, by school characteristic. The same subgroups exhibit a better than average level of response.

5.6 Spring-Kindergarten Data Collection

5.6.1 Advance Contact with Respondents

In March 1999, letters were mailed to school administrators confirming the scheduled visits for the school that were set up in the fall. Letters were mailed to the school coordinators reminding them of the upcoming visits to the school. Letters were also mailed to parents reminding them of the spring data collection activities.

5.6.2 Preassessment Contact

Field supervisors conducted most preassessment activities by telephone except in the schools that had refused to participate in the fall-kindergarten collection but had agreed to participate in the spring collection. In these converted schools, field supervisors made personal visits to select the child sample and complete the other preassessment activities as described for fall-kindergarten data collection.

Table 5-7. The ECLS-K, fall-kindergarten: number of completed teacher questionnaires and teacher-level completion rates

| | Teacher questionnaire A | | | Teac | her questionr | naire B |
|------------------------------------|-------------------------|----------|-------------|------------|---------------|-------------|
| | | Comple | etion rates | | Comple | etion rates |
| School characteristic ^a | Completes ^b | Weighted | Unweighted | Completesb | Weighted | Unweighted |
| All schools | 2,931 | 90.8 | 90.4 | 3,047 | 94.3 | 94.0 |
| School type | | | | | | |
| Public | 2,577 | 90.3 | 90.2 | 2,684 | 94.2 | 93.9 |
| Private | 354 | 93.3 | 91.9 | 363 | 94.7 | 94.3 |
| Catholic | 146 | 92.8 | 94.2 | 152 | 97.2 | 98.1 |
| Other private | 208 | 93.5 | 90.4 | 211 | 93.5 | 91.7 |
| Type of locale | | | | | | |
| Large city | 668 | 90.5 | 87.2 | 686 | 92.4 | 89.6 |
| Mid-size city | 599 | 95.5 | 94.9 | 614 | 97.7 | 97.3 |
| Urban fringe of large city | 854 | 88.3 | 88.1 | 903 | 93.1 | 93.2 |
| Urban fringe of mid-size | | | | | | |
| city | 230 | 95.8 | 95.8 | 237 | 99.0 | 98.8 |
| Large town | 44 | 95.6 | 93.6 | 45 | 96.7 | 95.7 |
| Small town | 262 | 95.1 | 94.6 | 273 | 98.2 | 98.6 |
| Rural | 274 | 84.0 | 87.8 | 289 | 89.7 | 92.6 |
| School size (Kindergartners) | | | | | | |
| 1 to 12 | 60 | 94.2 | 93.8 | 61 | 95.1 | 95.3 |
| 13 to 24 | 139 | 84.7 | 90.3 | 140 | 87.3 | 90.9 |
| 25 to 36 | 101 | 92.9 | 93.5 | 105 | 96.6 | 97.2 |
| 37 or more | 2,631 | 91.2 | 90.2 | 2,741 | 95.0 | 94.0 |
| Percent minority enrolled | | | | | | |
| 0 - 10% | 650 | 91.5 | 91.9 | 679 | 96.0 | 96.0 |
| 11 - 49% | 999 | 93.4 | 92.7 | 1,024 | 95.4 | 95.0 |
| 50 – 89% | 662 | 90.9 | 92.2 | 684 | 92.9 | 95.3 |
| 90 - 100% | 525 | 86.9 | 84.0 | 548 | 89.9 | 87.7 |
| Unknown | 95 | 82.5 | 83.3 | 112 | 97.6 | 98.2 |
| Region | | | | | | |
| Northeast | 437 | 89.6 | 89.2 | 457 | 92.4 | 93.3 |
| Midwest | 573 | 95.3 | 93.9 | 589 | 95.9 | 96.6 |
| South | 1,129 | 91.2 | 92.4 | 1,156 | 95.1 | 94.6 |
| West | 792 | 87.0 | 86.1 | 845 | 92.9 | 91.8 |
| High grade | | | | | | |
| Trans K, K or trans 1 | 130 | 90.9 | 86.7 | 145 | 96.4 | 96.7 |
| 01-12 | 2,743 | 90.6 | 90.5 | 2,842 | 94.1 | 93.8 |
| Ungraded | 11 | 91.7 | 91.7 | 11 | 91.7 | 91.7 |
| Unknown | 47 | 96.0 | 95.9 | 49 | 100.0 | 100.0 |

^aBased on frame data.

^bNonblank questionnaire.

Table 5-8. The ECLS-K, fall-kindergarten: number of completed child-level cases and overall child-level response rates, by school characteristic

| | (| Child assessme | nt | Parent interview | | |
|------------------------------------|------------------------|----------------|------------|------------------------|------------------------|------------|
| | Overall response rates | | | | Overall response rates | |
| School characteristic ^a | Completesb | Weighted | Unweighted | Completes ^C | Weighted | Unweighted |
| All children | 19,173 | 62.4 | 61.8 | 18,097 | 59.2 | 58.3 |
| School type | | | | | | |
| Public | 15,229 | 63.0 | 62.9 | 14,283 | 59.6 | 59.0 |
| Private | 3,944 | 59.4 | 59.1 | 3,814 | 57.7 | 57.2 |
| Catholic | 2,007 | 75.8 | 76.1 | 1,947 | 73.5 | 73.8 |
| Other private | 1,937 | 50.1 | 50.5 | 1,867 | 48.6 | 48.7 |
| Type of locale | | | | | | |
| Large city | 3,954 | 68.9 | 68.7 | 3,611 | 63.1 | 62.8 |
| Mid-size city | 4,135 | 67.0 | 66.4 | 3,977 | 64.6 | 63.9 |
| Urban fringe of large city | 5,452 | 60.7 | 59.5 | 5,092 | 57.2 | 55.5 |
| Urban fringe of mid-size city | 1,359 | 55.6 | 54.8 | 1,302 | 53.2 | 52.5 |
| Large town | 416 | 52.8 | 55.8 | 415 | 52.8 | 55.6 |
| Small town | 1,601 | 59.4 | 57.8 | 1,532 | 56.7 | 55.3 |
| Rural | 2,256 | 58.3 | 58.0 | 2,168 | 56.2 | 55.7 |
| School size (Kindergartners) | | | | | | |
| 1 to 12 | 366 | 64.1 | 59.6 | 358 | 63.8 | 58.3 |
| 13 to 24 | 1,550 | 57.2 | 58.7 | 1,478 | 54.9 | 56.0 |
| 25 to 36 | 1,640 | 65.6 | 68.1 | 1,577 | 62.9 | 65.5 |
| 37 or more | 15,617 | 62.6 | 61.8 | 14,684 | 59.2 | 58.1 |
| Percent minority enrolled | | | | | | |
| 0 - 10% | 5,134 | 59.5 | 58.3 | 5,027 | 58.3 | 57.1 |
| 11 – 49% | 6,704 | 61.6 | 60.5 | 6,405 | 58.7 | 57.8 |
| 50 - 89% | 3,637 | 63.8 | 64.7 | 3,381 | 60.0 | 60.1 |
| 90 - 100% | 2,905 | 70.6 | 70.4 | 2,514 | 61.9 | 61.0 |
| Unknown | 793 | 55.9 | 56.7 | 770 | 55.3 | 55.1 |
| Region | | | | | | |
| Northeast | 3,605 | 57.9 | 58.5 | 3,373 | 54.3 | 54.7 |
| Midwest | 4,769 | 69.5 | 69.8 | 4,575 | 66.6 | 67.0 |
| South | 6,126 | 61.3 | 58.4 | 5,853 | 58.8 | 55.8 |
| West | 4,673 | 60.7 | 61.1 | 4,296 | 56.5 | 56.2 |
| High grade | | | | | | |
| Trans K, K or trans 1 | 552 | 70.9 | 69.7 | 526 | 67.3 | 66.4 |
| 01-12 | 18,174 | 62.5 | 62.0 | 17,135 | 59.2 | 58.4 |
| Ungraded | 40 | 74.6 | 71.4 | 35 | 56.7 | 62.5 |
| Unknown | 407 | 51.8 | 50.7 | 401 | 51.0 | 50.0 |

^aBased on frame data.

 $^{^{}b}$ Reading, math, or general knowledge assessment was scorable or child was language minority (not Spanish) and scored below cut score in OLDS or disabled (IEP).

^cFamily structure portion of Parent Interview was completed.

dQuestionnaire was not blank.

Table 5-9. The ECLS-K, fall-kindergarten: number of completed child-level cases and overall child-level response rates, by school characteristic

| | Teacher questionnaire A Overall response rates | | Teacher questionnaire B Overall response rates | | | Teacher questionnaire C Overall response rates | | | |
|------------------------------------|--|----------|---|------------|----------|--|------------|----------|------------|
| | | | | | | | | | |
| School characteristic ^a | Completes ^d | Weighted | Unweighted | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted |
| All children | 19,444 | 63.0 | 62.6 | 20,647 | 67.0 | 66.5 | 19,492 | 63.4 | 62.8 |
| School type | | | | | | | | | |
| Public | 15,468□ | 63.6 | 63.9 | 16,382 | 67.7 | 67.6 | 15,489 | 64.1 | 63.9 |
| Private | 3,976 | 60.1 | 59.6 | 4,265 | 64.0 | 64.0 | 4,003 | 60.3 | 60.0 |
| Catholic | 2,015 | 75.6 | 76.4 | 2,186 | 82.5 | 82.9 | 2,036 | 76.5 | 77.1 |
| Other private | 1,961 | 51.4 | 51.1 | 2,079 | 53.4 | 54.2 | 1,967 | 51.1 | 51.3 |
| Type of locale | | | | | | | | | |
| Large city | 4,022 | 69.4 | 70.0 | 4,215 | 72.7 | 73.3 | 3,996 | 69.4 | 69.5 |
| Mid-size city | 4,314 | 70.4 | 69.3 | 4,496 | 73.2 | 72.2 | 4,238 | 68.6 | 68.1 |
| Urban fringe of large city | 5,372 | 60.3 | 58.6 | 5,836 | 64.8 | 63.7 | 5,522 | 61.4 | 60.3 |
| Urban fringe of mid-size city | 1,452 | 60.2 | 58.6 | 1,497 | 61.7 | 60.4 | 1,388 | 56.8 | 55.9 |
| Large town | 425 | 55.4 | 57.0 | 452 | 57.5 | 60.6 | 423 | 53.8 | 56.7 |
| Small town | 1,589 | 59.6 | 57.3 | 1,746 | 65.1 | 63.0 | 1,631 | 60.7 | 58.8 |
| Rural | 2,270 | 54.8 | 58.4 | 2,405 | 61.4 | 61.8 | 2,294 | 59.3 | 58.9 |
| School size (Kindergartners) | | | | | | | | | |
| 1 to 12 | 415 | 72.9 | 67.7 | 420 | 73.3 | 68.5 | 371 | 65.3 | 60.5 |
| 13 to 24 | 1,561 | 52.0 | 59.1 | 1,604 | 58.1 | 60.7 | 1,564 | 57.5 | 59.2 |
| 25 to 36 | 1,660 | 66.0 | 68.9 | 1,766 | 70.4 | 73.3 | 1,668 | 66.9 | 69.2 |
| 37 or more | 15,808 | 63.6 | 62.5 | 16,857 | 67.5 | 66.7 | 15,889 | 63.6 | 62.9 |
| Percent minority enrolled | | | | | | | | | |
| 0 - 10% | 5,190 | 60.3 | 58.9 | 5,601 | 65.0 | 63.6 | 5,196 | 60.3 | 59.0 |
| 11 – 49% | 6,808 | 62.8 | 61.4 | 7,254 | 66.4 | 65.5 | 6,804 | 62.4 | 61.4 |
| 50 - 89% | 3,856 | 67.5 | 68.5 | 3,948 | 69.3 | 70.2 | 3,744 | 65.7 | 66.5 |
| 90 – 100% | 2,839 | 68.8 | 68.8 | 2,972 | 71.5 | 72.1 | 2,943 | 71.1 | 71.4 |
| Unknown | 751 | 46.2 | 53.7 | 872 | 60.0 | 62.4 | 805 | 56.8 | 57.6 |
| Region | | | | | | | | | |
| Northeast | 3,657 | 59.1 | 59.4 | 3,858 | 62.0 | 62.6 | 3,626 | 58.1 | 58.9 |
| Midwest | 4,997 | 72.8 | 73.2 | 5,203 | 76.2 | 76.2 | 4,858 | 70.7 | 71.1 |
| South | 6,209 | 61.1 | 59.2 | 6,515 | 64.8 | 62.1 | 6,258 | 62.7 | 59.7 |
| West | 4,581 | 59.7 | 59.9 | 5,071 | 65.8 | 66.3 | 4,750 | 61.6 | 62.1 |
| High grade | • | | | | | | • | | |
| Trans K, K or trans 1 | 527 | 69.1 | 66.6 | 615 | 78.1 | 77.6 | 561 | 72.6 | 70.8 |
| 01-12 | 18,464 | 63.1 | 63.0 | 19,536 | 67.0 | 66.7 | 18,479 | 63.4 | 63.1 |
| Ungraded | 43 | 70.1 | 76.8 | 43 | 70.1 | 76.8 | 38 | 63.3 | 67.9 |
| Unknown | 410 | 53.4 | 51.1 | 453 | 57.5 | 56.5 | 414 | 52.8 | 51.6 |

^aBased on frame data.

^bReading, math, or general knowledge assessment was scorable or child was language minority (not Spanish) and scored below cut score in OLDS or disabled (IEP).

^cFamily structure portion of Parent Interview was completed.

dQuestionnaire was not blank.

5.6.3 Conducting Direct Child Assessments

The spring direct child assessment was identical to the one used in the fall except that the psychomotor assessment was dropped. The direct child assessments were conducted between March and June 1999. For children with a language other than English in the home, the child's score on the fall-kindergarten OLDS determined what assessment was administered in spring. Table 5-10 summarizes the OLDS routing patterns in spring-kindergarten.

Table 5-10. OLDS routing patterns in spring-kindergarten for fall-kindergarten respondents

| Home Language | Fall-Kindergarten OLDS Score | OLDS Required in Spring-Kindergarten? | Spring assessment path |
|----------------|------------------------------|---|--------------------------|
| English | Not applicable | No | English |
| Spanish | At or above cut score | No | English |
| | Below cut score | Yes At or above cut score Below cut score | English Spanish |
| Other language | At or above cut score | No | English |
| | Below cut score | Yes At or above cut score Below cut score | English Height/Weight |

Children who scored at or above the cut point on the OLDS in fall-kindergarten were automatically routed by CAPI to take the assessment in English; the OLDS was not administered again. Children who scored below the cut point in the OLDS in fall-kindergarten were administered the OLDS again in spring-kindergarten and routed according to the new spring-kindergarten OLDS score. Children taking the direct assessment for the first time in the spring, with a language other than English in the home, were routed according to their home language, just as in fall-kindergarten (see section 5.4.3). Table 5-11 presents the percentage of children who were routed into the various assessment alternatives in spring-kindergarten. Eight percent of the sampled children were screened using the OLDS in the spring-kindergarten. Overall almost one-half (42%) of the screened children were at or above the cut score on the OLDS and were administered the English direct child assessment. Of the children whose home language was Spanish, 36 percent were at or above the cut score, and of the children whose home language was a language other than English or Spanish, 55 percent were at or above the cut score.

Table 5-11. OLDS routing results in spring-kindergarten

| | Total screened (%) | At or above cut score on OLDS (%) | Below cut score on OLDS (%) |
|------------------|--------------------|-----------------------------------|-----------------------------|
| Total screened | 8 | 42 | 58 |
| Spanish language | 69 | 36 | 64 |
| Other language | 31 | 55 | 45 |

As in the fall, children identified as requiring an accommodation for the direct child assessment were provided the accommodation during the assessment. The patterns for accommodations were the same as in the fall-kindergarten data collection. Less than one percent of children were excluded from the spring direct child assessment due to physical or mental disability. Table 5-12 presents the number of children excluded from or requiring an accommodation to the direct child assessment in the spring of kindergarten.

Table 5-12. Number of children excluded from or accommodated in the spring-kindergarten assessment

| | Number of children |
|-------------------------|--------------------|
| Excluded for disability | 70 |
| Setting | 35 |
| Scheduling/timing | 70 |
| Health care aide | 8 |
| Assistive device | 5 |

5.6.4 Conducting the Parent Interview

Parent interview procedures mirrored those of the fall-kindergarten. The parent interview was administered, primarily by telephone interview, from March through July 1999. The parent interview averaged 65 minutes. As in the fall, the parent interview was conducted in person if the respondent did not have a telephone. Three percent of all completed parent interviews were conducted in person. As in the fall, seven percent of the completed parent interviews were conducted in a language other than English with 61 percent of completed non-English interviews conducted in Spanish. The refusal conversion workshop developed for fall-kindergarten was implemented at the end of the spring field period to improve response rates. The special effort to build parent response rates was conducted between

June 15 and July 4, 1999, and yielded an additional two percentage points. Five percent of the cases were not completed because of locating problems.

5.6.5 Teacher and School Data Collection

Data were collected from school administrators, regular classroom teachers, and special education teachers between March and June 1999. Teachers were again asked to complete individual ratings for the sampled children in their classrooms, and they were reimbursed seven dollars for each child rating (teacher questionnaire C) they completed. In addition, school staff were asked to complete a student record abstract after the school year closed. The school staff were reimbursed five dollars for every student record abstract they completed. Field supervisors also completed a facilities checklist for each sampled school.

Field supervisors distributed the school and teacher questionnaires in a variety of ways, depending on the preference of the school staff. Questionnaires were distributed during the preassessment visit (if one was held), by mail, and during the assessment visits. During the field period, field supervisors followed up with school administrators and teachers by telephone and visits to the schools to ensure completed questionnaires were mailed to Westat, the company contracted to conduct the survey. In late June, a package was mailed to all schools with outstanding school administrator questionnaires, teacher questionnaires, or student record abstracts with a request to complete and return questionnaires. Field staff were prompted by telephone and in person for the return of school administrator questionnaires and student record abstracts through October 1999.

Data about annual salary and benefits of identified teachers and principals in the sampled schools were collected between April and July 1999 from public school district administrators, headmasters of private schools, and Catholic dioceses or schools. The majority of teachers were identified in early April 1999; a smaller number were identified and fielded in mid-May 1999. The package mailed to these respondents included a list by school of the names of the principals and teachers about whom the salary and benefit data were requested. Responses were returned by facsimile or in the included return mailer. Respondents were prompted by telephone for the return of the salary and benefit information through July 1999.

5.6.6 Conducting Data Collection on Children Who Withdrew from Their Original School

During the preassessment contacts, field supervisors asked school staff to identify children who had withdrawn from the school since the fall of kindergarten. School staff were asked whether they knew the name and address of the school the child transferred into as well as any new information about the child's household address. This information was entered into the FMS and processed at Westat for refielding. A total of 1,568 children (8.2 percent) were identified as movers from their original school between fall-kindergarten and spring-kindergarten. Different data collection strategies were followed for children who moved, depending on how they were classified. Data collection was attempted for children who moved as follows:

- Parent interviews were attempted regardless of children's mover status.
- Data collected for children moving into cooperating sampled schools included the child assessment in the school, school administrator questionnaire, regular or special education teacher questionnaires, and student record abstract forms.
- Data collected for children moving into nonsampled schools in cooperating districts included the child assessment in the school, school administrator questionnaire, regular or special education teacher questionnaires, salary and benefits questionnaire, and student record abstract forms.
- Data collected for children moving into sample schools that refused, schools in sampled districts that refused, or ineligible sampled schools included only the direct child assessment conducted in the home. No school or teacher data were collected.
- Data collected for children moving into schools in nonsampled districts or dioceses depended on whether the school was within or outside of the PSU.
 - For children in schools within the PSU, data collected included only the child assessment in the home.
 - For children in schools outside the PSU, no child or teacher data were collected.
- For children who were not in school in the spring (home school or at home children), data collected included the child assessment in the home, if the children were in the sample PSU, and no data if they were outside the sample PSU.

Almost one-half (46.7 percent, 733 children) of the children who moved were identified as moving into a school in the sampled ECLS-K PSUs, 18 percent moved into a school outside the PSU, 3 percent were identified as in home school, 27 percent of the movers were unlocatable because there was not enough information from the parent locating information to search the frame, and for 5 percent the

schools could not be found on the frame. Of the 1,568 movers, data collection was attempted for 52 percent (816 children) of the located movers beginning in late April 1999. Almost 70 percent of the movers were fielded for in-home assessments and the remaining 30 percent of movers were fielded for in-school assessment. Sixty-two percent (510 children) of the fielded movers had assessments completed, 31 percent were nonresponse, and 1 percent were classified as out-of-scope. Table 5-13 presents the classification of the 1,568 children who moved and the number of completed assessments.

Table 5-13. Number of children who moved by category and assessment result

| Child in | Number of children | Number of complete assessments |
|--|--------------------|--------------------------------|
| Cooperating sampled school | 103 | 85 |
| Refusal school | 41 | 24 |
| Nonsampled district within sample PSU | 589 | 348 |
| Nonsampled district outside sample PSU | 302 | 0 |
| Home school | 45 | 32 |
| Nonsampled private school | 38 | 21 |
| Unknown location | 450 | 0 |
| Total | 1,568 | 510 |

5.6.7 Collection of Head Start Data

As mentioned in chapter 2, children's Head Start participation data were collected in the fall parent interview and in the spring-kindergarten student record abstract. The fall-kindergarten parent interview included a directory of Head Start centers names and addresses to assist the respondent in identifying the correct Head Start center name and address. The Head Start directory was sorted by state and alphabetically within state. In the child care section of the respondent was asked if the child attended Head Start in the year before kindergarten. If the answer was "Yes," then the directory was searched for the center name. If a match was found, the center name and address was verified with the respondent, selected from the directory and the identification number stored as the response to the question. If the center could not be found on the directory, then the field staff collected the name and address of the center, the name of the director and where the Head Start center was located, for example, in its own building, or in a school or church.

Head Start Data Collection-Spring-Kindergarten

In the student record abstract, collected in spring-kindergarten, one question asked whether or not the sampled child had attended a Head Start center before entering kindergarten. If the answer was "Yes," then the school staff person was asked to record the name, address, and telephone number of the Head Start center and the name of the Head Start director.

The process of verifying the Head Start centers and child participation began in the fall of 1999 and will continue through winter 2000.

5.7 Data Collection Quality Control

Data collection quality control efforts began with the development and testing of the CATI/CAPI applications and FMS. As these applications were programmed, extensive testing of the system was conducted. This testing included review by project design staff, statistical staff, and the programmers themselves. This testing by staff members, representing different aspects of the project, was designed to ensure that the systems were working properly from all perspectives. Quality control processes continued with the development of field procedures that maximized cooperation and thereby reduced the potential for nonresponse bias.

A live pilot test of the systems and procedures, including field supervisor and assessor training, was conducted in April and May 1998 with 12 elementary schools in the Washington, DC, metropolitan area. The purpose of the pilot test was to ensure that all the systems were working properly. Modifications to the data collection procedures, training programs, and systems were made to improve efficiency and reduce respondent burden. Modifications to the parent interview to address some issues raised by pilot test respondents were also made at this time.

Quality control activities continued during training and data collection. During the assessor training, field staff practiced conducting the parent interview in pairs and practiced the direct child assessment with kindergarten children brought to the training site for this purpose. When the fieldwork began, field supervisors observed each assessor conducting child assessments and made telephone calls to parents to validate the interview. Field managers made telephone calls to the schools to collect

information on the school activities for validation purposes. A sample of the assessor-completed OLDS score sheets were rescored in the home office for quality control purposes.

5.7.1 Child Assessment Observations

Field supervisors conducted on-site observations of the child assessments. During the fall-kindergarten collection, one observation was completed for each assessor within the first two weeks of the field period. In spring-kindergarten, two observations were completed for each assessor. The first observation was within two weeks after the assessments began, and the second observation was completed within three weeks of the first observation.

A standardized observation form was used to evaluate the assessor's performance in conducting the child assessment. The assessor was rated in three areas:

- Rapport building and working with the child such as use of neutral praise and the assessor's response to various child behaviors.
- Cognitive assessment activities such as reading questions verbatim, the use of acceptable probes, the use of appropriate hand motions, and the absence of coaching.
- Specific assessment activities such as correctly coding answers to open-ended questions in the assessment, weighing and measuring the child correctly, and following administration procedures.

The field supervisors recorded their observations on the form and then reviewed the form with the assessor. The most frequent problems observed were not reading the items verbatim and inappropriate gesturing. Feedback was provided to the assessors on the strengths and weaknesses of their performance and, when necessary, remedial training was provided in areas of weakness. A training video reinforcing appropriate gesturing and reading items verbatim was created and used in the spring training.

5.7.2 Parent Validations

Parent validation forms were generated for approximately ten percent of the completed parent interviews. The first parent interview completed by an assessor was always validated. Over the course of the field period, a running count of an assessor's completed parent interviews was maintained, and each tenth completed parent interview was selected for validation. This ensured that ten percent of

each assessor's cases were selected for validation. The parent validation was approximately five minutes long.

Field supervisors used a standardized parent validation script when calling the parents. The script covered the following topics:

- Verification of the child's name, date of birth, and gender; and
- Between eight and ten questions from the current round interview were re-asked of the parent.

During the validation process, no evidence was found of parent interviews being falsified.

5.7.3 School Validations

To ensure that assessments proceeded smoothly, a validation call was completed with the school principal in approximately ten percent of each supervisor's assigned schools in both the fall- and spring-kindergarten collections.

Field managers conducted the school validations by telephone. The first school that each team completed was called to ascertain how well the preassessment and assessment activities went. If the feedback from the school was positive, the fifth school that each team completed was called. If any problems were indicated in the first validation call, immediate action was taken with the field supervisor. The validation feedback was discussed with the supervisor and remedial action was provided, including in-person observation of the supervisor's next school if necessary.

Field managers used a standardized script when calling the school principals. The script covered the following topics:

- How well the ECLS-K supervisor organized and executed the sampling tasks;
- An overall rating of how the assessments went;
- Feedback about the study from the children and kindergarten teachers;
- Suggestions for improving procedures and making it easier for a school to participate;
 and
- General comments and suggestions.

5.7.4 Quality Control of the OLDS Scoring

The OLDS used to screen children for English language proficiency included the "Let's Tell Stories" subtest. This subtest involved reading the child a short story and having the child repeat it back to the assessor. The child's responses were recorded verbatim and scored by the assessor. Responses to this subtest are unique to each child, and it was important for interviewers' and coders' scoring of the child's responses to match the preLAS®2000 standards.

ECLS-K assessors were trained to conduct the OLDS using audiotapes of the stories and children's responses to the stories. Assessors listened to the audiotaped stories and to the child's responses and recorded the child's responses verbatim. Then the assessor scored the story using the preLAS®2000 rules. Reasons for scoring each story a particular way were discussed in detail. Differences between the assessor's scores and the correct scores were discussed during training, so assessors could understand the difference between the scores. Several stories in each scoring category were provided for practice to fine tune the assessor's scoring. Then the scoring ability of each assessor was tested. Only assessors who scored a 90 percent accuracy in scoring the training stories as matched against the preLAS®2000 samples were allowed to conduct the OLDS.

A ten percent sample of each assessor's OLDS stories were recoded in the home office. The coders received the same training as the assessors. Coders then scored the stories independently. If the home office coders' scores differed from the assessor, their scores were verified by their supervisor. All cases were adjudicated by lead trainers for the OLDS. Approximately 66 percent of the stories had complete score agreement between the assessor, coder, and lead trainer. The additional 33 percent of the stories had score agreement by two of the three scorers.

5.7.5 Assessor Effects

Individual Test Administrator effects and Design Effects

A multi-level analysis³ was carried out to estimate components of variance in fall- and spring-kindergarten cognitive scores associated with the: (1) student level, (2) school level, (3) team

_

³ Bryk, A. & Raudenbush, S.W. (1992). *Hierarchical Linear Models: Applications and data analysis methods*. New York, Sage Publications. Snijders, T. & Bosker, R. (1999). *Multilevel Analysis – An introduction to basic and advanced multilevel modeling*. London, Sage Publications.

leader, and (4) individual test administrator. This secondary analysis was motivated by Westat's earlier finding of larger than expected design effects. In addition, the impact on the above sources of variance of the SES indicator (parent's education) was also estimated. It was expected that much of the clustering of students within neighborhood schools (hence higher design effects) could be explained by SES.

In addition to the potential clustering effects related to shared parent SES within schools, there was a concern that the individual mode of administration might inject additional and unwanted variance to both the individual and the between school components of variance in the cognitive scores. Since it is more difficult to standardize test administrations when tests are individually administered, this source of variance could contribute to the high design effects if the individual assessors differed systematically in their modes of administration.

It was found that the component of variance associated with the individual test administration effect was negligible in all three cognitive areas and thus had little or no impact on the design effects. Much of the design effects with respect to cognitive scores could be explained by parents' SES.

5.8 Spring-Kindergarten Response Rates

Table 5-14 presents school-level response rates for spring-kindergarten data collection. Response rates increased for both public and private schools from fall to spring because of a concerted effort at refusal conversion. This was most dramatic for Catholic schools where the rate increased from 83.0 percent to 94.1 percent, but even non-Catholic private schools increased by over four percentage points. Although not directly evident from the table, all but three schools cooperating in the fall data collection continued to do so in the spring.

Table 5-15 presents child-level completion rates for the spring data collection, broken out by school characteristics. Because of the refusal converted schools, the absolute number of completed cases increased from fall- to spring-kindergarten. However, the completion rates fell by a point or two for the child assessment and parent interviews between the two rounds. Overall the child-level rates for teacher questionnaires A, B, and C dropped by four to six points between fall-kindergarten and spring, largely

Table 5-14. The ECLS-K, spring-kindergarten: number of cooperating schools and before-substitution school-level response rates

| | Number of | ooperating ^b | Before-substitution | on rasnonsa ratas |
|------------------------------------|--------------|-------------------------|-------------------------------|-------------------|
| | Before | After | | on response rates |
| School characteristic ^a | substitution | substitution | School weight × KG enrollment | Unweighted |
| All schools | 940 | 1014 | 74.0 | 73.7 |
| | 940 | 1014 | 74.0 | /3./ |
| School type Public | 678 | 752 | 74.2 | 74.2 |
| | | | | |
| Private | 262 | 262 | 72.8 | 72.4 |
| Catholic | 113 | 113 | 94.1 | 94.2 |
| Other private | 149 | 149 | 60.6 | 61.6 |
| Type of locale | 107 | 202 | 70.0 | 70.6 |
| Large city | 195 | 202 | 79.0 | 79.6 |
| Mid-size city | 189 | 206 | 76.8 | 76.5 |
| Urban fringe of large city | 271 | 287 | 71.6 | 70.9 |
| Urban fringe of mid-size | | | | |
| city | 63 | 70 | 66.9 | 65.6 |
| Large town | 31 | 31 | 96.3 | 93.9 |
| Small town | 77 | 88 | 71.6 | 68.8 |
| Rural | 114 | 130 | 69.4 | 70.8 |
| School size (Kindergartners) | | | | |
| 1 to 12 | 57 | 57 | 79.0 | 73.1 |
| 13 to 24 | 108 | 110 | 69.7 | 72.0 |
| 25 to 36 | 82 | 86 | 78.0 | 81.2 |
| 37 or more | 693 | 761 | 73.9 | 73.2 |
| All schools | 940 | 1014 | 74.0 | 73.7 |
| Percent minority enrolled | | | | |
| 0 - 10 % | 249 | 273 | 73.0 | 71.8 |
| 11 – 49 % | 302 | 341 | 71.5 | 71.6 |
| 50 - 89% | 191 | 199 | 75.8 | 76.7 |
| 90 - 100% | 140 | 143 | 81.3 | 81.4 |
| Unknown | 58 | 58 | 67.7 | 67.4 |
| Region | | | | |
| Northeast | 168 | 189 | 68.4 | 69.1 |
| Midwest | 246 | 253 | 82.3 | 82.6 |
| South | 301 | 327 | 74.3 | 72.2 |
| West | 225 | 245 | 69.6 | 70.8 |
| High grade | | | 07.0 | , 0.0 |
| Trans K, K or trans 1 | 43 | 43 | 83.8 | 84.3 |
| 01-12 | 855 | 929 | 73.9 | 73.8 |
| Ungraded | 4 | 4 | 100.0 | 100.0 |
| Unknown | 38 | 38 | 62.0 | 61.3 |
| UIIKIIOWII | 38 | 38 | 02.0 | 01.3 |

 $^{{}^{}a}\mathrm{Based}$ on frame data.

^bOne or more children or parents participated, or school is one of two schools in the Archdiocese of New Orleans where student sampling was performed too late in fall-kindergarten to field child or parent data collection.

5-37

Table 5-15. The ECLS-K, spring-kindergarten: number of completed child-level cases and child-level completion rates, by school characteristic

| | (| Child assessme | | I | Parent intervie | | School administrator questionnaire | | |
|------------------------------------|------------------------|----------------|------------|------------------------|-----------------|------------|------------------------------------|-------------|------------|
| | Completion rates | | | Completion rates | | | Compl | etion rates | |
| School characteristic ^a | Completes ^b | Weighted | Unweighted | Completes ^c | Weighted | Unweighted | Completes ^d | Weighted | Unweighted |
| All children | 19,967 | 88.0 | 88.3 | 18,950 | 83.9 | 83.8 | 19,282 | 85.9 | 85.4 |
| School type | | | | | | | | | |
| Public | 15,581 | 87.7 | 87.8 | 14,695 | 83.3 | 82.8 | 14,930 | 85.3 | 84.3 |
| Private | 4,386 | 90.1 | 90.0 | 4,255 | 87.9 | 87.3 | 4,352 | 89.9 | 89.5 |
| Catholic | 2,296 | 91.7 | 91.5 | 2,206 | 88.4 | 87.9 | 2,334 | 94.2 | 93.1 |
| Other private | 2,090 | 88.5 | 88.4 | 2,049 | 87.5 | 86.7 | 2,018 | 85.7 | 85.6 |
| Type of locale | | | | | | | | | |
| Large city | 3,933 | 86.6 | 86.9 | 3,599 | 79.4 | 79.5 | 3,289 | 71.4 | 72.9 |
| Mid-size city | 4,219 | 89.0 | 89.7 | 4,050 | 85.5 | 86.1 | 4,284 | 91.4 | 91.3 |
| Urban fringe of large city | 5,674 | 87.6 | 87.9 | 5,360 | 83.6 | 83.0 | 5,305 | 82.1 | 82.2 |
| Urban fringe of mid-size city | 1,404 | 86.7 | 87.3 | 1,349 | 83.2 | 83.9 | 1,514 | 95.3 | 94.3 |
| Large town | 636 | 89.2 | 89.1 | 624 | 87.1 | 87.4 | 666 | 92.6 | 93.3 |
| Small town | 1,696 | 89.5 | 89.4 | 1,641 | 87.2 | 86.5 | 1,683 | 91.7 | 88.9 |
| Rural | 2,405 | 88.6 | 88.4 | 2,327 | 85.8 | 85.6 | 2,541 | 94.5 | 93.7 |
| School size (Kindergartners) | , | | | , | | | , | | |
| 1 to 12 | 383 | 83.9 | 84.2 | 395 | 87.7 | 86.8 | 405 | 90.9 | 89.4 |
| 13 to 24 | 1,725 | 89.8 | 91.1 | 1,642 | 85.3 | 86.7 | 1,701 | 93.2 | 90.0 |
| 25 to 36 | 1,780 | 91.0 | 91.1 | 1,712 | 87.6 | 87.6 | 1,852 | 96.6 | 95.0 |
| 37 or more | 16,079 | 87.7 | 87.8 | 15,201 | 83.4 | 83.0 | 15,324 | 84.3 | 83.8 |
| Percent minority enrolled | , | | | , | | | , | | |
| 0 - 10% | 5,538 | 87.9 | 88.4 | 5,427 | 86.4 | 86.6 | 5,853 | 92.8 | 93.6 |
| 11 - 49% | 6,878 | 87.9 | 87.9 | 6,622 | 84.6 | 84.6 | 7,223 | 93.1 | 92.5 |
| 50 – 89% | 3,746 | 88.0 | 87.9 | 3,478 | 82.6 | 81.6 | 3,375 | 79.3 | 79.3 |
| 90 - 100% | 2,952 | 88.7 | 89.0 | 2,592 | 78.6 | 78.1 | 2,054 | 61.9 | 62.1 |
| Unknown | 853 | 87.7 | 88.9 | 831 | 85.6 | 86.7 | 777 | 90.9 | 81.1 |
| Region | | | | | | | | | |
| Northeast | 3,746 | 88.2 | 88.5 | 3,513 | 82.5 | 83.0 | 3,417 | 78.4 | 80.9 |
| Midwest | 4,951 | 87.6 | 88.2 | 4,761 | 84.3 | 84.8 | 5,069 | 90.7 | 90.5 |
| South | 6,685 | 89.4 | 89.6 | 6,358 | 85.4 | 85.2 | 6,476 | 88.0 | 86.9 |
| West | 4,585 | 85.9 | 86.3 | 4,318 | 82.1 | 81.2 | 4,320 | 83.1 | 81.5 |
| High grade | , | | | , · - | | | , - | | |
| Trans K, K or trans 1 | 597 | 90.3 | 89.4 | 573 | 87.8 | 85.8 | 582 | 91.2 | 87.3 |
| 01-12 | 18,880 | 87.9 | 88.3 | 17,895 | 83.8 | 83.7 | 18,227 | 85.7 | 85.4 |
| Ungraded | 43 | 80.5 | 76.8 | 38 | 62.8 | 67.9 | 56 | 100.0 | 100.0 |
| Unknown | 447 | 88.0 | 87.5 | 444 | 87.5 | 86.9 | 417 | 83.5 | 81.8 |
| All children | 19.637 | 87.0 | 87.0 | 20,523 | 90.5 | 90.9 | 19,382 | 86.0 | 85.8 |

Table 5-15. The ECLS-K, spring-kindergarten: number of completed child-level cases and child-level completion rates, by school characteristic (continued)

| | Teacher questionnaire A | | nire A | Tea | cher questionna | ire B | Teacher questionnaire C | | |
|------------------------------------|-------------------------|----------|------------|------------------|-----------------|------------|-------------------------|--------------|------------|
| • | Completion rates | | _ | Completion rates | | | Comp | letion rates | |
| School characteristic ^a | Completes ^d | Weighted | Unweighted | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted |
| School type | • | | | • | | | • | | |
| Public | 15,389 | 86.9 | 86.9 | 15,880 | 89.7 | 89.6 | 15,233 | 85.9 | 86.0 |
| Private | 4,248 | 87.9 | 87.3 | 4,643 | 95.2 | 95.5 | 4,149 | 86.0 | 85.3 |
| Catholic | 2,296 | 91.7 | 91.5 | 2,206 | 88.4 | 87.9 | 2,334 | 94.2 | 93.1 |
| Other private | 2,069 | 88.3 | 87.7 | 2,197 | 92.7 | 93.2 | 1,955 | 83.7 | 82.9 |
| Type of locale | • | | | - | | | • | | |
| Large city | 3,526 | 77.8 | 78.1 | 3,872 | 84.5 | 85.8 | 3,741 | 82.8 | 82.9 |
| Mid-size city | 4,214 | 89.6 | 89.8 | 4,359 | 92.2 | 92.9 | 4,093 | 87.2 | 87.2 |
| Urban fringe of large city | 5,718 | 89.2 | 88.6 | 5,855 | 90.7 | 90.8 | 5,462 | 84.8 | 84.7 |
| Urban fringe of mid-size city | 1,418 | 87.7 | 88.3 | 1,482 | 91.7 | 92.3 | 1,380 | 85.3 | 85.9 |
| Large town | 632 | 89.0 | 88.5 | 655 | 91.5 | 91.7 | 632 | 88.6 | 88.5 |
| Small town | 1,673 | 88.7 | 88.4 | 1,795 | 95.0 | 94.8 | 1,670 | 88.8 | 88.2 |
| Rural | 2,456 | 89.1 | 90.6 | 2,505 | 91.4 | 92.4 | 2,404 | 88.7 | 88.6 |
| School size (Kindergartners) | , | | | , | | | , | | |
| 1 to 12 | 394 | 88.4 | 87.0 | 423 | 93.2 | 93.4 | 367 | 82.0 | 81.0 |
| 13 to 24 | 1,671 | 85.6 | 88.4 | 1,756 | 89.9 | 92.9 | 1,654 | 85.3 | 87.5 |
| 25 to 36 | 1,771 | 90.6 | 90.9 | 1,866 | 94.7 | 95.7 | 1,718 | 89.1 | 88.1 |
| 37 or more | 15,801 | 86.9 | 86.4 | 16,478 | 90.1 | 90.1 | 15,643 | 85.8 | 85.5 |
| Percent minority enrolled | , | | | , | | | , | | |
| 0 - 10% | 5,701 | 90.9 | 91.2 | 5,901 | 94.1 | 94.4 | 5,486 | 87.5 | 87.7 |
| 11 - 49% | 6,735 | 86.5 | 86.3 | 7,158 | 91.2 | 91.7 | 6,666 | 85.4 | 85.4 |
| 50 – 89% | 3,682 | 86.7 | 86.5 | 3,810 | 89.5 | 89.5 | 3,648 | 86.8 | 85.7 |
| 90 - 100% | 2,716 | 82.4 | 82.1 | 2,742 | 82.0 | 82.9 | 2,781 | 84.5 | 84.1 |
| Unknown | 803 | 83.8 | 83.8 | 912 | 92.6 | 95.2 | 801 | 82.6 | 83.6 |
| Region | | | | | | | | | |
| Northeast | 3,836 | 90.6 | 90.8 | 3,871 | 91.6 | 91.6 | 3,601 | 85.6 | 85.2 |
| Midwest | 4,773 | 85.3 | 85.2 | 5,176 | 91.9 | 92.4 | 4,870 | 86.8 | 86.9 |
| South | 6,699 | 89.2 | 89.9 | 6,781 | 90.1 | 91.0 | 6,545 | 87.6 | 87.8 |
| West | 4,329 | 82.3 | 81.6 | 4,695 | 88.6 | 88.6 | 4,366 | 82.5 | 82.3 |
| High grade | 7 | | | , - | | | 7 | | |
| Trans K, K or trans 1 | 529 | 83.4 | 79.3 | 631 | 95.3 | 94.6 | 575 | 87.8 | 86.2 |
| 01-12 | 18,627 | 87.3 | 87.2 | 19,358 | 90.2 | 90.7 | 18,342 | 86.1 | 85.9 |
| Ungraded | 29 | 41.8 | 51.8 | 42 | 68.5 | 75.0 | 38 | 63.2 | 67.9 |
| Unknown | 452 | 87.5 | 88.6 | 492 | 96.6 | 96.5 | 427 | 82.2 | 83.7 |

^aBased on frame data.

bReading, math, or general knowledge assessment was scorable or child was language minority (not Spanish) and score below cut score in OLDS or disabled (IEP).
^cFamily structure portion of parent interview was completed.

^dQuestionnaire was not blank.

because of the data collection protocol for students who transferred to another school (for details see section 5.6.6). For teacher A and B, this disproportionately affected children in large cities, who showed a loss of 9 to 11 percentage points. Catholic schools too showed an 11-point drop in teacher B completion, though the spring-kindergarten rate was still in excess of 88 percent. The weighted completion rate for the school administrator questionnaire was 85.9 percent overall with the lowest rate observed for large cities (71.4 percent).

Table 5-16 also presents child-level response rates for the spring data collection, this time broken out by child characteristics. The same gains and losses of sample size and completion rates hold as in table 5-15 and for the same reasons. However, for the teacher A and B questionnaires, the decrease in the completion rate between fall and spring was higher for black students, i.e., in the range of 8 to 9 points. The lowest rate of completion for the school administrator questionnaire was for black and Hispanic students (76.4 and 75.1 percent, respectively), largely because of their clustering in large cities.

Table 5-17 presents teacher-level completion rates for the spring-kindergarten data collection broken out by school characteristics. Relative to the fall data collection experience, the overall completion rate for the teacher A questionnaire increased by nearly three percentage points to 93.4 percent and the teacher B rate held steady (94.1 percent). There was an 11-point gain in the teacher A rate for rural schools but a nearly four percentage point loss in the Midwest, which, however, still remained at nearly 92 percent.

Table 5-18 displays school-level completion rates for the school administrator questionnaire broken out by school characteristics. The overall weighted rate is 87.2 percent. The private school completion rate is about five points higher than that for public schools (90.7 vs. 85.5 percent). Rates tended to be lower for schools in large cities (77.6 percent complete), those having 90 percent or more minority students enrolled (65.0 percent), and those located in the West (80.1 percent).

The spring-kindergarten school-level response rates presented in table 5-14 can be combined with the child-level and teacher-level completion rates from tables 5-15 and 5-17 to produce overall response rates at the child and teacher levels, by school characteristic. Table 5-19 displays the results at the child-level. For the most part, the response patterns notable in the fall-kindergarten assessment persisted into the spring. Response rates for children enrolled in Catholic schools were higher than average across all survey instruments, as were those for children in schools in the Midwest, and schools

540

Table 5-16. The ECLS-K, spring-kindergarten: number of completed child-level cases and child-level completion rates, by child characteristic

| | C | hild assessm | ent | P | arent intervi | ew | School administrator questionnaire | | |
|-----------------------------------|------------------------|--------------|------------|------------|---------------|-------------|------------------------------------|----------|-------------|
| | Completion rates | | | | Compl | etion rates | Completion rates | | etion rates |
| Child characteristic ^a | Completes ^b | Weighted | Unweighted | Completesc | Weighted | Unweighted | Completesd | Weighted | Unweighted |
| All children | 19,967 | 88.0 | 88.3 | 18,950 | 83.9 | 83.8 | 19,282 | 85.8 | 85.4 |
| Gender | | | | | | | | | |
| Male | 10,191 | 88.1 | 88.3 | 9,679 | 84.0 | 83.8 | 9,864 | 86.1 | 85.6 |
| Female | 9,720 | 88.2 | 88.5 | 9,231 | 84.3 | 84.1 | 9,370 | 85.7 | 85.5 |
| Unknown gender | 56 | 59.1 | 56.6 | 40 | 35.2 | 40.4 | 48 | 51.7 | 48.5 |
| Race-ethnicity | | | | | | | | | |
| White (not Hispanic) | 11,602 | 88.2 | 88.5 | 11,370 | 86.4 | 86.7 | 12,011 | 92.0 | 91.8 |
| Black (not Hispanic) | 3,130 | 88.7 | 88.6 | 2,847 | 80.8 | 80.6 | 2,601 | 76.4 | 73.8 |
| Hispanic | 2,668 | 88.4 | 88.5 | 2,494 | 83.0 | 82.7 | 2,223 | 75.1 | 73.9 |
| Asian or Pacific Islander | 1,696 | 89.6 | 89.9 | 1,455 | 77.0 | 77.1 | 1,614 | 86.8 | 85.7 |
| American Indian or Alaskan | | | | | | | | | |
| Native | 327 | 88.1 | 88.4 | 288 | 77.7 | 77.8 | 332 | 88.6 | 90.2 |
| Other | 219 | 83.4 | 85.2 | 201 | 78.0 | 78.2 | 227 | 90.8 | 88.3 |
| Unknown race-ethnicity | 325 | 72.8 | 71.4 | 295 | 64.0 | 64.8 | 274 | 52.8 | 60.2 |
| Year of birth | | | | | | | | | |
| 1992 | 5,720 | 88.8 | 89.1 | 5,465 | 85.1 | 85.2 | 5,689 | 88.9 | 88.7 |
| 1993 | 13,936 | 88.1 | 88.4 | 13,199 | 84.0 | 83.7 | 13,244 | 84.5 | 84.2 |
| 1994 | 54 | 85.2 | 85.7 | 52 | 83.9 | 82.5 | 46 | 82.6 | 75.4 |
| Other/unknown | 257 | 70.1 | 68.7 | 234 | 62.2 | 62.6 | 303 | 84.2 | 81.2 |
| Kindergarten type | | | | | | | | | |
| Full day | 11,036 | 93.0 | 92.9 | 10,246 | 86.4 | 86.3 | 10,149 | 85.4 | 85.5 |
| Part day | 8,543 | 91.1 | 91.1 | 8,016 | 86.0 | 85.5 | 8,017 | 86.8 | 86.1 |
| Kindergarten type unknown | 388 | 27.0 | 28.3 | 688 | 49.9 | 50.1 | 1,062 | 81.5 | 79.8 |

Table 5-16. The ECLS-K, spring-kindergarten: number of completed child-level cases and child-level completion rates, by child characteristic (continued)

| | Teacl | ner questioni | naire A | Teacl | her questioni | naire B | Teac | her question | naire C |
|-----------------------------------|------------------------|---------------|-------------|------------|---------------|-------------|------------|--------------|-------------|
| | | Compl | etion rates | | Compl | etion rates | | Compl | etion rates |
| Child characteristic ^a | Completes ^d | Weighted | Unweighted | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted |
| All children | 19,637 | 87.0 | 87.0 | 20,523 | 90.4 | 90.9 | 19,382 | 85.9 | 85.8 |
| Gender | | | | | | | | | |
| Male | 10,010 | 87.2 | 86.9 | 10,455 | 90.5 | 90.7 | 9,875 | 85.7 | 85.7 |
| Female | 9,584 | 87.3 | 87.4 | 10,011 | 90.8 | 91.3 | 9,477 | 86.6 | 86.5 |
| Unknown gender | 43 | 46.0 | 43.4 | 57 | 49.5 | 57.6 | 30 | 35.6 | 30.3 |
| Race-ethnicity | | | | | | | | | |
| White (not Hispanic) | 11,623 | 89.0 | 88.8 | 12,187 | 92.7 | 93.1 | 11,323 | 86.5 | 86.5 |
| Black (not Hispanic) | 2,983 | 85.1 | 84.6 | 3,086 | 87.7 | 87.6 | 3,057 | 87.2 | 86.7 |
| Hispanic | 2,502 | 83.4 | 83.2 | 2,593 | 86.2 | 86.2 | 2,544 | 85.2 | 84.6 |
| Asian or Pacific Islander | 1,647 | 88.3 | 87.4 | 1,745 | 92.9 | 92.6 | 1,632 | 87.2 | 86.6 |
| American Indian or Alaskan | | | | • | | | • | | |
| Native | 331 | 89.3 | 89.9 | 313 | 85.8 | 85.1 | 332 | 90.1 | 90.2 |
| Other | 215 | 86.1 | 83.7 | 237 | 90.6 | 92.2 | 208 | 81.1 | 80.9 |
| Unknown race-ethnicity | 336 | 70.5 | 73.8 | 362 | 77.4 | 79.6 | 286 | 62.1 | 62.9 |
| Year of birth | | | | | | | | | |
| 1992 | 5,581 | 86.9 | 87.0 | 5,885 | 91.1 | 91.8 | 5,599 | 87.1 | 87.3 |
| 1993 | 13,750 | 87.6 | 87.4 | 14,303 | 90.6 | 90.9 | 13,498 | 86.0 | 85.8 |
| 1994 | 51 | 87.0 | 83.6 | 56 | 90.8 | 91.8 | 47 | 80.0 | 77.0 |
| Other/unknown | 255 | 65.7 | 68.4 | 279 | 71.9 | 74.8 | 238 | 63.0 | 63.8 |
| Kindergarten type | | | | | | | | | |
| Full-day | 11,106 | 94.4 | 93.5 | 11,437 | 96.2 | 96.3 | 10,800 | 91.6 | 91.0 |
| Part-day | 8,531 | 91.0 | 91.0 | 9,062 | 96.5 | 96.6 | 8,412 | 89.6 | 89.7 |
| Kindergarten type unknown | 0 | 0.0 | 0.0 | 24 | 1.9 | 1.8 | 170 | 14.2 | 12.8 |

^aDemographic data were captured from school records prior to student sampling.

^bReading, math, or general knowledge assessment was scorable or child was language minority (not Spanish) and scored below cut score in OLDS or disabled (IEP).

^cFamily structure portion of parent interview was completed.

^dQuestionnaire was not blank.

Table 5-17. The ECLS-K, spring-kindergarten: number of completed teacher questionnaires and teacher-level completion rates

| | Teacl | her questions | naire A | Teacl | her questionr | naire B |
|------------------------------------|------------------------|---------------|-------------|------------|---------------|-------------|
| | | Compl | etion rates | | Comple | etion rates |
| School characteristic ^a | Completes ^b | Weighted | Unweighted | Completesc | Weighted | Unweighted |
| All schools | 3,215 | 93.4 | 93.0 | 3,243 | 94.1 | 93.8 |
| School type | | | | | | |
| Public | 2,819 | 93.7 | 93.2 | 2,830 | 93.9 | 93.6 |
| Private | 396 | 92.4 | 91.2 | 413 | 95.3 | 95.2 |
| Catholic | 168 | 93.5 | 93.9 | 176 | 98.1 | 98.3 |
| Other private | 228 | 91.8 | 89.4 | 237 | 93.8 | 92.9 |
| Type of locale | | | | | | |
| Large city | 688 | 88.8 | 88.1 | 703 | 92.4 | 90.0 |
| Mid-size city | 640 | 96.6 | 96.2 | 646 | 97.6 | 97.1 |
| Urban fringe of large city | 955 | 93.1 | 93.1 | 953 | 93.0 | 92.9 |
| Urban fringe of mid-size | | | | | | |
| city | 244 | 95.0 | 95.3 | 253 | 98.7 | 98.8 |
| Large town | 85 | 89.4 | 89.5 | 86 | 90.6 | 90.5 |
| Small town | 288 | 94.8 | 95.7 | 291 | 96.4 | 96.7 |
| Rural | 315 | 94.9 | 94.3 | 311 | 90.8 | 93.1 |
| School size (Kindergartners) | | | | | | |
| 1 to 12 | 64 | 94.2 | 92.8 | 67 | 96.7 | 97.1 |
| 13 to 24 | 157 | 88.4 | 90.2 | 158 | 87.7 | 90.8 |
| 25 to 36 | 114 | 96.7 | 95.8 | 116 | 96.9 | 97.5 |
| 37 or more | 2,880 | 93.8 | 93.0 | 2,902 | 94.6 | 93.7 |
| Percent minority enrolled | | | | | | |
| 0 - 10% | 736 | 95.5 | 94.8 | 740 | 95.5 | 95.4 |
| 11 - 49% | 1,070 | 93.3 | 93.6 | 1,083 | 95.0 | 94.8 |
| 50 - 89% | 704 | 92.4 | 92.5 | 726 | 93.7 | 95.4 |
| 90 - 100% | 596 | 91.9 | 91.0 | 573 | 89.5 | 87.5 |
| Unknown | 109 | 92.8 | 88.6 | 121 | 97.1 | 98.4 |
| Region | | | | | | |
| Northeast | 486 | 93.5 | 92.7 | 490 | 93.1 | 93.5 |
| Midwest | 574 | 91.6 | 89.0 | 613 | 94.6 | 95.0 |
| South | 1,288 | 96.0 | 96.2 | 1,267 | 95.0 | 94.6 |
| West | 867 | 90.7 | 91.3 | 873 | 92.9 | 91.9 |
| High grade | | | | | | |
| Trans K, K or trans 1 | 134 | 83.4 | 79.8 | 160 | 94.4 | 95.2 |
| 01-12 | 3,019 | 94.1 | 93.7 | 3,017 | 94.0 | 93.6 |
| Ungraded | 10 | 77.2 | 76.9 | 12 | 92.4 | 92.3 |
| Unknown | 52 | 94.3 | 94.5 | 54 | 98.5 | 98.2 |

^aBased on frame data.

 $^{{}^{}b}Round\ 2\ question naire\ completed\ by\ teacher\ employed\ in\ a\ base-year\ probability\ sampled\ school.$

 $^{{}^{}C}Fall\text{-}kindergarten or spring-kindergarten questionnaire completed by teacher employed in a base-year probability sampled school.}$

Table 5-18. The ECLS-K, spring-kindergarten: number of completed school administrator questionnaire and school-level completion rates

| | Number | Comple | etion rates |
|------------------------------------|--------------------------|-----------------------|-------------|
| School characteristic ^a | cooperating ^b | Weighted ^c | Unweighted |
| All schools | 866 | 87.2 | 85.4 |
| School type | | | |
| Public | 631 | 85.5 | 83.9 |
| Private | 235 | 90.7 | 89.7 |
| Catholic | 105 | 93.9 | 92.9 |
| Other private | 130 | 88.9 | 87.2 |
| Type of locale | | | |
| Large city | 148 | 77.6 | 73.3 |
| Mid-size city | 189 | 92.8 | 91.7 |
| Urban fringe of large city | 237 | 84.1 | 82.6 |
| Urban fringe of mid-size city | 66 | 95.5 | 94.3 |
| Large town | 29 | 94.7 | 93.5 |
| Small town | 78 | 88.6 | 88.6 |
| Rural | 119 | 89.5 | 91.5 |
| School size (Kindergartners) | | | |
| 1 to 12 | 50 | 85.0 | 87.7 |
| 13 to 24 | 98 | 90.2 | 89.1 |
| 25 to 36 | 82 | 96.0 | 95.3 |
| 37 or more | 636 | 84.8 | 83.6 |
| Percent minority enrolled | | | |
| 0 - 10% | 256 | 94.7 | 93.8 |
| 11 - 49% | 315 | 92.2 | 92.4 |
| 50 – 89% | 158 | 80.8 | 79.4 |
| 90 - 100% | 89 | 65.0 | 62.2 |
| Unknown | 48 | 86.3 | 82.8 |
| Region | | | |
| Northeast | 154 | 84.7 | 81.5 |
| Midwest | 228 | 92.1 | 90.1 |
| South | 286 | 89.6 | 87.5 |
| West | 198 | 80.1 | 80.8 |
| High grade | | | |
| Trans K, K or trans 1 | 37 | 87.1 | 86.0 |
| 01-12 | 793 | 87.2 | 85.4 |
| Ungraded | 4 | 100.0 | 100.0 |
| Unknown | 32 | 85.2 | 84.2 |

^aBased on frame data.

 $^{^{}b}$ School is part of the original base-year probability sample and questionnaire was not blank.

^cWeighted by school base weight.

Table 5-19. The ECLS-K, spring-kindergarten: child-level sample sizes and overall response rates, by school characteristic

| | | Child assessme | ent |] | Parent intervie | ew | School administrator questionnaire | | |
|-------------------------------------|------------|----------------|---------------|------------------------|-----------------|---------------|------------------------------------|------------|---------------|
| | | Overall re | esponse rates | | Overall re | esponse rates | | Overall re | esponse rates |
| School characteristics ^a | Completesb | Weighted | Unweighted | Completes ^c | Weighted | Unweighted | Completesd | Weighted | Unweighted |
| All children | 19,967 | 65.1 | 65.1 | 18,950 | 62.1 | 61.8 | 19,282 | 63.6 | 62.9 |
| School type | | | | | | | | | |
| Public | 15,581 | 65.1 | 65.1 | 14,695 | 61.8 | 61.4 | 14,930 | 63.3 | 62.6 |
| Private | 4,386 | 65.6 | 65.2 | 4,255 | 64.0 | 63.2 | 4,352 | 65.4 | 64.8 |
| Catholic | 2,296 | 86.3 | 86.2 | 2,206 | 83.2 | 82.8 | 2,334 | 88.6 | 87.7 |
| Other private | 2,090 | 53.6 | 54.5 | 2,049 | 53.0 | 53.4 | 2,018 | 51.9 | 52.7 |
| Type of locale | | | | · | | | | | |
| Large city | 3,933 | 68.4 | 69.2 | 3,599 | 62.7 | 63.3 | 3,289 | 56.4 | 58.0 |
| Mid-size city | 4,219 | 68.4 | 68.6 | 4,050 | 65.7 | 65.9 | 4,284 | 70.2 | 69.8 |
| Urban fringe of large city | 5,674 | 62.7 | 62.3 | 5,360 | 59.9 | 58.8 | 5,305 | 58.8 | 58.3 |
| Urban fringe of mid-size city | 1,404 | 58.0 | 57.3 | 1,349 | 55.7 | 55.0 | 1,514 | 63.8 | 61.9 |
| Large town | 636 | 85.9 | 83.7 | 624 | 83.9 | 82.1 | 666 | 89.2 | 87.6 |
| Small town | 1,696 | 64.1 | 61.5 | 1,641 | 62.4 | 59.5 | 1,683 | 65.7 | 61.2 |
| Rural | 2,405 | 61.5 | 62.6 | 2,327 | 59.5 | 60.6 | 2,541 | 65.6 | 66.3 |
| School size (Kindergartners) | | | | • | | | • | | |
| 1 to 12 | 383 | 66.3 | 61.6 | 395 | 69.3 | 63.5 | 405 | 71.8 | 65.4 |
| 13 to 24 | 1,725 | 62.6 | 65.6 | 1,642 | 59.5 | 62.4 | 1,701 | 65.0 | 64.8 |
| 25 to 36 | 1,780 | 71.0 | 74.0 | 1,712 | 68.3 | 71.1 | 1,852 | 75.3 | 77.1 |
| 37 or more | 16,079 | 64.8 | 64.3 | 15,201 | 61.6 | 60.8 | 15,324 | 62.3 | 61.3 |
| Percent nonwhite enrolled | | | | | | | | | |
| 0 - 10% | 5,538 | 64.2 | 63.5 | 5,427 | 63.1 | 62.2 | 5,853 | 67.7 | 67.2 |
| 11 – 49% | 6,878 | 62.8 | 62.9 | 6,622 | 60.5 | 60.6 | 7,223 | 66.6 | 66.2 |
| 50 – 89% | 3,746 | 66.7 | 67.4 | 3,478 | 62.6 | 62.6 | 3,375 | 60.1 | 60.8 |
| 90 - 100% | 2,952 | 72.1 | 72.4 | 2,592 | 63.9 | 63.6 | 2,054 | 50.3 | 50.5 |
| Unknown | 853 | 59.4 | 59.9 | 831 | 58.0 | 58.4 | 777 | 61.5 | 54.7 |
| Region | | | | | | | | | |
| Northeast | 3,746 | 60.3 | 61.2 | 3,513 | 56.4 | 57.4 | 3,417 | 53.6 | 55.9 |
| Midwest | 4,951 | 72.1 | 72.9 | 4,761 | 69.4 | 70.0 | 5,069 | 74.6 | 74.8 |
| South | 6,685 | 66.4 | 64.7 | 6,358 | 63.5 | 61.5 | 6,476 | 65.4 | 62.7 |
| West | 4,585 | 59.8 | 61.1 | 4,318 | 57.1 | 57.5 | 4,320 | 57.8 | 57.7 |
| High grade | | | | · | | | · | | |
| Trans K, K or trans 1 | 597 | 75.7 | 75.4 | 573 | 73.6 | 72.3 | 582 | 76.4 | 73.6 |
| 01-12 | 18,880 | 65.0 | 65.2 | 17,895 | 61.9 | 61.8 | 18,227 | 63.3 | 63.0 |
| Ungraded | 43 | 80.5 | 76.8 | 38 | 62.8 | 67.9 | 56 | 100.0 | 100.0 |
| Unknown | 447 | 54.6 | 53.6 | 444 | 54.3 | 53.3 | 417 | 51.8 | 50.1 |

Table 5.19. The ECLS-K, spring-kindergarten: child-level sample sizes and overall response rates, by school characteristic (continued)

| | Tea | cher questionna | nire A | Tea | cher questionna | ire B | Tea | cher questionna | ire C |
|-------------------------------------|------------|-----------------|---------------|------------|-----------------|---------------|------------|-----------------|---------------|
| | | Overall re | esponse rates | | Overall re | esponse rates | | Overall re | esponse rates |
| School characteristics ^a | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted | Completesd | Weighted | Unweighted |
| All children | 19,637 | 64.4 | 64.1 | 20,523 | 67.0 | 67.0 | 19,382 | 63.6 | 63.2 |
| School type | | | | | | | | | |
| Public | 15,389 | 64.5 | 64.5 | 15,880 | 66.6 | 66.5 | 15,233 | 63.7 | 63.8 |
| Private | 4,248 | 64.0 | 63.2 | 4,643 | 69.3 | 69.1 | 4,149 | 62.6 | 61.8 |
| Catholic | 2,179 | 82.3 | 82.0 | 2,446 | 92.1 | 91.9 | 2,194 | 83.3 | 82.4 |
| Other private | 2,069 | 53.5 | 54.0 | 2,197 | 56.2 | 57.4 | 1,955 | 50.7 | 51.1 |
| Type of locale | | | | | | | | | |
| Large city | 3,526 | 61.5 | 62.2 | 3,872 | 66.8 | 68.3 | 3,741 | 65.4 | 66.0 |
| Mid-size city | 4,214 | 68.8 | 68.7 | 4,359 | 70.8 | 71.1 | 4,093 | 67.0 | 66.7 |
| Urban fringe of large city | 5,718 | 63.9 | 62.8 | 5,855 | 64.9 | 64.4 | 5,462 | 60.7 | 60.1 |
| Urban fringe of mid-size city | 1,418 | 58.7 | 57.9 | 1,482 | 61.3 | 60.5 | 1,380 | 57.1 | 56.4 |
| Large town | 632 | 85.7 | 83.1 | 655 | 88.1 | 86.1 | 632 | 85.3 | 83.1 |
| Small town | 1,673 | 63.5 | 60.8 | 1,795 | 68.0 | 65.2 | 1,670 | 63.6 | 60.7 |
| Rural | 2,456 | 61.8 | 64.1 | 2,505 | 63.4 | 65.4 | 2,404 | 61.6 | 62.7 |
| School size (Kindergartners) | | | | | | | | | |
| 1 to 12 | 394 | 69.8 | 63.6 | 423 | 73.6 | 68.3 | 367 | 64.8 | 59.2 |
| 13 to 24 | 1,671 | 59.7 | 63.6 | 1,756 | 62.7 | 66.9 | 1,654 | 59.5 | 63.0 |
| 25 to 36 | 1,771 | 70.7 | 73.8 | 1,866 | 73.9 | 77.7 | 1,718 | 69.5 | 71.5 |
| 37 or more | 15,801 | 64.2 | 63.2 | 16,478 | 66.6 | 66.0 | 15,643 | 63.4 | 62.6 |
| Percent nonwhite enrolled | | | | | | | | | |
| 0 - 10% | 5,701 | 66.4 | 65.5 | 5,901 | 68.7 | 67.8 | 5,486 | 63.9 | 63.0 |
| 11 – 49% | 6,735 | 61.8 | 61.8 | 7,158 | 65.2 | 65.7 | 6,666 | 61.1 | 61.1 |
| 50 - 89% | 3,682 | 65.7 | 66.3 | 3,810 | 67.8 | 68.6 | 3,648 | 65.8 | 65.7 |
| 90 – 100% | 2,716 | 67.0 | 66.8 | 2,742 | 66.7 | 67.5 | 2,781 | 68.7 | 68.5 |
| Unknown | 803 | 56.7 | 56.5 | 912 | 62.7 | 64.2 | 801 | 55.9 | 56.3 |
| Region | | | | | | | | | |
| Northeast | 3,836 | 62.0 | 62.7 | 3,871 | 62.7 | 63.3 | 3,601 | 58.6 | 58.9 |
| Midwest | 4,773 | 70.2 | 70.4 | 5,176 | 75.6 | 76.3 | 4,870 | 71.4 | 71.8 |
| South | 6,699 | 66.3 | 64.9 | 6,781 | 66.9 | 65.7 | 6,545 | 65.1 | 63.4 |
| West | 4,329 | 57.3 | 57.8 | 4,695 | 61.7 | 62.7 | 4,366 | 57.4 | 58.3 |
| High grade | | | | | | | | | |
| Trans K, K or trans 1 | 529 | 69.9 | 66.8 | 631 | 79.9 | 79.7 | 575 | 73.6 | 72.7 |
| 01-12 | 18,627 | 64.5 | 64.4 | 19,358 | 66.7 | 66.9 | 18,342 | 63.6 | 63.4 |
| Ungraded | 29 | 41.8 | 51.8 | 42 | 68.5 | 75.0 | 38 | 63.2 | 67.9 |
| Unknown | 452 | 54.3 | 54.3 | 492 | 59.9 | 59.2 | 427 | 51.0 | 51.3 |

^aBased on frame data.

^bReading, math, or general knowledge assessment was scorable or child was language minority (not Spanish) and scored below the cut score in the OLDS or disabled (IEP).

^cFamily structure portion of Parent Interview was completed.

^dQuestionnaire was not blank.

whose highest grade is kindergarten. For schools with over 90 percent minority enrollment, response rates were higher than average for all but the school administrator questionnaire, which was a full 13 points below the average rate. Table 5-20 presents overall response rates at the teacher-level, by school characteristic. The same subgroups exhibit a better than average level of response.

In addition to the child assessment, parent interview, teacher questionnaires, and school administrator questionnaires whose completion rates have been summarized in the preceding tables, various other types of data were collected during spring of kindergarten as well. Table 5-21 presents counts of completes and weighted and unweighted completion rates at the overall student level for these other data collection efforts. The facilities checklist has a 96.6 percent weighted completion rate at the student level. (At the school level, it is 95.7 percent.) Also very high are the special education teacher questionnaire A and the school principal's salary and benefits information, at 94.1 and 91.0 percent completion respectively. The salary and benefits data for special education teachers is largely unavailable (31.4 percent completion) as is the Adaptive Behavior Scale (45.6 percent), which was collected only for students who were not assessed in spring of kindergarten because of physical or mental disability. The Adaptive Behavior Scale was collected for a very small number of children, less than 100, and seemed to be burdensome for the special education teachers to complete. The majority of teachers were identified for teacher and salary benefits data collection in early April 1999; a smaller number were identified and fielded in mid-May 1999. It appears that the timing of this data collection effort may not have included all of the special education teachers. In addition, these teachers often had other sources of payment about which the school district could not report; for example, the county had a special education cooperative that paid the teacher salary or the salary was paid by other special services contracts.

5.9 Base Year Response Rates

Thus far cooperation rates have been presented for the two rounds of data collection separately. It is also reasonable to consider such rates from the perspective of the base year as a whole. Table 5-22 presents base year rates for schools, children, parents, and teachers. Within this table a child, parent, or teacher is considered a respondent if he or she cooperated in either the fall- or spring-kindergarten data collection. A school is counted as responding if one or more parents or children from that school cooperated in either round. Rates are given both weighted and unweighted. Weighted rates were calculated using the school base weight for schools and teachers and the child base weight for

Table 5-20. The ECLS-K, spring-kindergarten: number of completed teacher questionnaires and teacher-level response rates

| | Teacl | ner question | naire A | Teac | her questionr | naire B |
|-------------------------------|------------------------|--------------|------------|------------|---------------|------------|
| | | Respo | onse rates | | Respo | nse rates |
| School characteristica | Completes ^b | Weighted | Unweighted | Completesb | Weighted | Unweighted |
| All schools | 3,215 | 69.1 | 68.5 | 3,243 | 69.6 | 69.1 |
| School type | | | | | | |
| Public | 2,819 | 69.5 | 69.2 | 2,830 | 69.7 | 69.5 |
| Private | 396 | 67.3 | 66.0 | 413 | 69.4 | 68.9 |
| Catholic | 168 | 88.0 | 88.5 | 176 | 92.3 | 92.6 |
| Other private | 228 | 55.6 | 55.1 | 237 | 56.8 | 57.2 |
| Type of locale | | | | | | |
| Large city | 688 | 70.2 | 70.1 | 703 | 73.0 | 71.6 |
| Mid-size city | 640 | 74.2 | 73.6 | 646 | 75.0 | 74.3 |
| Urban fringe of large city | 955 | 66.7 | 66.0 | 953 | 66.6 | 65.9 |
| Urban fringe of mid-size city | 244 | 63.6 | 62.5 | 253 | 66.0 | 64.8 |
| Large town | 85 | 86.1 | 84.0 | 86 | 87.2 | 85.0 |
| Small town | 288 | 67.9 | 65.8 | 291 | 69.0 | 66.5 |
| Rural | 315 | 65.9 | 66.8 | 311 | 63.0 | 65.9 |
| School size (Kindergartners) | | | | | | |
| 1 to 12 | 64 | 74.4 | 67.8 | 67 | 76.4 | 71.0 |
| 13 to 24 | 157 | 61.6 | 64.9 | 158 | 61.1 | 65.4 |
| 25 to 36 | 114 | 75.4 | 77.8 | 116 | 75.6 | 79.2 |
| 37 or more | 2,880 | 69.3 | 68.1 | 2,902 | 69.9 | 68.6 |
| Percent minority enrolled | | | | | | |
| 0 – 10% | 736 | 69.7 | 68.1 | 740 | 69.7 | 68.5 |
| 11 - 49% | 1,070 | 66.7 | 67.0 | 1,083 | 67.9 | 67.9 |
| 50 - 89% | 704 | 70.0 | 70.9 | 726 | 71.0 | 73.2 |
| 90 - 100% | 596 | 74.7 | 74.1 | 573 | 72.8 | 71.2 |
| Unknown | 109 | 62.8 | 59.7 | 121 | 65.7 | 66.3 |
| Region | | | | | | |
| Northeast | 486 | 64.0 | 64.1 | 490 | 63.7 | 64.6 |
| Midwest | 574 | 75.4 | 73.5 | 613 | 77.9 | 78.5 |
| South | 1,288 | 71.3 | 69.5 | 1,267 | 70.6 | 68.3 |
| West | 867 | 63.1 | 64.6 | 873 | 64.7 | 65.1 |
| High grade | | | | | | |
| Trans K, K or trans 1 | 134 | 69.9 | 67.3 | 160 | 79.1 | 80.3 |
| 01-12 | 3,019 | 69.5 | 69.2 | 3,017 | 69.5 | 69.1 |
| Ungraded | 10 | 77.2 | 76.9 | 12 | 92.4 | 92.3 |
| Unknown | 52 | 58.5 | 57.9 | 54 | 61.1 | 60.2 |

^aBased on frame data.

^bNonblank questionnaire.

Table 5-21. The ECLS-K, spring-kindergarten: number of completed instruments and child-level completion rates for additional data collected

| | | Comple | etion rates |
|---|-----------|----------|-------------|
| Instrument | Completes | Weighted | Unweighted |
| School Facilities Checklist | 21,140 | 96.6 | 93.6 |
| Student Record Abstract | 16,902 | 75.9 | 74.8 |
| Salary and Benefits (principal) | 19,628 | 91.0 | 86.9 |
| Salary and Benefits (regular teacher) | 18,700 | 88.1 | 87.3 |
| Salary and Benefits (special education teacher) | 240 | 31.4 | 30.0 |
| Special Education Teacher Questionnaire A | 737 | 94.1 | 92.2 |
| Special Education Teacher Questionnaire B | 698 | 87.2 | 87.4 |
| Adaptive Behavior Scale | 32 | 45.6 | 45.7 |

Table 5-22. The ECLS-K: number sampled and number and percent cooperating during fall- or spring-kindergarten, with percent of fall respondents who also responded in the spring

| | | Responded fall or spring | Base year r | Percent of fall respondents who also responded in spring | | |
|---------------------|---------|--------------------------|-------------|--|----------|------------|
| | Sampled | kindergarten | Weighted | Unweighted | Weighted | Unweighted |
| Schools | | | | | | |
| Before substitution | 1,277 | 944 | 74.2 | 73.9 | 99.3 | 99.5 |
| After substitution | 1,277 | 1,018 | 80.7 | 79.7 | 99.4 | 99.6 |
| Children | 22,782 | 20,929 | 92.0 | 91.9 | 95.1 | 95.3 |
| Parents | 22,782 | 20,141 | 88.8 | 88.4 | 93.7 | 93.7 |
| Teachers | 3,551 | 3,305 | 93.5 | 93.1 | _a | _a |

^a The conditional response rate is not presented for teachers because in the spring a teacher was considered to be a respondent if the teacher questionnaire B had been completed in either the spring or the fall. Therefore, the nominal fall to spring retention rate would be meaningless, i.e., 100 percent.

children and parents. In a longitudinal study such as the ECLS-K, another informative measure is the rate at which respondents in one round of data collection continue to cooperate in the next round. Typically the retention rates from round to round are higher than the initial cooperation rate. This is definitely true of the ECLS-K where the fall-kindergarten child assessment completion rate was 89.9 percent (see table 5-5), but 95.1 percent of fall-assessed children were also assessed in spring-kindergarten. The difference for parents was even more dramatic: 85.3 percent cooperated in the fall, of whom 95.1 percent also participated in the spring. Of schools that cooperated in the fall, over 99 percent continued in the study during the spring.

6. DATA PREPARATION

As described in chapter 5, two types of data collection instruments were used for the Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K)—computer-assisted and self-administered paper forms (hard copy). The data preparation approach differs with the type of data collection. The direct child assessment and parent interview were conducted using computer-assisted personal interviewing (CAPI) and computer-assisted telephone interviewing (CATI). Editing specifications were built into the computer program used by field staff to collect the data. The teacher and school administrator forms were self-administered. When the field supervisors returned these forms, coders recorded the receipt of these forms into a project-specific forms tracking system. Coders reviewed the questionnaires to ensure data readability for transfer into an electronic format. The visual review included changing any "other" responses that actually fit within the numerical answer structure of the question. (This is called upcoding.) There were some items where upcoding was conducted after the data were keyed due to the large volume of other responses. Once they finished this review, the coders sent the instruments to data entry to be manually transferred to an electronic format and reviewed for range and logic consistency. This section presents the data preparation activities for both types of data collection in more detail.

6.1 Coding and Editing Specifications for CATI/CAPI

The very nature of designing a computer-assisted interview forces decisions about edit specifications to be made up front. Both acceptable ranges and logic consistency checks were preprogrammed into the electronic questionnaire. The next few sections describe the coding and editing of the data collected using CATI/CAPI.

6.1.1 Range Specifications

Within the CATI/CAPI instruments, respondent answers were subjected to both "hard" and "soft" range edits during the interviewing process. A "soft range" is one that represents the reasonable expected range of values but does not include all possible values. Reponses outside the soft range were confirmed with the respondent and entered a second time. For example, the number of hours each week a

child attends a day care center on a regular basis had a soft range of 1 to 50. A value outside this range could be entered and confirmed as correct by the assessor as long as it was within the hard range of values (1 to 70).

"Hard ranges" are those that have a finite set of parameters for the values that can be entered into the computer, for example, "1-13 pounds" for birth weight. Out-of-range values for closed-ended questions were not accepted. If the respondent insisted that a response outside the hard range was correct, the assessor could enter the information in a comments data file. Data preparation and project staff reviewed these comments. Out-of-range values were accepted if the comments supported the response.

6.1.2 Consistency Checks (Logical Edits)

Consistency checks, or logical edits, examine the relationship 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 item unlikely. For example, in the household roster, one could not be recorded as a mother and male. When a logical error such as this occurred during a session, the assessor saw a message requesting verification of the last response and a resolution of the discrepancy. In some instances, if the verified response still resulted in a logical error, the assessor recorded the problem either in a comment or on a problem report.

6.1.3 Coding

Additional coding was required for some items of data collected in the CAPI/CATI instruments. These items included "Other, specify" text responses, occupation, race-ethnicity, and language. Staff were recruited and trained to code these data using coding manuals designed by Westat and NCES to support the coding process. In this section, we describe the coding activities for the CAPI/CATI instruments.

Review of "Other, specify" Items

The "Other, specify" open-ended parent interview responses were reviewed to determine if they should be coded into one of the existing code categories. During the data collection, when a respondent selected an "other" response in the parent interview, the assessor entered the text into a "specify" overlay that appeared on the screen. These text "specify" responses were reviewed by the data preparation staff and, where appropriate, coded into one of the existing response categories. If a text "specify" response for which there was no code occurred frequently enough, new codes were added.

Fall-Kindergarten Parent Interview

Review of the "specify" text responses revealed over 1,000 cases where respondents spoke languages other than the ones specified in the questionnaire as spoken in the household. Over 50 languages beyond the options provided were recorded, and there were over 100 cases with other languages (892 for other languages, 306 for primary language). Given the frequency with which some of the languages appeared, groups of languages were created based on geographic boundaries. These additions were: African language; Eastern European language; Native American language; Sign language; Middle Eastern language; Western European language; Indian subcontinent language; Southeast Asian language; Pacific Islander language; and other language.

Spring-Kindergarten Parent Interview

No additional codes were added from the review of the spring-kindergarten parent interview "Other, specify" items.

Parent Occupation Coding

Occupations were coded using the "Manual for Coding Industries and Occupations," March 1999 (National Household Education Survey, NHES: 99). This coding manual was created for NHES and used an aggregated version of industry and occupation codes. The industry and occupation codes used by NHES were originally developed for the National Postsecondary Student Aid Study (NPSAS, 1990) and

contained one to four digits. Analysis of the NPSAS categories revealed that some categories had very small numbers of cases and some categories that are similar in industry or occupation had similar participation rates, suggesting that the separate codes could be collapsed without significant loss of information. The NHES industry and occupation code categories use a one-digit code, the highest level of aggregation, to have sufficient numbers of cases to support analysis without collapsing categories. There are 13 industry codes and 22 occupation codes in the NHES coding scheme. If an industry or occupation could not be coded using this manual, the "Index of Industries and Occupations - 1980" and "Standard Occupational Classification Manual—1980" were used. Both of these manuals use an expanded coding system and at the same time are directly related to the much more condensed NHES coding scheme. The 1980 manuals were used for reference in cases where the NHES coding scheme did not adequately cover a particular situation (see chapter 7, section 7.4 for an expanded description of the industry and occupation codes).¹

Occupation coding began with an autocoding procedure using a computer string match program developed for the NHES. The program searched the responses for strings of text for each record/case and assigned an appropriate code. About 25 percent of the cases were autocoded and were not verified because there was an exact match between the respondent's answer and the occupation code.

Cases that could not be coded using the autocoding system were coded manually by coders using a customized coding utility program designed for coding occupations. The customized coding utility program brought up each case for coders to assign the most appropriate codes. In addition to the text strings, other information such as main duties, highest level of education, and name of the employer was available for the coders. The coders used this information to ensure that the occupation code assigned to each case was appropriate.

Verification of coding is an important tool to assure quality control and as an extension of coder training. As a verification step, two coders independently assigned codes, i.e., double-blind coding, to industry and occupation cases. A coding supervisor arbitrated disagreements between the two codes, the initial code and the verification code. In the early stages of each coder's work, 100 percent of each coder's work was reviewed. Once the coder's error rate had dropped to one percent or less, ten percent of the coder's work was reviewed.

Office of Budget and Management, Executive Office of the President (1980). *Standard Industrial Classification Manual*. Springfield, VA, and Office of Federal Statistical Policy and Standards, U.S. Department of Commerce (1980). *Standard Occupational Classification Manual* (2nd ed.). Washington, DC: Superintendent of Documents, U.S. Government Printing Office.

Partially Complete Parent Interviews

A "completed" parent instrument was defined by whether the section on family structure (FSQ) was completed by the interviewer. Only completed interviews were retained in the final data file. A small number of interviews in each round, approximately 50 (<1 percent) in fall-kindergarten and 75 (<1 percent) in spring-kindergarten, terminated the parent interview after the FSQ section but before the end of the instrument. These interviews were defined as "partially complete" cases and were included in the data file. All instrument items after the interview termination point were set to -9 for "not ascertained."

Household Roster in the Parent Interview

Several tests were run on the household roster to look for missing or inaccurate information. First, the relationship of an individual to the focal child was compared to the individual's listed age and gender. There were 235 cases with inconsistencies (such as a male mother or a biological mother over age 80) that were examined more closely, and any problems found were corrected wherever possible; 231 cases were corrected. Second, households with more than one mother or more than one father were scrutinized for errors. While it is possible to have more than one mother in a household—for example, a household could contain one biological and one foster mother of the focal child—such cases warranted closer inspection. There were 37 cases with more than one mother or father in the household. Corrections were made wherever clear errors existed. Twenty-one cases were corrected, and the other 16 appeared to be correct. Lastly, the relationship of an individual to both the focal child and the reference person was examined, as there are cases in which the relationship of an individual to the focal child conflicts with his status as the spouse/partner of the reference person. For example, in a household containing a child's grandparents, but not his or her parents, we may designate the grandmother as the "mother" figure, and the grandfather thus becomes the "father" by virtue of his marriage to the grandmother. These cases were examined but left unchanged. Both the original—and correct (grandfather)—relationship data and the new "parent-figure" designation (father) that had been constructed were kept.

Race-Ethnicity Coding

Just under 5,000 "Other, Specify" responses were received on the race-ethnicity questions because respondents were allowed to indicate that they belonged to more than one race. Many of these

"others" included more than one response (e.g., African American/Asian or American Indian/white). The open responses were coded into one or more of the following seven categories: one Hispanic category; White, non-Hispanic; Black or African American, non-Hispanic; American Indian or Alaskan Native; Asian; Native Hawaiian, or other Pacific Islander; and one unspecified multirace-ethnicity category.

The same coding rules were used to code all race-ethnicity variables for children, resident parents, and nonresident parents. See chapter 7, section 7.4.1 for details on how the race variables were coded and how the race-ethnicity composite was created.

6.2 Coding and Editing Specifications for Hard Copy Questionnaires

6.2.1 Receipt Control

In order to monitor the more than 125,000 documents that were to be received in the base year, a project-specific receipt and document control system was established. The receipt and document control system was initially loaded with the identifying information such as identification numbers for schools, teachers, and children; the links between teachers and children; and the questionnaires that were expected from each school and teacher, for each cooperating school in the sample. As data were collected in the field, field staff completed transmittal forms for each school to indicate which questionnaires were being mailed to the home office. Once data collection started, receipt control clerks compared the transmittal forms to the questionnaires sent in from the field for accuracy and completeness. The identification number on each form was matched against the identification numbers in the tracking system to verify that the appropriate number of forms for each school was returned. The forms were then logged into the receipt and document control system. Once forms were logged in, if they had any data (some forms had no data due to refusal by the respondent to complete them), they were then coded; the data were entered into electronic format, after which the data were edited. The following sections describe the coding, data entry, and editing processes for hard copy questionnaires.

6.2.2 Coding

The hard copy questionnaires required coding of race-ethnicity for teachers, review of "Other, specify" text responses, and a quick visual review of particular questions in each questionnaire.

The quick visual review was to assure that the questionnaire values were accurate and complete and were consistent across variables and that the numbers were converted to the appropriate unit of measurement prior to converting data to an electronic format. The coding staff were trained on the coding procedures and had coding manuals to support the coding process. This staff also did the data editing after data entry was complete. Senior coders verified coding. The verification rate was set at 100 percent for each coder until accuracy of less than one percent error rate was established. After that point, work was reviewed at a rate of ten percent.

Review of "Other, specify" Items

The "Other, specify" text responses were reviewed by the data editing staff and, where appropriate, upcoded into one of the existing response categories. Reexamination of uncoded specify text responses in the fall-kindergarten teacher questionnaires, the spring-kindergarten teacher questionnaires, and the school administrator questionnaire revealed that all responses could be coded into preexisting categories. The small number of specify responses that remained after upcoding those did not fit into any preexisting category and were of insufficient numbers to warrant an additional category. No new codes were added.

Coding Teacher Race-Ethnicity

"Other, specify" text responses for race-ethnicity in the teacher questionnaire B were coded using the procedures described above in section 6.1.3.

Coding Teacher Language

"Other, specify" text responses for language in the teacher questionnaire A were coded using the procedures described above in section 6.1.3.

Coding the Psychomotor Assessment

In fall-kindergarten, the copy form items—copy a plus sign, a square, a triangle, an open-square with a circle, and an asterisk—and the draw-a-person item from the fine motor section of the psychomotor assessment required special coding. The coding protocol for the measure from which the fine motor assessment was adapted was used to code all drawings. A coding sheet was developed that contained both the scoring decisions for the copy forms and the draw-a-person. The coding sheet and coding protocol were reviewed prior to coder training by the authors of the measure from which the fine motor assessment was adapted.

Each copy form was scored separately based on the coding protocol. The first 1,100 forms were sent to one of the authors of the measure from which the fine motor assessment was adapted for additional review as a check on the quality of coding. These forms had ambiguous responses that required more expert adjudication and establishment of additional coding rules. The author made decisions about the drawings, and she coded the forms and established rules that were followed for the remainder of the forms. The coding was verified by the coding supervisor at 100 percent until the coder error rate fell below one percent. Coders were retrained as necessary to follow the coding protocol.

Coding the Facilities Checklist

On question 3a, parts a, b, c, and d, the valid options were "a little," "some" and "a lot." There was no response option for the value "none." However, in approximately 35 to 45 percent of the cases the field staff wrote in a category of "none." Thus a new category of "none" was included as a response option, even though it was not directly provided in the questionnaire.

6.2.3 Data Entry

Westat data entry staff keyed the forms in each batch. The data were rekeyed by more senior data entry operators at a rate of 100 percent to verify the data entry. The results of the two data entry passes were compared and differences identified. The hard copy form was pulled and examined to determine what corrections had to be made to the keyed data. These corrections were rekeyed. An

accuracy rate exceeding 99 percent was the result of this process. The verified batches were then transmitted electronically to Westat's computer system for data editing.

6.2.4 Data Editing

The data editing process consisted of running range edits for soft and hard ranges, running consistency edits, and reviewing frequencies of the results.

Range Specifications

Hard copy range specifications are the set parameters for high and low acceptable values for a question. Where values were preprinted on the forms, these were used as the range parameters. For open-ended questions, high and low ranges were established as acceptable values. Data frequencies were run on the range of values to identify any errors. Values outside the range fell out as an error and were printed on hard copy for a data editor to review. Cases identified with range errors were extracted from the data set, and the original response was updated. Data frequencies were then rerun and reviewed. This iterative process was repeated until no further range errors were found.

Consistency Checks (Logical Edits)

Consistency between variables not involved in a skip pattern was accomplished by programming logical edits between variables (for example, in teacher questionnaire A, the sum of the number of boys and girls in the class could not exceed the total number of children enrolled in the classroom). These logical edits were run on the whole database after all data entry and range edits were complete. The logical edits were run separately for each form. All batches of data were combined into one large data file, and data frequencies were produced. The frequencies were reviewed to ensure the data remained logically consistent within the form. When an inconsistency was found, the case was identified and the inconsistency was printed on paper for an editor to review. The original value was replaced, and the case was then rerun through the consistency edits. Once the case passed the consistency edits, it was appended back into the main data set. The frequencies were then rerun and reviewed. This was an iterative process; it was repeated until no further inconsistencies were found.

Frequency and Cross-Tabulation Review

Frequencies and cross-tabulations were run to determine consistency and accuracy across the various forms and matched against the data in the field management system. If discrepancies could not be explained, no changes were made to the data. For example, in teacher questionnaire A, an item asking about languages other than English spoken in the classroom includes a response option of "No language other than English." If a respondent circled that response but also answered that other languages besides English were spoken in the classroom, then the response was left as recorded by the respondent.

7. DATA FILE CONTENT AND COMPOSITE VARIABLES

This chapter describes the content of the Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K) Base Year Public-Use Data Files. There are three data files: one each for school, teacher, and child. The school file contains one record for each of the 866 schools providing a school administrator questionnaire; the teacher file contains one record for each of the 3,305 responding teachers; and the child file contains one record for each of the 21,260 responding students. School- and teacher-level data, including composites, are also stored on the child catalog for the convenience of users performing child-level analyses that require school or teacher data. Each of these data files is stored in the root directory of the CD-ROM as an ASCII file; the file names are school dat, teacher dat, and child dat. However, it is strongly recommended that users access the data using the Electronic Code Book (ECB) software available on the CD-ROM rather than access the ASCII files directly. Appendix B contains the record layout for the school, teacher, and child files.

7.1 Identification Variables

Each data file contains an identification (ID) variable that uniquely identifies each record. For the school file, the ID variable is S_ID; for the teacher file, the ID variable is T_ID; and for the child file, the ID variable is CHILD_ID.

Each type of respondent has a unique ID number. The school ID number is the base for all the subsequent ID numbers as children, parents, and teachers were sampled from schools. The school ID number is a four-digit number assigned sequentially to sampled schools. The school ID has a series of ranges: 0001-1299 for originally sampled schools; 2000 series for new schools added to the sample during the sample freshening process; 3000 series for substitute schools that replaced nonresponding original sample schools; and 4000 series for transfer schools, which were assigned during processing at the home office. (See chapter 4 for a complete description of the ECLS-K sample.)

The child ID number is a concatenation of the school ID where the child was sampled, a three-digit student number and the letter "C." For example, 0001001C is the ID number of the first child sampled in school 0001. The teacher ID number is a concatenation of the school ID where the teacher was sampled, the letter "T" and a two-digit teacher number. For example, 0001T01 is the ID number for the

first teacher sampled in school 0001. The parent ID number is linked to the child ID number and is a concatenation of the school ID, the child ID and the letter "P." For example, 0001001P is the ID number of the parent of the first child sampled in school 0001. If twins are sampled in a particular household, the ID of the first child sampled is used to generate the parent ID. For twins, there will be two child-level records with the same parent ID. Children with the same teacher can be identified by finding all children on the child file with the same teacher ID.

7.2 Missing Values

All variables on these files use a standard scheme for missing values. Codes are used to indicate item nonresponse, legitimate skips, unit nonresponse, and suppressed data.

- -1 Not Applicable (legitimate skip)
- -2 Data Suppressed
- -7 Refused
- -8 Don't Know
- -9 Not Ascertained

(blank) System Missing

The "not applicable" code (-1) indicates that the respondent did not answer the question due to skip instructions within the instrument or external reasons that lead a respondent to not participate. For the child file where the respondents were directly interviewed, a "not applicable" is coded for items that were not asked of the respondent because of a previous answer given. For example, an item about a sibling's age is not asked when the respondent has indicated that the child has no siblings. A "not applicable" code is also used in the direct child assessment if a child did not participate in any section due to language or a disability. For the teacher and school files where the instruments are self-administered, a "not applicable" is coded for items that the respondent left blank because the written directions instructed them to skip the item due to a certain response on a previous item.

Depending on the research question being addressed, cases with a value of -1 may need to be recoded. For example, a researcher interested in the average number of hours kindergarten children spend in relative care, would include both children who are in such care and those who do not receive relative care, i.e. children whose overall exposure is zero hours. These cases would have a -1 for the question on

number of hours in relative care, since they would have been skipped out of the series once the respondent had answered that the child had no relative care. Thus, the -1s would first have to be converted to zero before being included in the computations. If the same researcher was interested in the average time children in relative care spend in such care, he would simply average the cases with valid data values, i.e. those with no missing values or -1s.

The "data suppressed" code (-2) indicates that the data for that variable are suppressed in order to protect the identity of the respondent or child. When the data for a variable are suppressed, all the cases have a value of -2 for that variable. A comment, "This data is suppressed for respondent confidentiality," is displayed in the comment field in the electronic code book.

The "refused" code (-7) indicates that the respondent specifically told the interviewer that he or she would not answer the question. This, along with the "don't know" code and the "not ascertained" code, indicates item nonresponse. This code rarely appears in the school and teacher files because it indicates the respondent specifically wrote something on the questionnaire indicating an unwillingness to answer the question.

The "don't know" code (-8) indicates that the respondent specifically told the interviewer that he or she does not know the answer to the question (or in rare cases on the self-administered questionnaires, "I don't know" was written in for the item). The "don't know" code was also used in the direct child assessment when children did not answer a particular question after procedures had been followed to repeat the question and try it again. For items where "don't know" is one of the options explicitly provided, a "-8" will not be coded for those that choose this option; instead the "don't know" response will be coded as indicated in the value label information for that item.

The "not ascertained" code (-9) indicates that the respondent left the item blank that he or she should have answered. For the school and teacher self-administered questionnaires, this is the primary code for item nonresponse. For data outside the instruments, e.g., direct assessment scores, a –9 means that a value was not ascertained or could not be calculated due to nonresponse.

System missing appears as a blank when viewing code book frequencies and in the ASCII data files. System missing codes (blanks) indicate that an entire instrument or assessment is missing due to unit nonresponse. For example, if a child's parent did not participate in the parent interview, then all items from the parent interview will have a system missing. These may be translated to another value

when the data are extracted into specific processing packages. For instance, SAS will translate these blanks into periods (".") for numeric variables.

Missing values for composite variables were coded in a similar fashion. If a particular composite was inappropriate for a given household—as the variable P1MOMID was for a household with no resident mother—that variable was given a value of -1. In instances where a variable was appropriate, but complete information to construct the composite was not available, the composite was given a value of -9. The "Refused" and "Don't Know" codes were not used for the composites, except in the calculations of the height, weight, and body mass index (BMI) composites for fall-kindergarten and spring-kindergarten.¹

The ECLS-K Base Year Public-Use Data Files are provided on a CD-ROM and are accessible through an ECB that allows data users to view variable frequencies, tag variables for extraction, and create the SAS, SPSS for Windows, or STATA code needed to create an extract each file for analysis. The three data files on the ECB—school, teacher, and child—are each referred to as a "catalog." Instructions for using the CD-ROM and ECB are provided in chapter 8.

7.3 Variable Naming Conventions

Variables were named according to the data source, (e.g., parent interview, teacher questionnaire) and the data collection point (e.g., fall-kindergarten, spring-kindergarten). These variable names are used consistently throughout all three catalogs. In general, variable names start with the following prefixes:

- A1 Data collected/derived from fall-kindergarten teacher questionnaire A.
- A2 Data collected/derived from spring-kindergarten teacher questionnaire A.
- B1 Data collected/derived from fall-kindergarten teacher questionnaire B.

¹ Children's height and weight measurements were each taken twice to prevent error and provide an accurate reading. Children's BMI was calculated based on height and weight. The rules for using "don't know" and "not ascertained" codes for these values was as follows. If both the first and second measurement of height in the child assessment were coded as -8 (don't know), then the height composite was coded as -8 (don't know). If both the first and second measurements of weight were coded as -8 (don't know), the weight composite was coded as -8 (don't know). If either the height or weight composites were coded as not ascertained (-9), the BMI composite was coded as not ascertained (-9). If neither the height nor weight composites were coded as not ascertained, and either the height or weight composite was coded as -8 (don't know), then the BMI composite was coded as -8 (don't know).

| B2 | Data collected/derived from spring-kindergarten teacher questionnaire B. |
|----|--|
| BY | Base year panel weight variables. |
| C1 | Data/scores collected/derived from fall-kindergarten direct child assessment and fall-kindergarten weight variables. |
| C2 | Data/scores collected/derived from spring-kindergarten direct child assessment and spring-kindergarten weight variables. |
| F1 | Data from fall-kindergarten field management system (FMS). |
| F2 | Data from spring-kindergarten FMS. |
| FK | Data from base year (cross round) FMS. |
| IF | Imputation flags. |
| K2 | Data collected/derived from spring-kindergarten school facility checklist. |
| P1 | Data/scores collected/derived from fall-kindergarten parent interview. |
| P2 | Data/scores collected/derived from spring-kindergarten parent interview. |
| R1 | Derived child demographic or child status variables for fall-kindergarten. |
| R2 | Derived child demographic or child status variables for spring-kindergarten. |
| S2 | Data collected/derived from spring-kindergarten school administrator questionnaire. |
| T1 | Data/scores collected/derived from fall-kindergarten teacher questionnaire C. |
| T2 | Data/scores collected/derived from spring-kindergarten teacher questionnaire C. |
| WK | Base year (cross round) parent composite variables. |

A few exceptions that do not follow the above-mentioned prefix convention are:

The identifiers CHILDID, PARENTID, T1 ID, T2 ID, S1 ID, and S2 ID.

School demographic variables from the sample frame that are named CREGION (Census region), and CS_TYPE2 (type of school), KURBAN (location type, e.g., large city, small town).

In general, all composites derived from a given source maintain the same prefix as the source. Some composite variables, however, combined information across data collection points and/or several sources and are consequently not associated with any

prefixes. Derived child demographic variables, gender, race-ethnicity, and date of birth, were created from the best source of data and are named GENDER, RACE, DOBMM, DOBDD, and DOBYY. Other such derived variables include CREGION, FKCHGSCH, FKCHGTCH, KURBUN, R1_KAGE and R2_KAGE. Sources and other details for these and all other composite variables can be found in table 7-6.

7.4 Composite Variables

To facilitate analysis of the survey data, a group of composite variables were created and added to the child, teacher and school data files. Variables based on the child assessment include height, weight, and BMI. Variables based on the teacher data include class type (e.g., AM, PM, or all-day kindergarten class), student-teacher instructional ratio, and teacher's age. Variables constructed from the school data include the percentage of minority students, school type, and school instructional level. Variables constructed from the parent interview data include parent identifiers, parent demographics, household composition, household income and poverty, childcare, and child demographics.

Table 7-6 lists all the composite variables. All basic child demographic items (gender, age, race-ethnicity, and date of birth) are listed first. Child care variables follow the demographics, and then household composition and imputed variables are listed. Demographics for parents are next; resident father and mother characteristics are first, followed by characteristics of nonresident biological parents and nonresident adoptive parents. Teacher, classroom, and school variables are listed last. Once the user identifies the composites of interest, he or she can refer to table 8-8 for instructions on accessing the variables from the ECB.

7.4.1 Child Variables

Child Height Composite (C1HEIGHT and C2HEIGHT)

Children's height was measured twice. For the height composite (C1HEIGHT and C2HEIGHT), if the two height values from the instrument were less than two inches apart, the average of the two height values was computed and used as the composite value. Otherwise, the value that was closest to 43 inches (the average height for a five year old child) was used as the composite.

Child Weight Composite (C1WEIGHT and C2WEIGHT)

Children's weight was measured twice. For the weight composite (C1WEIGHT and C2WEIGHT), if the two weight values from the instrument were less than five pounds apart, the average of the two values was computed and used as the composite value. Otherwise, the value that was closest to 40 pounds (the average weight for a five year old child) was used as the composite value.

Child BMI Composite (C1BMI and C2BMI)

Composite BMI (C1BMI and C2BMI) was calculated by multiplying the composite weight in pounds by 703.0696261393 and dividing by the square of the child's composite height in inches.

Child Date of Birth Composite (DOBYY, DOBMM, and DOBDD)

The child date of birth composite was created using parent interview data and, in cases in which the parent interview data did not exist or were outside of the criteria for inclusion, using the FMS data. If the date of birth given was before June 1, 1990, or after March 31, 1995, the data were excluded.

Child Age at Assessment Composite (R1 KAGE, R2 KAGE)

The child's age was calculated by determining the number of days between the child assessment date and the child's date of birth. The value was then divided by 30 to calculate the age in months.

Gender Composite (GENDER)

The gender composite was derived using the gender indicated in the parent interview and, if it was missing, the FMS. Also, if the gender was different in the fall-kindergarten parent interview and spring-kindergarten parent interview, the FMS gender was used.

Race-Ethnicity Composites

The data on race-ethnicity is presented in the ECLS-K files in two ways. Since a respondent was allowed to indicate that they belonged to more than one of the five race categories (White, Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific Islander), a series of five dichotomous race variables were created that indicated separately whether the respondent belonged to any of the five specified race groups. In addition one more dichotomous variable was created for those who had simply indicated that they were multiracial without specifying the race (e.g., biracial).

Data was collected on ethnicity as well. Respondents were asked if they were Hispanic or not. Using the six race dichotomous variables and the Hispanic ethnicity variable, a race-ethnicity composite variable was created. The categories were: White, non Hispanic; black or African American, non-Hispanic; Hispanic, race specified; Hispanic, no race specified; Asian; Native Hawaiian or other Pacific Islander; American Indian or Alaskan Native, and more than one race specified, non-Hispanic.

The retention of the dichotomous on the file allows users to create different composites as needed.

7.4.2 Family and Household Variables

The list of all composite variables, including variables used to derive the composites, is given in table 7-6 at the end of this chapter. Several household and family composite variables were created. The creation of one of these, socioeconomic status (SES), is described below.

The socioeconomic scale (SES) variable was computed at the household level for the set of parents who completed the parent interview in fall-kindergarten or spring-kindergarten. The SES variable reflects the socioeconomic status of the household at the time of data collection for spring-kindergarten (Spring 1999). The components used for the creation the SES were:

Father/male guardian's education;

Mother/female guardian's education;

Father/male guardian's occupation;

Mother/female guardian's occupation; and

Household income.

The parent's occupation was recoded to reflect the average of the 1989 General Social Survey (GSS) prestige score² of the occupation. It was computed by averaging the corresponding prestige score of the 1980 Census occupational category codes covered by the ECLS-K occupation. Table 7-6 provides details on the prestige score values.

The variables were collected as follows:

- 1. **Income.** The information about income was collected in spring-kindergarten. As a result, income is missing for all households with parents who did not participate in the survey in spring-kindergarten.
- 2. **Parent's education.** The information about parent's education was collected in round 1. For households not interviewed in fall-kindergarten (e.g., parents of children in refusal-converted schools), this information was collected in spring-kindergarten.
- 3. **Parent's occupation.** The information about parent's education was collected in fall-kindergarten only.

Because not all the parents responded to all the questions or were respondents in both rounds, there were missing values for some of the components of the SES indicator. The amounts of missing data for these variables were small percentages, with income having the largest percentage missing (see table 7-1 below).

Table 7-1. Missing data for SES variables

Variable Number Missing Percent Mother's Education 414 2.1% Father's Education 756 3.8% Mother's Occupation 2256 11.3% Father's Occupation 2252 11.3% 28.2% Household Income 5630

-

² Nakao, K., and Treas, J. (1992). *The 1989 Socioeconomic Index of Occupations: Construction from the 1989 Occupational Prestige Scores:* General Social Survey Methodological Report No. 74. Chicago: NORC.

A hot deck imputation methodology was used to impute for missing values of all components of the SES. In hot deck imputation, the value reported by a respondent for a particular item is given or "donated" to a "similar" person who failed to respond to that question. Groups or cells use auxiliary information known for both donors and nonrespondents. Ideally, donors and nonrespondents have similar characteristics in the cell. The value to impute is from the randomly selected donor among the respondents within the cell.

The SES component variables were highly correlated so a multivariate analysis was more appropriate for examining the relationship of the characteristics of donors and nonrespondents. A categorical search algorithm called CHAID (Chi-squared Automatic Interaction Detector) was used to divide the data into cells based on the distribution of the variable to be imputed. The analysis used the records with no missing values for the variable being imputed. CHAID not only analyzed and determined the best predictors but also created the cells that were used for hot deck imputation.

The variables were imputed in a sequential order and separately by type of household (female single parent, male single parent, and both parents present). For households with both parents present, the mother's and father's variables were imputed separately. The new imputed values were used in the creation of the imputation cells if these values had been already imputed. If this was not the case, an "unknown" or missing category was created as an additional level for the CHAID analysis. As a rule, no imputed value was used as a donor. In addition, the same donor was not used more than two times. The order of the imputation for all the variables was from the lowest percent missing to the highest. Occupation imputation involved two steps. First, the labor force status of the parent was imputed, i.e., whether the parent was employed or not. Then the parent's occupation was imputed only for those parents whose status was identified as employed either through the parent interview or the first imputation step. The variable for income was imputed last using a three-stage procedure, where if a respondent provided some partial information about income, that was used in the imputation process as well. For example, some respondents did respond in the parent interview to the item on whether they earned more or less than \$25,000 but did not respond to the items asking for further details.

For example, for households where both parents are present, variables were imputed in the following order:

Mother's education;

Father's education;

Mother's labor force status;

Mother's occupation if the mother was employed or imputed as employed;

Father's labor force status;

Father's occupation if the father was employed or imputed as employed;

Income figure for households where the detailed income ranges are known;

Income figure for households where the broad income ranges are known; and

Income figure for households with no information about income.

Once the components of the SES variable were imputed, their corresponding z-score or normalized value was computed. The expression of z-score z_{hi} for the h-th component in the i-th household is

$$z_{hi} = \frac{x_{hi} - \overline{x}_{w}}{se(\overline{x}_{w})}$$

where

 x_{hi} is the value of the h-th SES component for the i-th household;

 w_i is the base weight for the *i*-th record;

 \overline{x}_w is the weighted mean of x_{hi} ; and

 $se(\overline{x}_w)$ is the standard error of \overline{x}_w .

That is, each component converted to a z-score with mean of 0 and a standard deviation of one. For income, the component x_i is defined as the logarithm of the income for i-th household. The logarithm of income was used as its distribution is less skewed than the direct income values. The SES value for the i-th household was then computed as

$$SES_{i} = \frac{\sum_{h=1}^{m_{i}} z_{hi}}{m_{i}}$$

where m_i is number of non-missing SES components for the *i*-th household. WKSESL is a continuous variable that ranges from -4.75 to 2.75. As described, the SES composite is the average of up to five measures, each of which was standardized to have a mean of 0 and a standard deviation of 1, hence the

negative valves. For analyses that require a continuous SES measure, such as multivariate regressions, WKSESL is the variable to use. For categorical analyses, use WKSESQ5.

Note that for households with only one parent present, not all the components were defined. In these cases, the SES was computed averaging the available components.

A categorical SES variable was created to indicate the quintile for the value of the SES. The quintiles were computed at the child level using the spring-kindergarten parent weights.

The imputed income variable was also used to create a household-level poverty variable. Income was compared to preliminary Census poverty thresholds for 1998, which vary by household size. Households whose income fell below the appropriate threshold were classified as poor (see table 7-2). For example, if a household contained two members, and the household income was lower than \$10,973, then the household was considered to be in poverty.

Table 7-2. Preliminary Census poverty thresholds for 1998¹

| Household Size | Weighted Average Thresholds |
|----------------|-----------------------------|
| 2 | \$10,973 |
| 3 | \$13,001 |
| 4 | \$16,655 |
| 5 | \$19,682 |
| 6 | \$22,227 |
| 7 | \$25,188 |
| 8 | \$28,023 |
| 9+ | \$33,073 |

¹ U.S. Census Bureau, Current Population Survey. http://www.census.gov/hhes/poverty/threshld/thresh98.html.

7.4.3 Teacher Variables

The list of all composite variables, including the variables used to derive the composites, is given in table 7-6 at the end of this chapter. Details about how one of the teacher composites, class type was created are provided below.

Base Year Class Type Composite (KGCLASS)

This composite indicates the type(s) of kindergarten class(es) teachers taught, (i.e., AM only, PM only, AM and PM, all day). If the fall-kindergarten class type and spring-kindergarten class type were the same, then that class type was used as KGCLASS. If either data collection point was missing, the remaining class type was used as KGCLASS. If one of the data collection points showed an answer that indicated overlapping times of day for instruction (the teacher indicated that he or she taught AM and all day classes, PM and all day classes, or AM, PM, and all day classes) and the other data collection point had a more typical answer (AM only, PM only, AM and PM, or all day), then the typical answer was used as KGCLASS. If the two data collection points both had consistent answers but they were different from each other, then the FMS data were used if it was in agreement with one of the data collection points. If there were two different overlapping answers in the two data collection points or the FMS was not in agreement with either of the two data collection points, then the fall-kindergarten answer was used. Overlapping answers, e.g., AM and all day, were used only when they were provided in both fall- and spring-kindergarten. If both data collection points had missing data, then the FMS data were used. Since KGCLASS is a teacher level variable it is only present in the teacher level dataset.

There were 1,063 respondents who chose the "other specify" category for question 3e in the teacher questionnaire C, student information section. A new variable, TZTT1OTG, was created that classified the "other specifies" from question 3e into the following five categories: ESL/Bilingual, Handicapped/Special Education, School-wide Title I, Computer, and other. It is important to remember that these responses were not offered to all respondents, and thus, should not be used to make estimates such as percentage of children participating in Title I computer programs. The goal of this variable was to provide some information on the large number of "other specifies" in this question.

7.4.4 School and Class Characteristics

The list of all composite variables, including the variables used to derive the composites, is given in table 7-6 at the end of this chapter. Variables on school and class characteristics were constructed from the teacher and school data. Details on how some of the variables were created follow.

Percent Minority Students (S2KMINOR)

The percent of minority students was derived from answers to the spring-kindergarten school administrator questionnaire by determining the percentage of children who were either of Hispanic origins (question 14) or who were American Indian or Alaskan Native, Asian, Black or African-American, or Native Hawaiian or Other Pacific Islander (question 15) to create the percent minority composite. In the questionnaire design, it was assumed that the school administrator would allow for overlap between the ethnicity and race. For example, 20 percent of the children could be listed as Hispanic, and these same children's races could be indicated in the next question, such that the percentages for different races in the school would add to 100 percent. However, this is not how all the questionnaires were answered; therefore, rules were established for the following five types of schools to accommodate different answer patterns. It is important to note that the term "race variables" refers to the variables obtained from question 15 that pertain solely to race, whereas the terms "ethnicity" or "Hispanic" refer to the ethnicity variable obtained from questions 14 and 15, i.e., both the race and ethnicity variables.

- Type 1: Schools with missing race or Hispanic data. For the schools that had all race variables missing, the Hispanic variables missing, or both race and the Hispanic variables missing, data from the school sample frame was used to create the percent minority composite. If there was no school sample frame data for certain records, then the composite was not created for those records.
- Type 2: Schools with race and Hispanic variables totaling less than 97 percent. For the schools that had race and Hispanic variables with percentages totaling less than 97 percent, school sample frame data were used to create composite.
- Type 3: Schools with race-ethnicity variables (questions 14 and 15) greater than 103 percent but race variables sum to less than 97 percent. For the schools that had a total of race and Hispanic variable percentages greater than 103 percent but with the sum of the race variables less than 97 percent, school sample frame data were used to create the composite.
- Type 4: Schools with total race-ethnicity percentages (sum of questions 14 and 15) between 97 percent and 103 percent. Several schools had the total percentages of Hispanic and race variables (question 14 and question 15) total to between 97

percent and 103 percent. Overall, these cases included two types of cases: a) where items in question 14 (Hispanicity) and question 15 (race) cumulatively added up to 100 percent, it was assumed that this indicated that the school administrator did not allow an overlap between ethnicity and race and therefore none of the percentages for whites were meant to indicate Hispanic whites; and b) cases where the percentages given for Hispanic was so small that it was less relevant how the principal interpreted these items and the total of question 14 and question 15 was not equal to 100 percent, but lay between 97 and 103 percent. Of these cases, some add up to exactly 100 percent, and so no adjustment was needed prior to calculating percentage minority. For the latter cases, the percent white was adjusted so that the total equaled 100. In order to do so, the percent white was divided by reported total (sum of question 14 and question 15) then multiplied by 100 to get adjustment. Then, 100 minus adjusted percent white was used for the percent minority.

■ Type 5: Schools with race-ethnicity percentages greater than 103 percent and race variables sum to between 97 percent and 103 percent. Many schools that had Hispanic and race variables that added to more than 103 percent and totals for race variables that were between 97 percent and 103 percent. This indicated that the school administrator interpreted these items to allow for overlap (e.g., there could be Hispanic whites, Hispanic African-Americans, etc.)—some of the whites may be Hispanic whites. It could not be known with certainty how many of the whites were Hispanic and how many were non-Hispanic. For these schools, the first step was to determine the range of possible values for percent minority (100 minus non-Hispanic whites) given the data. The following example illustrates this process:

Example: Hispanic = 60 percent; and Asian = 1 percent, Native Indian = 1 percent, African-American = 12 percent, Pacific Islander = 0 percent, white = 88 percent, and Total Races = 100 percent. Therefore, total of percent given for all races and Hispanic = 160 percent.

The next step was to determine the highest possible percent minority. This value was calculated assuming that all Hispanics are white-Hispanics. The Hispanic percent was subtracted from the percent white. (If percent Hispanic is greater than percent white, then percent white becomes zero.) Then remaining white percentage was subtracted from 100 to equal highest possible percent minority.

Example: Non-Hispanic whites = 88 percent (whites) – 60 percent (Hispanic) = 28 percent. Therefore, highest percent minority = 100 percent - 28 percent (non-Hispanic whites) = 72 percent.

The next step was to determine the lowest possible percent minority. This value was calculated assuming that all of the African-Americans were African-American-Hispanics and that any remaining Hispanics were white-Hispanics. Total African-Americans were subtracted from Hispanics, then only those remaining Hispanics were subtracted from whites to estimate the lowest possible percentage of non-Hispanic whites. Next, non-Hispanic whites were subtracted from 100 to get the lowest possible percent minority.

Example: Non-African-American Hispanics = 60 percent (Hispanics) - 12 percent (African-Americans) = 48 percent; Non-Hispanic whites = 88 percent (whites) - 48 percent (non-African-American Hispanics) = 40. Therefore, lowest percent minority = 100 percent - 40 percent (non-Hispanic whites) = 60 percent.

The last step was to compare this range of possible percent minority values to the school sample frame value. If the school sample frame value was within range of the possible values, then the school sample frame value was used as the percent minority composite. If the school sample frame value was outside of the range of possible values, then school sample frame values were not used because the range of values in the school administrator questionnaire offered at least some improvement for an estimate over the school sample frame alone. If the school sample frame value was lower than the range of values, the lowest possible percent minority was used as the composite estimate. If the school sample frame value was higher than the range of values, the highest possible percent minority was used as the composite estimate. For example, if the range of possible percent minority was 60 to 72 and the school sample frame value was 73, then the percent minority was estimated as 72.

School Type Composite (S2KSCTYP)

Questions 5 (whether school is public) and 7 (type of private school) from the school administrator questionnaire, along with school sample frame data, were used to create this variable. If the response to question 5 (Is this a public school?) was "Yes," then S2KSCTYP was coded "public." If the response to question 5 was "No," and the response to question 7.a. (Is your school a Catholic school) was

"Yes," then the school was coded as "Catholic." If the responses to both questions 5 and 7.a. were No," and the response to question 7.b. (Is your school private with another religious affiliation?) was "Yes," then S2KSCTYP was coded as "private, other religious." Otherwise, a school administrator questionnaire with valid answers to questions 5 and 7, then S2KSCTYP was coded as "private, non-religious." If there was no school administrator questionnaire, then school sample frame data were used to create the composite.

School Instructional Level Composite (S2KSCLVL)

The purpose of this composite is to classify schools based on the highest grade taught in the school. Question 4 (grade levels included in the school) of the school administrator questionnaire was used to create this composite. The highest grade level circled on the form was determined, and the grade level was classified accordingly. If question 4 was left blank, question 10 from the school administrator questionnaire (grade levels that participate in special programs, if applicable) was used as a proxy for question 4. If the respondent did not answer questions 4 and 10, or there was no school administrator questionnaire, then school sample frame data were used to determine the value for the composite.

7.4.5 Parent Identifiers and Household Composition

The construction of parent identifiers and the household composition variables from the parent interview data was a two-step process. First, individuals identifying themselves as the child's mother/father were located within the household roster, and their type (biological, adoptive, foster, step, partner, or unknown) was established. For households containing more than one father or mother, a hierarchy was used to designate the "current," or residential, parent of each sex. The biological parent, if present, was always the current mother or father. In the absence of a biological parent, the current mother/father designation was given to the adoptive, step, foster/guardian, partner, or "unknown-type" parent. This information, along with household size and presence or absence of grandparents, siblings, and other relatives was used to construct the household composition variables P1HPARNT, P2HPARNT, P1HDAD, P2HDAD, P1HMOM, P2HMOM, P1HFAMIL, and P2HFAMIL and parent type variables P1MOMTYP, P1DADTYP, P2MOMTYP, and P2DADTYP.

After the actual residential parents were identified and the composite variables were constructed, in any household without a parent the household respondent (and his or her spouse, if applicable) was assigned as a "parent figure." Parent demographic variables (including age, race-ethnicity, and education) were then constructed for all parents/parent "figures." It should be noted, however, that these parent "figures" were not incorporated into the construction of the household composition variables described above.

It should be noted that because the composite construction identifies only one resident mother and/or one resident father, same sex parents are not readily identified in the composites themselves. Two approaches can be used to identify these couples. First, the user should search the relationship variables (P1REL_1, P2REL_1, etc.) to identify households in which more than one person identifies himself or herself as a father/mother to the focal child. Secondly, since not all same-sex partners identify themselves as "mother" or "father" to the focal child, the user should also search for households in which the respondent (identified by P1PER_1, P2PER_1, etc.) is the child's parent and the respondent's spouse (identified from P1SPOUSE, P2SPOUSE) is the same sex as the respondent.

There are four sections in the parent interview that asked about parent-figure-specific questions:

ALQ Years child lived with person

PLQ Primary language

PEQ Parent education

EMQ Employment

Each of these sections may be completed during the parent interview about a different household member but about no more than four household members. Rather than reserve space (mostly unused) for these sections with each of the 17 household members (the FSQ section), these sections are repeated four times, with "pointer" or "foreign key" variables that hold the original number of the household member. For instance, if household member #3 is the first person to receive the ALQ section, then the pointer variable P1ALQHH1 will hold the value "3," and the actual ALQ variable P1YRS_1 will hold the number of years the child spent with the household member specified by the value of P1ALQHH1. Table 7-3 identifies the pointer variables.

Table 7-3. Pointers to parent figure questions

| | Person Pointer | | Interview Item |
|----------|---------------------|---------|--|
| P1ALQHH1 | P1 ALQ010 HH PERSON | P1YRS_1 | P1 ALQ010 YEARS CHD LIVED WITH PERSON 1 |
| | POINTER 1 | P1MON_1 | P1 ALQ010 MONTHS CHD LIVED WITH PERSON 1 |
| P1ALQHH2 | P1 ALQ010 HH PERSON | P1YRS_2 | P1 ALQ010 YEARS CHD LIVED WITH PERSON 2 |
| | POINTER 2 | P1MON_2 | P1 ALQ010 MONTHS CHD LIVED WITH PERSON 2 |
| P1ALQHH3 | P1 ALQ010 HH PERSON | P1YRS_3 | P1 ALQ010 YEARS CHD LIVED WITH PERSON 3 |
| | POINTER 3 | P1MON_3 | P1 ALQ010 MONTHS CHD LIVED WITH PERSON 3 |
| P1ALQHH4 | P1 ALQ010 HH PERSON | P1YRS_4 | P1 ALQ010 YEARS CHD LIVED WITH PERSON 4 |
| | POINTER 4 | P1MON_4 | P1 ALQ010 MONTHS CHD LIVED WITH PERSON 4 |
| P1PLQHH1 | P1 PLQ083-090 HH | P1RES_1 | P1 PLQ083 PERSON 1 LANGUAGE TO CHILD |
| | PERSON POINTER 1 | P1CHL_1 | P1 PLQ090 CHILD'S LANGUAGE TO PERSON 1 |
| P1PLQHH2 | P1 PLQ083-090 HH | P1RES_2 | P1 PLQ083 PERSON 2 LANGUAGE TO CHILD |
| | PERSON POINTER 2 | P1CHL_2 | P1 PLQ090 CHILD'S LANGUAGE TO PERSON 2 |
| P1PLQHH3 | P1 PLQ083-090 HH | P1RES_3 | P1 PLQ083 PERSON 3 LANGUAGE TO CHILD |
| | PERSON POINTER 3 | P1CHL_3 | P1 PLQ090 CHILD'S LANGUAGE TO PERSON 3 |
| P1PLQHH4 | P1 PLQ083-090 HH | P1RES_4 | P1 PLQ083 PERSON 4 LANGUAGE TO CHILD |
| | PERSON POINTER 4 | P1CHL_4 | P1 PLQ090 CHILD'S LANGUAGE TO PERSON 4 |
| P1PEQHH1 | P1 PEQ020-080 HH | P1HIG_1 | P1 PEQ020 PERS 1 HIGHEST EDUCATION LEVEL |
| | PERSON POINTER 1 | P1HIS_1 | P1 PEQ030 IF PERS 1 HIGH SCHOOL DIPLOMA |
| | | P1ENR_1 | P1 PEQ050 IF PERS 1 ENROLLED IN COURSES |
| | | P1FPT_1 | P1 PEQ060 PERS 1 COURSE FULL/PART TIME |
| | | P1TRN_1 | P1 PEQ070 IF PERSON 1 GETS JOB TRAINING |
| | | P1WKL_1 | P1 PEQ080 PERS 1 WEEK HOURS IN TRAINING |
| P1PEQHH2 | P1 PEQ020-080 HH | P1HIG_2 | P1 PEQ020 PERS 2 HIGHEST EDUCATION LEVEL |
| | PERSON POINTER 2 | P1HIS_2 | P1 PEQ030 IF PERS 2 HIGH SCHOOL DIPLOMA |
| | | P1ENR_2 | P1 PEQ050 IF PERS 2 ENROLLED IN COURSES |
| | | P1FPT_2 | P1 PEQ060 PERS 2 COURSE FULL/PART TIME |
| | | P1TRN_2 | P1 PEQ070 IF PERSON 2 GETS JOB TRAINING |
| | | P1WKL_2 | P1 PEQ080 PERS 2 WEEK HOURS IN TRAINING |
| P1PEQHH3 | P1 PEQ020-080 HH | P1HIG_3 | P1 PEQ020 PERS 3 HIGHEST EDUCATION LEVEL |
| | PERSON POINTER 3 | P1HIS_3 | P1 PEQ030 IF PERS 3 HIGH SCHOOL DIPLOMA |
| | | P1ENR_3 | P1 PEQ050 IF PERS 3 ENROLLED IN COURSES |
| | | P1FPT_3 | P1 PEQ060 PERS 3 COURSE FULL/PART TIME |
| | | P1TRN_3 | P1 PEQ070 IF PERSON 3 GETS JOB TRAINING |
| | | P1WKL_3 | P1 PEQ080 PERS 3 WEEK HOURS IN TRAINING |

Table 7-3. Pointers to parent figure questions (continued)

| | Person Pointer | | Interview Item | | |
|----------|--------------------------------------|---------|--|--|--|
| P1PEQHH4 | P1 PEQ020-080 HH | P1HIG_4 | P1 PEQ020 PERS 4 HIGHEST EDUCATION LEVEL | | |
| | PERSON POINTER 4 | P1HIS_4 | P1 PEQ030 IF PERS 4 HIGH SCHOOL DIPLOMA | | |
| | | P1ENR_4 | P1 PEQ050 IF PERS 4 ENROLLED IN COURSES | | |
| | | P1FPT_4 | P1 PEQ060 PERS 4 COURSE FULL/PART TIME | | |
| | | P1TRN_4 | P1 PEQ070 IF PERSON 4 GETS JOB TRAINING | | |
| | | P1WKL_4 | P1 PEQ080 PERS 4 WEEK HOURS IN TRAINING | | |
| P1EMQHH1 | P1 EMQ020-150 HH | P1PAY_1 | P1 EMQ020 PERS 1 HAD PAID JOB LAST WEEK | | |
| | PERSON POINTER 1 | P1VAC_1 | P1 EMQ030 IF PERS 1 ON LEAVE PAST WEEK | | |
| | | P1JOB_1 | P1 EMQ040 PERSON 1 NUMBER OF ALL JOBS | | |
| | | P1HRS_1 | P1 EMQ050 PERSON 1 HOURS/WK AT ALL JOBS | | |
| | | P1LOK_1 | P1 EMQ060 PERS 1 SOUGHT JOB LAST 4 WEEKS | | |
| | | P1DO1_1 | P1 EMQ070 PERS 1 CHKD W/PUB EMPL AGNCY | | |
| | | P1DO2_1 | P1 EMQ070 PERS 1 CHKD W/PRIV EMP AGNCY | | |
| | | P1DO3_1 | P1 EMQ070 PERS 1 CHKD W/EMPLOYR DIRECTLY | | |
| | | P1DO4_1 | P1 EMQ070 PERS 1 CHKD W/FRIENDS & REL | | |
| | | P1DO5_1 | P1 EMQ070 PERS 1 PLACED OR ANSWERED ADS | | |
| | | P1DO6_1 | P1 EMQ070 PERS 1 READ WANT ADS | | |
| | | P1DO7_1 | P1 EMQ070 PERS 1 DID SOMETHING ELSE | | |
| | | P1DOW_1 | P1 EMQ080 WHAT PERSON 1 DOING LAST WEEK | | |
| | | P1TAK_1 | P1 EMQ100 PERS 1 JOB AVAILABLE LAST WEEK | | |
| | | P1OCC_1 | P1 EMQ130-50 1ST PERSON OCCUPATION CODE | | |
| P1EMQHH2 | P1 EMQ020-150 HH PERSON POINTER 2 | P1PAY_2 | P1 EMQ020 PERS 2 HAD PAID JOB LAST WEEK | | |
| | | P1VAC_2 | P1 EMQ030 IF PERS 2 ON LEAVE PAST WEEK | | |
| | | P1JOB_2 | P1 EMQ040 PERSON 2 NUMBER OF ALL JOBS | | |
| | | P1HRS_2 | P1 EMQ050 PERSON 2 HOURS/WK AT ALL JOBS | | |
| | | P1LOK_2 | P1 EMQ060 PERS 2 SOUGHT JOB LAST 4 WEEKS | | |
| | | P1DO1_2 | P1 EMQ070 PERS 2 CHKD W/PUB EMPL AGNCY | | |
| | | P1DO2_2 | P1 EMQ070 PERS 2 CHKD W/PRIV EMP AGNCY | | |
| | | P1DO3_2 | P1 EMQ070 PERS 2 CHKD W/EMPLOYR DIRECTLY | | |
| | | P1DO4_2 | P1 EMQ070 PERS 2 CHKD W/FRIENDS & REL | | |
| | | P1DO5_2 | P1 EMQ070 PERS 2 PLACED OR ANSWERED ADS | | |
| | | P1DO6_2 | P1 EMQ070 PERS 2 READ WANT ADS | | |
| | | P1DO7_2 | P1 EMQ070 PERS 2 DID SOMETHING ELSE | | |
| | | P1DOW_2 | P1 EMQ080 WHAT PERSON 2 DOING LAST WEEK | | |
| | | P1TAK_2 | P1 EMQ100 PERS 2 JOB AVAILABLE LAST WEEK | | |
| | | P1OCC 2 | P1 EMQ130-50 2ND PERSON OCCUPATION CODE | | |

7.4.6 Changes in Household Composition between Fall-Kindergarten and Spring-Kindergarten

Changes in household composition between fall-kindergarten and spring-kindergarten may complicate analyses. A household may have two different mothers in the base year file, one for each data collection point. For most composite variables, a change in parent across rounds will result in missing values in spring-kindergarten, since much of the information collected in fall-kindergarten is either not collected in spring-kindergarten or is only asked of new households in spring-kindergarten. Consequently, the household with a change in mother between rounds will have a nonmissing value for mother's employment in fall-kindergarten, but a missing value for mother's employment in spring-kindergarten.

For several composites—education, mother's marital status, and mother's work history—a cross-round, "base year" composite was constructed to compensate for missing values resulting from household changes. These composites have a prefix of "w." In general, if a nonmissing value existed for spring-kindergarten, the composite was assigned that value; otherwise, if a nonmissing value existed for fall-kindergarten, that value was used; otherwise the variable was set to missing. The result of this scheme maximizes available information across rounds, on the theory that "replacement" parents in spring-kindergarten do not differ much demographically from their fall-kindergarten counterparts.

7.4.7 The Supplemental Section (SPQ) in the Spring-Kindergarten Parent Interview

The SPQ section was administered in spring-kindergarten to households that were nonrespondents in fall-kindergarten. The SPQ was constructed to allow respondents participating for the first time in spring-kindergarten to provide data for some of the more vital items from fall-kindergarten, rather than respond to the entire fall-kindergarten instrument. For example, an entire section of fall-kindergarten is devoted to education of parents and other adults in the household, while the spring-kindergarten SPQ contains only four questions on the education of the respondent and respondent's spouse (if applicable).

The topics covered in SPQ section include child care, Head Start participation, child health and health services received, marital status of the biological parents at the time of the child's birth, the primary language spoken in the home, respondent (and spouse) education, and receipt of WIC benefits.

Relevant items from the SPQ section were used to construct composites for families new to the survey in spring-kindergarten. Composites were calculated for child care (WKCAREPK), parental education (WKMOMED, WKDADED, WKPARED), primary language (WKLANGST), mother's work status (WKHEARLY), and parent's marital status at the time of the focal child's birth (WKHMOMAR, WKBMOMAR). These "cross-round" composites facilitate analyses across fall-kindergarten and spring-kindergarten.

When using SPQ data for cross-round analyses, users should combine the data items from SPQ with the appropriate items from fall-kindergarten. Table 7-4 presents instrument item matches across the two data collection points.

Care should be exercised when doing cross-round analysis of parental education, since the spring-kindergarten SPQ education items are asked only of the respondent and the respondent's spouse, and it is conceivable that the respondent is not the parent. The cross-round parental education composites (WKPARED, WKMOMED, and WKDADED) are more appropriate for such analyses.

The only section that is asked in its entirety to fall nonrespondents is the FSQ section, where information on the household roster is collected for the first time.

7.4.8 Industry and Occupation Codes Used in ECLS-K

This section describes the aggregated categories that were used for coding occupation in the ECLS-K.³

Executive, Administrative, and Managerial Occupations

This category includes top and middle management occupations and occupations that directly support management. Top level managers are persons concerned with policy making, planning, staffing, directing, and/or controlling activities. Middle managers include persons who plan, or organize, direct and/or control activities at the operational level. Legislators are also included in this category. Workers in this category are not directly concerned with the fabrication of products or with the provision of services. Other officials and administrators include consultants, library directors, customer-house brokers, and location managers.

³ Office of Budget and Management, Executive Office of the President (1980). *Standard Industrial Classification Manual*. Springfield, VA, and Office of Federal Statistical Policy and Standards, U.S. Department of Commerce (1980). *Standard Occupational Classification Manual* (2nd ed.). Washington, DC: Superintendent of Documents, U.S. Government Printing Office.

Table 7-4. SPQ item matches to fall-kindergarten items

| Fall- | Fall- | Spring- | Spring- |
|--------------|--------------|--------------|--------------|
| kindergarten | kindergarten | kindergarten | kindergarten |
| Variable | Item | Variable | Item |
| P1SAMETW | CCQ003 | P2SAMETW | SPQ005 |
| P1RPREK | CCQ025 | P2RPREK | SPQ010 |
| P1NPREK | CCQ130 | P2NPREK | SPQ020 |
| P1HSPREK | CCQ215 | P2HSPREK | SPQ030 |
| P1CPREK | CCQ280 | P2CPREK | SPQ040 |
| P1WEIGHP | CHQ005 | P2WEIGHP | SPQ060 |
| P1WEIGHO | CHQ005 | P2WEIGHO | SPQ065 |
| P1WEIGH5 | CHQ010 | P2WEIGH5 | SPQ070 |
| P1WEIGH6 | CHQ015 | P2WEIGH6 | SPQ080 |
| P1PREMAT | CHQ025 | P2PREMAT | SPQ090 |
| P1EARLY | CHQ030 | P2EARLY | SPQ100 |
| P1EARDAY | CHQ030 | P2EARDAY | SPQ105 |
| P1SIGHT | CHQ285 | P2SIGHT | SPQ107 |
| P1CORREC | CHQ315 | P2CORREC | SPQ108 |
| P1DIFFHR | CHQ230 | P2DIFFHR | SPQ109 |
| P1THERAP | CHQ340 | P2THERAP | SPQ110 |
| P1THERA2 | CHQ345A | P2THERA2 | SPQ120A |
| P1THERA3 | CHQ345B | P2THERA3 | SPQ120B |
| P1THERA5 | CHQ345D | P2THERA5 | SPQ120D |
| P1THERA6 | CHQ345E | P2THERA6 | SPQ120E |
| P1THERA7 | CHQ345F | P2THERA7 | SPQ120F |
| P1THERA8 | CHQ345G | P2THERA8 | SPQ120G |
| P1THERA9 | CHQ345H | P2THERA9 | SPQ120H |
| P1THER10 | CHQ345I | P2THER10 | SPQ120I |
| P1THER11 | CHQ345J | P2THER11 | SPQ120J |
| P1THER12 | CHQ345K | P2THER12 | SPQ120K |
| P1THER13 | CHQ345L | P2THER13 | SPQ120L |
| P1THER14 | CHQ375 | P2THER14 | SPQ130A |
| P1THER15 | CHQ375U | P2THER15 | SPQ130B |
| P1BIOLOG | MHQ060 | P2BIOLOG | SPQ150 |
| P1ANYLNG | PLQ020 | P2ANYLNG | SPQ155 |
| P1PRMLNG | PLQ060 | P2PRMLNG | SPQ157 |
| P1MOMWRK | EMQ170 | P2MOMWRK | SPQ200 |
| P1WICMOM | WPQ030 | P2WICMOM | SPQ210 |
| P1WICCHD | WPQ040 | P2WICCHD | SPQ220 |

Natural Scientists and Mathematicians

This category includes those engaged primarily in the application of scientific principles to research and development. Natural scientists are those in the physical sciences (e.g., chemistry, physics) and the life sciences (e.g., biology, agriculture, medicine). In addition, this category includes those in computer science, mathematics (including statistics), and operations research.

Social Scientists, Social Workers, Religious Workers, and Lawyers

This division includes occupations concerned with the social needs of people and in basic and applied research in the social sciences.

Teachers: College, University, and other Postsecondary Institution; Counselors, Librarians, Archivists

This NHES category includes those who teach at higher education institutions and at other postsecondary (after high school) institutions, such as vocational institutes. In addition, vocational and educational counselors, librarians, and archivists are included here.

Teachers, except Postsecondary Institution

This category includes prekindergarten and kindergarten teachers, elementary and secondary teachers, special education teachers, instructional coordinators, and adult education teachers (outside postsecondary).

Health Diagnosing and Treating Practitioners

This category includes health care professionals who diagnose and treat patients. In addition to physicians, dentists, and veterinarians, this category includes optometrists, podiatrists, and other diagnosing and treating professionals, such as optometrists, podiatrists, chiropractors, hypnotherapists, and acupuncturists.

Registered Nurses, Pharmacists, Dieticians, Therapists, and Physician's Assistants

This category includes occupations concerned with the maintenance of health, the prevention of illness, and the care of the ill through the provision and supervision of nursing care; compounding drugs, planning food service or nutritional programs; providing assistance to physicians; and the provision of therapy and treatment as directed by physicians.

Writers, Artists, Entertainers, and Athletes

This occupational category includes occupations concerned with creating and executing artistic works in a personally interpreted manner, by painting, sculpturing, drawing, engraving, etching, and other methods; creating designs for products and interior decorations; designing and illustrating books, magazines, and other publications; writing; still, motion picture and television photography/filming; producing, directing, staging, acting, dancing, singing in entertainment; and participating in sports and athletics as competitor or player and administering and directing athletic programs.

Health Technologists and Technicians

This category includes occupations concerned with providing technical assistance in the provision of health care. For example, clinical laboratory technologists and technicians, dental hygienists, radiologic technicians, licensed practical nurses (LPN's), and other health technologists are included here.

Technologists and Technicians, except Health

This group includes those providing technical assistance in engineering and scientific research, development, testing, and related activities, as well as operating and programming technical equipment and systems.

Marketing and Sales Occupations

This category includes occupations involving selling goods or services, purchasing commodities and property for resale, and conducting wholesale or retail business.

Administrative Support Occupations, including Clerical

Occupations involving preparing, transcribing, transferring, systematizing, and preserving written communications and records; collecting accounts; gathering and distributing information; operating office machines and data processing equipment; operating switchboards; distributing mail and messages; and other support and clerical duties such as bank teller, data entry keyer, etc.

Service Occupations

The category includes occupations providing personal and protective services to individuals, and current maintenance and cleaning for building and residences. Some examples include food service, health service (e.g., aides or assistants), cleaning services other than household, and personal services.

Agricultural, Forestry, and Fishing Occupations

This category is concerned with the production, propagation (breeding/growing), gathering, and catching of animals, animal products, and plant products (timber, crop, and ornamental); the provision of services associated with

agricultural production; and game farms, fisheries, and wildlife conservation. "Other agricultural and related occupations" include occupations concerned with the production and propagation of animals, animals products, plants and products (crops and ornamental).

Mechanics and Repairers

Mechanics and repairers are persons who do adjustment, maintenance, part replacement, and repair of tools, equipment, and machines. Installation may be included if installation is usually done in conjunction with other duties of the repairers.

Construction and Extractive Occupations

This category includes occupations that normally are performed at a specific site, which will change over time, in contrast to production workers, where the work is usually at a fixed location. Construction workers include those in overall construction, brickmasons, stonemasons, carpenters, electricians, drywall installers, paperhangers and painters, etc. Extractive occupations include oil well drillers, mining machine operators, and so on.

Precision Production Occupations

Precision production includes occupations concerned with performing production tasks that require a high degree of precision or attainment of rigid specification and operating plants or large systems. Examples are tool and die makers, pattern and model makers, machinists, jewelers, engravers, and so on. Also included are some food-related occupations including butchers and bakers. Plant and system operators include water and sewage, gas, power, chemical, petroleum, and other plant or system operators.

Production Working Occupations

This category includes occupations concerned with setting up, operating, and tending of machines and hand production work usually in a factory or other fixed place of business.

Transportation and Material Moving Occupations

This category includes occupations concerned with operating and controlling equipment used to facilitate the movement of people or materials and the supervising of those workers.

Handlers, Equipment Cleaners, Helpers, and Laborers

This category includes occupations that involve helping other workers and performing routine nonmachine tasks. A wide variety of helpers, handlers, etc., are included in this category. Examples include construction laborers, freight, stock, and material movers, garage and service station related occupations, parking lot attendants, and vehicles washers and equipment cleaners.

7.5 Using Teacher Data Collected Either in Fall-kindergarten or Spring-kindergarten

Teachers were asked about classroom characteristics in teacher questionnaire part B (TQB). If the data were collected in fall-kindergarten, they were not collected again in spring-kindergarten. If they were not collected in fall-kindergarten, i.e., a teacher was added to the sample in spring-kindergarten, then they were collected in spring-kindergarten. There are flags on the file to indicate in which round the data were collected. The TQB flags and data are set on the teacher and child catalogs as follows:

- **Teacher catalog:** There are two flags: B1TQUEX and B2TQUEX. For each, a "1" means that the TQB for that teacher was collected at that data collection point. All teachers will have one but not both of these variables set. Each teacher record has only one set of TQB data, regardless of data collection point.
- Child catalog: There are two flags and corresponding sets of data. The first flag, B1TQUEX, and variables (approximately 80 variables all starting with the B1 prefix) are set if the teacher with whom the child was linked in fall-kindergarten has a completed TQB. This is regardless of which round the TQB on the teacher record was collected. The second flag, B2TQUEX, and variables (also approx. 80 variables, all starting with B2) are set if the teacher with whom the child was linked in spring-kindergarten has a TQB. That is, the B1TQUEX and B2TQUEX on the child catalog refer to the data collection point in which the child was linked to the teacher, not the data collection point in which that teacher's TQB data was collected.

7.6 The Relationship Among Composite Variables on the Child, Teacher, and School Catalogs

The school catalog contains ONLY school composites.

The teacher catalog contains all teacher composites and five of the school composites (S2KSCTYP, S2KENRLS, S2KMINOR, S2KSCLVL, and S2KPUPR).

The child catalog contains all child, teacher (except KGCLASS which is in the teacher catalog only), and school composites, but it should be noted that some of the teacher variables on the child catalog are slightly altered when they are brought to the child level. While some teacher variables are class specific, i.e., there will be three versions of each of these class-specific variables (AM, PM, and all day) on the teacher file, the child file will only contain data from only one of each of the three variables—depending on whether the child attends an AM, PM, or all day class. For example, there are three variables (one for AM, one for PM, and one for all day classes) on the teacher catalog that represent percent of African-Americans in the teacher's class. Since the child can only be in one class, the child-file version of percent African-American in class is only one variable. The same is true for percent Hispanic and percent minority variables. The opposite is true for the teacher age variable—since a child could have two teachers, one in each data collection point, there are two teacher ages (B1AGE, B2AGE) on the child file, but only one teacher age (B1AGE) on the teacher file. Table 7-5 presents the relationship of the composite variables on the three catalogs.

Table 7-5. Relationship among composite variables on the three ECB catalogs

| School | Teacher | Child | | |
|---------|---------|---------|--------------------------------------|--|
| Catalog | Catalog | Catalog | Variable Name | Variable Label |
| | | X | DOBMM | CHILD COMPOSITE DOB MONTH |
| | | X | DOBDD | CHILD COMPOSITE DOB DAY |
| | | X | DOBYY | CHILD COMPOSITE DOB YEAR |
| | | X | GENDER | CHILD COMPOSITE GENDER |
| | | X | RACE | CHILD COMPOSITE RACE |
| | | X | R1 KAGE | R1 COMPOSITE CHILD ASSESSMENT AGE(MNTHS) |
| | | X | R2 KAGE | R2 COMPOSITE CHILD ASSESSMENT AGE(MNTHS) |
| | | X | R2ELIG | R2 CHILD ELIGIBILITY IN ROUND 2 |
| | | X | FKCHGTCH | FK CHD CHANGED TCHRS BETWEEN ROUND 1 & 2 |
| | | X | FKCHGSCH | FK CHD CHANGED SCHLS BETWEEN ROUND 1 & 2 |
| | | X | C1HEIGHT | C1 ROUND 1 CHILD COMPOSITE HGT (INCHES) |
| | | X | C1WEIGHT | C1 ROUND 1 CHILD COMPOSITE WGT (POUNDS) |
| | | X | C1BMI | C1 ROUND 1 CHILD COMPOSITE BMI |
| | X | | C2HEIGHT | C2 ROUND 2 CHILD COMPOSITE HGT (INCHES) |
| | | | C2WEIGHT | C2 ROUND 2 CHILD COMPOSITE WGT (POUNDS) |
| X | | X | C2BMI | C2 ROUND 2 CHILD COMPOSITE BMI |
| X | | X | P1HMEMP | P1 CURRENT MOTHER EMPLOYMENT STATUS |
| X | | X | P1HDEMP | P1 CURRENT FATHER EMPLOYMENT STATUS |
| | | X | P1HMAGE | P1 AGE - CURRENT MOTHER (YRS) |
| | | X | P1HDAGE | P1 AGE - CURRENT FATHER (YRS) |
| X | | P1DADID | P1 HOUSEHOLD ROSTER NUMBER OF FATHER | |
| | | X | P1MOMID | P1 HOUSEHOLD ROSTER NUMBER OF MOTHER |
| | | X | P1HMRACE | P1 RACE OF CURRENT MOTHER |
| | | X | P1HMHISP | P1 MOTHER HISPANIC |
| | | X | P1HMIND | P1 MOTHER AMERICAN INDIAN |
| | | X | P1HMASN | P1 MOTHER ASIAN |
| | | X | P1HMBLCK | P1 MOTHER BLACK |
| | | X | P1HMPACI | P1 MOTHER PACIFIC ISLANDER |
| | | X | P1HMWHT | P1 MOTHER WHITE |
| | | X | P1HMMT1R | P1 MOTHER MORE THAN ONE RACE |
| | | X | P1HDRACE | P1 RACE OF CURRENT FATHER |
| | | X | P1HDHISP | P1 FATHER HISPANIC |
| | | X | P1HDIND | P1 FATHER AMERICAN INDIAN |
| | | X | P1HDASN | P1 FATHER ASIAN |
| | | X | P1HDBLCK | P1 FATHER BLACK |
| | | X | P1HDPACI | P1 FATHER PACIFIC ISLANDER |
| | | X | P1HDWHT | P1 FATHER WHITE |
| | | X | P1HDMT1R | P1 FATHER MORE THAN ONE RACE |
| | | X | P1HMAFB | P1 AGE AT 1ST BIRTH - CURRENT MOM (YRS) |
| | | X | P1BMAGE | P1 AGE OF NONRES BIO MOTHER (YRS) |
| | | X | P1BDAGE | P1 AGE OF NONRES BIO FATHER (YRS) |
| | | X | P1BMRACE | P1 RACE OF NONRES BIOLOGICAL MOTHER |
| | | X | P1BMHISP | P1 NONRES BIOLOGICAL MOTHER HISPANIC |

Table 7-5. Relationship among composite variables on the three ECB catalogs (continued)

| School Catalog | Teacher Catalog | Child Catalog | Variable Name | Variable Label |
|----------------|--------------------|------------------|---------------|--|
| Catalog | Catalog | X | P1BMIND | P1 NONRES BIO MOTHER AMERICAN INDIAN |
| | | X | P1BMASN | P1 NONRES BIOLOGICAL MOTHER ASIAN |
| | | X | P1BMBLCK | P1 NONRES BIOLOGICAL MOTHER BLACK |
| | | X | P1BMPACI | P1 NONRES BIO MOTHER PACIFIC ISLANDER |
| | | X | P1BMWHT | P1 NONRES BIOLOGICAL MOTHER WHITE |
| | | X | P1BDMT1R | P1 NONRES BIO FATHER MORE THAN 1 RACE |
| | | X | P1BDRACE | P1 RACE OF NONRES BIOLOGICAL FATHER |
| | | X | P1BDHISP | P1 NONRES BIOLOGICAL FATHER HISPANIC |
| | | X | P1BDIND | P1 NONRES BIO FATHER AMERICAN INDIAN |
| | | X | P1BDASN | P1 NONRES BIOLOGICAL FATHER ASIAN |
| | | X | P1BDBLCK | P1 NONRES BIOLOGICAL FATHER BLACK |
| | | X | P1BDPACI | P1 NONRES BIO FATHER PACIFIC ISLANDER |
| | | X | P1BDWHT | P1 NONRES BIOLOGICAL FATHER WHITE |
| | | X | P1BMMT1R | P1 NONRES BIO MOTHER MORE THAN 1 RACE |
| | | X | P1BMAFB | P1 AGE AT 1ST BIRTH NONRES BIO MOM (YRS) |
| | | X | P1AMOMED | P1 EDUCATION LVL NONRES ADOPTIVE MOTHER |
| | | X | P1ADADED | P1 EDUCATION LVL NONRES ADOPTIVE FATHER |
| | | X | P1BMOMED | P1 EDUCATION LVL NONRES BIOLOGICAL MOM |
| | | X | P1BDADED | P1 EDUCATION LVL NONRES BIOLOGICAL DAD |
| | | X | P1MOMOCC | P1 RESIDENT MOTHER'S OCCUPATION |
| | | X | P1DADOCC | P1 RESIDENT FATHER'S OCCUPATION |
| | | X | P1AGEENT | P1 AGE (MONTHS) AT KINDERGARTEN ENTRY |
| | | X | P1AGEFRS | P1 AGE (MNTHS) AT FIRST NONPARENTAL CARE |
| | | X | P1CARNOW | P1 CURRENT NONPARENTAL CARE ARRANGEMENT |
| | | X | P1NUMNOW | P1 # NONPARENTAL CARE ARRANGEMENTS NOW |
| | | X | P1HRSNOW | P1 # HOURS SPENT IN NONPARENTAL CARE NOW |
| | | X | P1PRIMNW | P1 PRIMARY TYPE OF NONPARENTAL CARE |
| | | X | P1CENTER | P1 CHILD EVER IN CENTER-BASED CARE |
| | | X | P1DISABL | P1 CHILD W/ DISABILITY |
| | | X | P1HMLANG | P1 MOTHER'S LANGUAGE TO CHILD |
| | | X | P1HMLTOM | P1 CHILD'S LANGUAGE TO MOTHER |
| | | X | P1HDLANG | P1 FATHER'S LANGUAGE TO CHILD |
| | | X | P1HDLTOD | P1 CHILD'S LANGUAGE TO FATHER |
| | | X | P1LANGUG | P1 BOTH PARENT LANGUAGE TO CHILD |
| | | X | P1HMOM | P1 RESIDENT MOTHER TYPE |
| | | X | P1HDAD | P1 RESIDENT FATHER TYPE |
| | | X | P1NUMSIB | P1 NUMBER OF SIBLINGS IN HOUSEHOLD |
| | | X | P1LESS18 | P1 NUMBER IN HOUSEHOLD AGED <18 |
| | | X | P1OVER18 | P1 NUMBER IN HOUSEHOLD AGED 18+ |
| | | X | P1HTOTAL | P1 TOTAL NUMBER IN HOUSEHOLD |
| | | X | P1HFAMIL | P1 FAMILY TYPE |
| | | X | P1HPARNT | P1 TYPES OF PARENTS IN HOUSEHOLD |
| | | X | P1MOMTYP | P1 TYPE OF RESIDENT MOTHER |
| | | X | P1BMVITL | P1 BIOLOGICAL MOTHER IS LIVING/DEAD |
| | | X | P1ABSMOM | P1 TYPE OF NONRESIDENT MOTHER(S) |

Table 7-5. Relationship among composite variables on the three ECB catalogs (continued)

| School | Teacher | Child | | |
|---------|---------|---------|----------------------|---|
| Catalog | Catalog | Catalog | Variable Name | Variable Label |
| | | X | P1DADTYP | P1 TYPE OF RESIDENT FATHER |
| | | X | P1BDVITL | P1 BIOLOGICAL FATHER IS LIVING/DEAD |
| | | X | P1ABSDAD | P1 TYPE OF NONRESIDENT FATHER(S) |
| | | X | P1TWINST | P1 CHILD BIRTH STATUS |
| | | X | P1FIRKDG | P1 FIRST-TIME KINDERGARTNER |
| | | X | P2HMOM | P2 RESIDENT MOTHER TYPE |
| | | X | P2HDAD | P2 RESIDENT FATHER TYPE |
| | | X | P2NUMSIB | P2 NUMBER OF SIBLINGS IN HOUSEHOLD |
| | | X | P2LESS18 | P2 NUMBER IN HOUSEHOLD AGED <18 |
| | | X | P2OVER18 | P2 NUMBER IN HOUSEHOLD AGED 18+ |
| | | X | P2HTOTAL | P2 TOTAL NUMBER IN HOUSEHOLD |
| | | | | |
| | | X | P2HFAMIL | P2 FAMILY TYPE |
| | | X | P2HPARNT | P2 TYPES OF PARENTS IN HOUSEHOLD |
| | | X | P2MARSTA | P2 MARITAL STATUS |
| | | X | P2MOMID | P2 HOUSEHOLD ROSTER NUMBER OF MOTHER |
| | | X | P2DADID | P2 HOUSEHOLD ROSTER NUMBER OF FATHER |
| | | X | P2HMAGE | P2 AGE - CURRENT MOTHER (YRS) |
| | | X | P2HDAGE | P2 AGE - CURRENT FATHER (YRS) |
| | | X | P2HMRACE | P2 RACE OF CURRENT MOTHER |
| | | X | P2HMHISP | P2 MOTHER HISPANIC |
| | | X | P2HMIND | P2 MOTHER AMERICAN INDIAN |
| | | X | P2HMASN | P2 MOTHER ASIAN |
| | | X | P2HMBLCK | P2 MOTHER BLACK |
| | | X | P2HMPACI | P2 MOTHER PACIFIC ISLANDER |
| | | X | P2HMWHT | P2 MOTHER WHITE |
| | | X | P2HMMT1R | P2 MOTHER MORE THAN ONE RACE |
| | | X | P2HDRACE | P2 RACE OF CURRENT FATHER |
| | | X | P2HDHISP | P2 FATHER HISPANIC |
| | | X | P2HDIND | P2 FATHER AMERICAN INDIAN |
| | | X | P2HDASN | P2 FATHER ASIAN |
| | | X | P2HDBLCK | P2 FATHER BLACK |
| | | X | P2HDPACI | P2 FATHER PACIFIC ISLANDER |
| | | X | P2HDWHT | P2 FATHER WHITE |
| | | X | P2HDMT1R | P2 FATHER MORE THAN ONE RACE |
| | | X | P2DADCHK | P2 FATHER IN HOUSEHOLD |
| | | X | P2DADTYP | P2 TYPE OF RESIDENT FATHER |
| | | X | P2MOMCHK | P2 MOTHER IN HOUSEHOLD |
| | | X | P2MOMCHK P2MOMTYP | P2 TYPE OF RESIDENT MOTHER |
| | | X | | |
| | | X X | WKMOMED | WK MOTHER'S EDUCATION LEVEL IF MOTHER'S EDUCATION IMPUTED |
| | | | IF_M_ED | |
| | | X | WKDADED | WK FATHER'S EDUCATION LEVEL |
| | | X | IF_D_ED | IF FATHER'S EDUCATION IMPUTED |
| | | X | WKHEARLY | WK MOM WORKED BTWN CHILD'S BIRTH & KINDG |
| | | X | WKPARED | WK PARENT HIGHEST EDUCATION LEVEL |
| | | X | WKHMOMAR | WK MOTHER MARRIED AT TIME OF BIRTH |
| | | X | WKBMOMAR | WK NONRES MOM MARRIED AT TIME OF BIRTH |
| | | X | WKRACETH | WK CHILD RACE- COMPOSITE |

Table 7-5. Relationship among composite variables on the three ECB catalogs (continued)

| School | Teacher | Child | | |
|---------|---------|---------|---------------|---|
| Catalog | Catalog | Catalog | Variable Name | Variable Label |
| | | X | WKHISP | WK CHILD HISPANIC |
| | | X | WKAMERIN | WK CHILD AMERICAN INDIAN |
| | | X | WKASIAN | WK CHILD ASIAN |
| | | X | WKBLACK | WK CHILD BLACK |
| | | X | WKPACISL | WK CHILD PACIFIC ISLANDER |
| | | X | WKWHITE | WK CHILD WHITE |
| | | X | WKMT1RAC | WK CHILD MORE THAN ONE RACE |
| | | X | WKCAREPK | WK NONPARENTAL CARE ARRANGEMENTS PRE-K |
| | | X | WKNUMPRK | WK # NONPARENTAL CARE ARRANGEMENTS PRE-K |
| | | X | P1HRSPRK | P1 # HRS SPENT IN NONPARENTAL CARE PRE-K |
| | | X | P1PRIMPK | P1 PRIMARY TYPE NONPARENTAL CARE PRE-K |
| | | X | P1COSTPK | P1 COST NONPARENTAL CHILD CARE PRE-K (\$) |
| | | X | WKLANGST | WK HOME LANGUAGE OF CHILD |
| | | X | WKMOMSCR | WK AVG PRESTIGE SCORE FOR MOM OCCUPATION |
| | | X | IF M OCS | IF MOM OCCUPATION PRESTIGE SCORE IMPUTED |
| | | X | WKDADSCR | WK AVG PRESTIGE SCORE FOR DAD OCCUPATION |
| | | X | IF D OCS | IF DAD OCCUPATION PRESTIGE SCORE IMPUTED |
| | | X | WKSESL | WK CONTINUOUS SES MEASURE |
| | | X | | |
| | | | WKSESQ5 | WK CATEGORICAL SES MEASURE |
| | | X | WKPOVRTY | WK POVERTY LEVEL |
| | | X | WKINCOME | WK INCOME (IMPUTED) |
| | | X | IF_INC | IF INCOME VALUE IMPUTED |
| | 37 | X | A1PBLK | A1 PERCENT OF BLACKS IN CLASS |
| | X | | A1APBLK | A1 PERCENT OF BLACKS IN CLASS-AM |
| | X | | A1PPBLK | A1 PERCENT OF BLACKS IN CLASS-PM |
| | X | | A1DPBLK | A1 PERCENT OF BLACKS IN CLASS-AD |
| | | X | A1PHIS | A1 PERCENT OF HISPANICS IN CLASS |
| | X | | A1APHIS | A1 PERCENT OF HISPANICS IN CLASS-AM |
| | X | | A1PPHIS | A1 PERCENT OF HISPANICS IN CLASS-PM |
| | X | | A1DPHIS | A1 PERCENT OF HISPANICS IN CLASS-AD |
| | | X | A1PMIN | A1 PERCENT OF MINORITIES IN CLASS |
| | X | | A1APMIN | A1 PERCENT OF MINORITIES IN CLASS-AM |
| | X | | A1PPMIN | A1 PERCENT OF MINORITIES IN CLASS-PM |
| | X | | A1DPMIN | A1 PERCENT OF MINORITIES IN CLASS-AD |
| | X | X | B1AGE | B1 TEACHER'S AGE |
| | | X | B2AGE | B2 TEACHER'S AGE |
| | X | | KGCLASS | KINDERGARTEN TEACHER CLASS COMPOSITE |
| | X | X | S2KSCTYP | S2 SCHOOL TYPE FROM THE SCH ADMIN QUEST |
| X | | X | S2KENRLK | S2 TOTAL SCHOOL K ENROLLMENT |
| | X | X | S2KENRLS | S2 TOTAL SCHOOL ENROLLMENT |
| X | X | X | S2KMINOR | S2 PERCENT MINORITY STUDENTS |
| X | | X | S2KFLNCH | S2 PCT FREE LUNCH ELIGIBLE STUDENTS |
| X | | X | S2KRLNCH | S2 PCT REDUCED LUNCH ELIGIBLE STUDENTS |
| | X | X | S2KSCLVL | S2 SCH INSTRUCTNL LEVEL FROM ADMIN QUEST |
| X | | X | S2KLNGTH | S2 SCHOOL YEAR LENGTH |
| X | | X | S2KGFTED | S2 PERCENT GIFTED/TALENTED STUDENTS |
| | X | X | S2KPUPRI | S2 PUBLIC OR PRIVATE SCHOOL |
| - | | | | |

7.7 Creating a Child File for Classroom Level Analysis

Using T1_ID or T2_ID in the child catalog a user can identify all students belonging to a given teacher. And given a T1_ID and A1CLASS or T2_ID and A2CLASS combination, a classroom level file can also be created in the child catalog. For example, in the child catalog, records with T1_ID = 0001T01 and A1CLASS = AM are all children from teacher 0001T01's morning class.

7.8 Creating a Classroom Level File Using Teacher Data

For researchers interested in doing classroom level analysis on the characteristics of kindergarten classrooms, a classroom level file can be constructed. Each record in the teacher file represents one teacher regardless of whether that teacher teaches one or two classes. (Approximately 16 percent of the kindergarten teachers in the ECLS-K sample teach both a morning and an afternoon class.) For situations when the *class* rather than the *teacher* is the unit of analysis of interest to the researcher, a new class-level file may be constructed so that each record represents a kindergarten class. Teachers provided separate information about each of their kindergarten classes – morning, afternoon, or all-day – for a set of items on the fall part A and spring part A teacher questionnaires. These class-specific variables contain information about class characteristics such as class size and race-ethnicity composition. In order to create a classroom level file a user must perform the following steps:

- 1. Identify the variables that are to be included in the classroom level file including the AM, PM, and all day versions of identical variables. These are the variables that will comprise the classroom file, so non-class specific data, e.g., teacher's educational background, should be included as well. A1AASIAN, A1PASIAN, and A1DASIAN are examples of class-specific variables.
- 2. Create three files, an AM, PM, and all day file, each with the appropriate class specific variables (e.g., keep only A1AASIAN for the AM file, drop A1PASIAN and A1DASIAN) and the remaining non-class specific variables. The aim of this exercise is to isolate into three groups those records with data belonging to each of the three groups. Those teachers with more than one class type will appear in more than one file. Thus on the AM file, there will be data for all the non-class specific variables, and the AM variables. The PM and all day variables will be dropped.

- 3. Rename the class-specific variables in each of the three files to be the same across each of the files. For example, on the AM file, one might rename the variable A1AASIAN (the number of Asian children in the AM class) to A1ASIAN. Similarly, A1PASIAN (the number of Asian children in the PM class) gets renamed to A1ASIAN, and A1DASIAN gets renamed to A1ASIAN in the all day file.
- 4. On each of these three files, create a class type variable with the same name across the three files, that indicates the class type. The class type variable can use values of 1=AM, 2=PM, and 3=all day. In each of the files the class type variable value will be the same for all cases (e.g., all records in the AM file will have a value of 'AM' for class type), but when the records from the three files (AM, PM, and all day) are merged, the class type variable will be used to identify whether the classroom is an AM, PM, or all day class.
- 5. Merge the three files. Now each case represents one classroom. This file will have no classroom ID. An ID can be created if needed but is not necessary for analysis.

With this file users can do analysis such as examining characteristics of classrooms with high percent minority, etc.

KGCLASS, F1CLASS, F2CLASS, A1CLASS, and A2CLASS are all class type variables—AM/PM/All-day. However, they carry different information and serve different purposes. KGCLASS was created to reflect the teacher's base year class type and is not related to the child data. (See section 7.4 for details.) F1CLASS and F2CLASS are the child's fall- and spring-kindergarten class types respectively in the FMS. A1CLASS and A2CLASS were created for linking teacher and child data in fall- and spring-kindergarten, respectively.

The teacher report of class type in the teacher questionnaire A defines the teacher's reported class type. This report does not always match the child's class type. A1CLASS and A2CLASS were created to report a child class type. In fall-kindergarten, if the teacher's reported class type in teacher questionnaire A matches F1CLASS, then A1CLASS is defined as the matching class type. If the teacher's reported class type does not match F1CLASS and the teacher reported only one class in teacher questionnaire A, then A1CLASS is defined as the teacher's reported class type and the child is linked to the only class that the teacher reported. If the teacher's reported class type does not match F1CLASS and the teacher reported more than one class in questionnaire A, then A1CLASS is missing and the teacher

and child are not linked. The same rules were followed with F2CLASS and A2CLASS with spring-kindergarten data to link the teacher and child data.

Table 7-6 lays out the composite and derived variables that are on the ECLS-K child, teacher, and school datasets. Please note that some of the variables specified in the 'derived from' column are intermediary variables that were not included in the final datasets. This column also contains the item numbers from the questionnaire, which help in identifying the items that were used in the creation of these composites and derived variables.

Table 7-6. Composite variables

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|---|--------------------------|--------------------------------------|
| CHILDID | Child | Child Identification Number | OCHILDID | |
| R1_KAGE | Child | Child's age at the time the direct child assessment | DOBMO, DOBDA, DOBYR, | Continuous |
| R2_KAGE | | occurred. This age will be in month and years, no | C1ASMTMM, C1ASMTDD, | |
| | | days. | C1ASMTYY, C2ASMTMM, | |
| | | | C2ASMTDD, C2ASMTYY | |
| GENDER | Child | Child's gender | FMS and parent interview | 1 = Male |
| | | | fall (INQ050) | 2 = Female |
| | | | spring (INQ 160) | |
| DOBMM | Child | Child's date of birth month | FMS, parent interview | 1-12 |
| DOBDD | Child | Child's date of birth day | fall (INQ060) | 1-31 |
| DOBYY | Child | Child's date of birth year | spring (INQ 170) | |
| WKRACETH | Child | Race and ethnicity of the child | P1RC_1 (FSQ190), | 1 = White, non-Hispanic |
| | | | P1RC_2 (FSQ190), | 2 = Black or African American, non- |
| | | | P1RC_3 (FSQ190), | Hispanic |
| | | | P1RC_4 (FSQ190), | 3 = Hispanic, race specified |
| | | | P1RC_5 (FSQ190), | 4 = Hispanic, no race specified |
| | | | P1RC_6 (FSQ190), | 5 = Asian |
| | | | RACEOS (FSQ190), | 6 = Native Hawaiian or other Pacific |
| | | | P1HSP (FSQ190), | Islander |
| | | | P2RC_1 (FSQ195), | 7 = American Indian or Alaskan |
| | | | P2RC_2 (FSQ195), | Native |
| | | | P2RC_3 (FSQ195), | 8 = More than 1 race, non-Hispanic |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|--|------------------|---------|
| WKAMERIN | Child | Child is American Indian or Native Alaskan | P1RC_1 (FSQ190), | 1 = Yes |
| | | | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| WKASIAN | Child | Child is Asian | P1RC_1 (FSQ190), | 1 = Yes |
| | | | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|--|------------------|---------|
| WKPACISL | Child | Child is Native Hawaiian or other Pacific Islander | P1RC_1 (FSQ190), | 1 = Yes |
| | | | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| WKBLACK | Child | Child is African American | P1RC_1 (FSQ190), | 1 = Yes |
| | | | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|-------------------|------------------|---------|
| WKWHITE | Child | Child is white | P1RC_1 (FSQ190), | 1 = Yes |
| | | | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| WKHISP | Child | Child is Hispanic | P1RC_1 (FSQ190), | 1 = Yes |
| | | | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|----------------------------------|--------------------|-----------------------------------|
| WKMT1RAC | Child | Child is more than one race | P1RC_1 (FSQ190), | 1 = Yes |
| | | | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| C1BMI | Child | Round 1 body mass index (BMI) | C1HEIGHT, C1WEIGHT | Continuous |
| C2BMI | Child | Round 2 body mass index (BMI) | C2HEIGHT, C2WEIGHT | |
| C1HEIGHT | Child | Child's round 1 composite height | HEIGHTIN, HEIGHTI2 | Continuous |
| C2HEIGHT | | Child's round 2 composite height | HEIGHTI3, HEIGHTI4 | Continuous |
| C1WEIGHT | Child | Child's round 1 composite weight | WEIGHTIN, WEIGHTI2 | Continuous |
| C2WEIGHT | | Child's round 2 composite weight | WEIGHTI3, WEIGHTI4 | Continuous |
| P1DISABL | Child | Child currently has a disability | P1DIAGNO (CHQ120), | 1 = Yes |
| | | | P1PROFFD (CHQ155), | 2 = No |
| | | | P1CLIMB (CHQ185), | |
| | | | P1COMMU2 (CHQ215), | |
| | | | P1DIFFH3 (CHQ245), | |
| | | | P1VISIO2 (CHQ300), | |
| | | | P1THERAP (CHQ340) | |
| P1TWINST | Child | Multiple birth status | P1MULTIP (CHQ035), | 1 = Fraternal twin, same sex |
| | | | P1IDENTI (CHQ070) | 2 = Fraternal twin, different sex |
| | | | | 3 = Identical twin |
| | | | | 4 = Higher order multiple birth |
| | | | | (triplet, quadruplet, etc.) |
| | | | | 9 = Single birth |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|---|------------------------------|------------|
| P1AGEFRS | Child | The age in months when the focal child first began | P1AGEMRL (CCQ020), P1YRSFIR | Continuous |
| | | any type of nonparental care on a regular basis | (CCQ125), P1AGEMHS (CCQ259), | |
| | | | P1CAGEMO (CCQ275) | |
| P1CARNOW | Child | Focal child is currently receiving any nonparental | P1RELAT (CCQ010), | 1 = Yes |
| | | care | P1NONREL (CCQ115), | 2 = No |
| | | | P1CTRNOW (CCQ260) | |
| | | | | |
| WKCAREPK | Child | Focal child received any nonparental care the year | P1RLCAR2 (CCQ070), | 1 = Yes |
| | | before entering kindergarten | P1NONRL2 (CCQ.120), | 2 = No |
| | | | P1HEADST (CCQ215), | |
| | | | P1CPREK (CCQ.280), | |
| | | | P2RPREK (SPQ010), | |
| | | | P2NPREK (SPQ020), | |
| | | | P2HSPREK (SPQ030), | |
| | | | P2CPREK (SP040) | |
| P1CENTER | Child | Child has ever been in center-based care | P1EVERHD (CCQ210), | 1 = Yes |
| | | | P1HEADST (CCQ215), | 2 = No |
| | | | P1CTRNOW (CCQ260), | |
| | | | P1ATTEND (CCQ265) | |
| P1COSTPK | Child | The total amount paid for all primary care | P1AMTREL (CCQ053), | Continuous |
| | | arrangements for the child the year before | P1PAYNON (CCQ158), | |
| | | kindergarten | P1AMTHS (CCQ256), | |
| | | | P1AMNTF4 (CCQ318) | |
| P1HRSNOW | Child | Total number of hours per week the focal child | P1NUMHR2 (CCQ090), | Continuous |
| | | currently spends in all primary, nonparental/non- | P1HRSNR (CCQ190), P1NUMHRS | |
| | | kindergarten care | (CCQ335) | |
| P1HRSPRK | Child | Total number of hours per week the focal child | P1NUMHRS (CCQ335), | Continuous |
| | | spent in all types of primary, nonparental care the | P1HRSNON (CCQ150), | |
| | | year before kindergarten | P1HSHRS (CCQ251), | |
| | | | P1NUMHR4 (CCQ310) | |
| P1NUMNOW | Child | Total number of all types of care arrangements the | P1NUMREG (CCQ060), | Continuous |
| | | focal child currently has on a regular basis | P1NUMCAR (CCQ165), | |
| | | | P1NUMNO2 (CCQ325) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|------------|---|------------------------------|---------------------------------------|
| WKNUMPRK | Child Care | Total number of all types of care arrangements the | P1NUMARR (CCQ.030), | Continuous |
| | | focal child had on a regular basis the year before | P1NUMNON (CCQ.135), | |
| | | starting kindergarten | P1HEADST (CCQ.215), | |
| | | (Note: Information for this variable was only | P1NUMCNT (CCQ.285), | |
| | | collected in round 1. Data for round 2 participants | | |
| | | are coded as "not ascertained" or -9.) | | |
| P1PRIMPK | Child | Primary, nonparental arrangement in which the | P1NHRSPK (CCQ150), | 0 = No non-parental care |
| | | child spent the most hours per week during the year | | 1 = Relative care in child's home |
| | | before kindergarten | P1HSHRS (CCQ251), | 2 = Relative care in another home |
| | | | P1HOMREL (CCQ035) | 3 = Non-relative care in child's home |
| | | | | 4 = Non-relative care in another |
| | | | | home |
| | | | | 5 = Head Start program |
| | | | | 6 = Center-based program |
| | | | | 7 = 2 or more programs |
| | | | | 8 = Location of care varies |
| P1PRIMNW | Child | Primary, nonparental/non-kindergarten | P1NUMHR2 (CCQ090), P1RLCAR2 | 0 = No non-parental care |
| | | arrangement in which the child currently spends the | (CCQ070), P1HOMNON (CCQ140) | 1 = Relative care in child's home |
| | | most hours per week | | 2 = Relative care in another home |
| | | | | 3 = Non-relative care in child's home |
| | | | | 4 = Non-relative care in another |
| | | | | home |
| | | | | 5 = Center-based program |
| | | | | 6 = 2 or more programs |
| | | | | 7 = Location of care varies |
| P1AGEENT | Child | The age in months at which the focal child first | CHILDDOB (INQ.060), P1WHICHY | Continuous |
| | | entered kindergarten. For children in their first year | (PIQ080) | |
| | | of kindergarten, this will be their age as of | | |
| | | September 1, 1998; for those in their second year of | | |
| | | kindergarten, it will be their age as of September 1, 1997. | | |
| P1FIRKDG | Child | First time kindergartner | P1WHICHY (PIQ080) | 1 = Yes |
| | | | | 2 = No |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|---------------------------------|--------------------------------------|
| A1CLASS | Child | Student attend a morning, afternoon or full-day | FMS data, A1ACLASS, A1DCLASS, | 1 = Morning class |
| | | kindergarten class in the fall | A1PCLASS | 2 = Afternoon class |
| | | | | 3 = Full-day class |
| A2CLASS | Child | Student attends a morning, afternoon, or full-day | FMS data, A2ACLASS, A2DCLASS, | 1 = Morning class |
| | | kindergarten class in the spring | A2PCLASS | 2 = Afternoon class |
| | | | | 3 = Full-day class |
| FKCHGTCH | Child | Child changed teachers between round 1 and round | R1T_ID, R2T_ID | 0 = No change |
| | | 2 | | 1 = Changed teachers |
| FKCHGSCH | Child | Child changed schools between round 1 and round | R1S_ID, R2S_ID | 0 = No change |
| | | 2 | | 1 = Changed schools |
| P1MOMID | Family/HH | Household roster number of resident mother | P1REL (FSQ130), P1UNR (FSQ180), | 1-17 |
| P2MOMID | | | P2REL (FSQ130), P2UNR (FSQ180) | |
| P1DADID | Family/HH | Household roster number of resident father | P1REL (FSQ130), P1UNR (FSQ180), | 1-17 |
| P2DADID | | | P2REL (FSQ130), P2UNR (FSQ180) | |
| P1HPARNT | Family/HH | Classification of the focal child's parents who | P1REL (FSQ130), P1UNR (FSQ180) | 1 = Biological mother and biological |
| P2HPARNT | | reside in the household | P1HMOM, P1HDAD (composites), | father |
| | | | P2REL (FSQ130), P2UNR (FSQ180), | 2 = Biological mother and other |
| | | | P2HMOM, P2HDAD (composites) | father (step-, adoptive, foster) |
| | | | | 3 = Biological father and other |
| | | | | mother (step-, adoptive, foster) |
| | | | | 4 = Biological mother only |
| | | | | 5 = Biological father only |
| | | | | 6 = Two adoptive parents |
| | | | | 7 = Single adoptive parent or |
| | | | | adoptive parent and stepparent |
| | | | | 8 = Related guardian(s) |
| | | | | 9 = Unrelated guardian(s) |
| P1HFAMIL | Family/HH | Family type categories using both parent and | P1REL (FSQ130), P1UNR (FSQ180) | 1 = Two parents and sibling(s) |
| P2HFAMIL | | sibling information | P1HMOM, P1HDAD, P1NUMSIB | 2 = Two parents, no siblings |
| | | | (composites) | 3 = One parent and sibling(s) |
| | | | | |
| | | | P2HMOM, P2HDAD, P2NUMSIB | 5 = Other |
| | | | (composites) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|-------------------------------------|-----------------------------------|
| P1NUMSIB | Family/HH | Total number of siblings with whom the focal child | P1REL (FSQ130), P1UNR (FSQ180), | Continuous |
| P2NUMSIB | | lives, including anyone reporting him/herself as the | P1AGE, P2REL (FSQ130), | |
| | | child of the focal child's foster parent/guardian | P2UNR (FSQ180), P2AGE | |
| P1LESS18 | Family/HH | Total number of household members younger than | P1REL (FSQ130), P1UNR (FSQ180), | Continuous |
| P2LESS18 | | 18 years old | P1AGE, P2REL (FSQ130), | |
| | | | P2UNR (FSQ180), P2AGE | |
| P1OVER18 | Family/HH | Total number of household members older than 18 | P1REL (FSQ130), | Continuous |
| P2OVER18 | | years old | P1UNR (FSQ180), P1AGE, | |
| | | | P2REL (FSQ130), | |
| | | | P2UNR (FSQ180), | |
| | | | P2AGE | |
| P1HTOTAL | Family/HH | Total number of household members | P1REL (FSQ130), P1UNR (FSQ180), | Continuous |
| P2HTOTAL | | | P2REL (FSQ130), P2UNR (FSQ180) | |
| P1TWIN | Family/HH | Household has sampled twins | P1PER, P2PER | 0 = No twin in household |
| P2TWIN | | | | 1 = Twin in household |
| WKPOVRTY | Family/HH | Poverty indicator | WKINCOME, P2HTOTAL | |
| | | | (composites), and Census-defined | 1 = Below poverty threshold |
| | | | thresholds | 2 = At or above poverty threshold |
| WKINCOME | Family/HH | Household income | INCOME (PAQ100). | Continuous |
| | | | Imputed using hotdeck imputation if | |
| | | | missing. Imputation used partial | |
| | | | income information collected in the | |
| | | | parent interview if available. | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|--|---|
| WKSESL | Family/HH | Socioeconomic status (SES) scale | Derived from the logarithm of WKINCOME, WKMOMED, WKDADED, WKMOMSCR, (mother's occupation GSS prestige score), WKDADSCR (father's occupation GSS prestige score) (composites) | Continuous (Higher values indicate higher SES) |
| WKSESQ5 | Family/HH | Quintile indicator for WKSESL (SES scale) | Derived from WKSESL at the child level using round 2 P2 weights | 1 = First quintile (highest SES) 2 = Second quintile 3 = Third quintile 4 = Fourth quintile 5 = Fifth quintile (lowest SES) |
| WKPARED | Family/HH | Highest level of education for the child's parents or nonparent guardians who reside in the household. If only one parent or guardian resides in the household, WKPARED reflects that parent's education level. | WKMOMED, WKDADED (composites) | 1 = 8th grade or below 2 = 9th to 12th grade 3 = High school diploma/equivalent 4 = Voc/Tech program 5 = Some college 6 = Bachelor's degree 7 = Graduate/professional school/no degree 8 = Master's degree 9 = Doctorate or professional degree |

Table 7-6. Composite variables (continued)

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|------------------------------------|--|
| WKDADSCR | Family/HH | Father's occupation GSS prestige score | Average of the 1998 GSS prestige | 29.6 Handler, Equip, Cleaner, |
| | | | scores of the 1998 census | Helpers, Labor |
| | | | occupational category codes | 33.42 Production Working |
| | | | previously matched to the ECLS-K | Occupation |
| | | | occupation codes. The ECLS-K | 34.95 Service Occupations |
| | | | occupation codes were collected in | 35.63 Agriculture, Forestry, Fishing |
| | | | EMQ120, EMQ130, and EMQ140 | Occupations |
| | | | | 35.78 Marketing & Sales |
| | | | | Occupation |
| | | | | 35.92 Transportation, Material |
| | | | | Moving |
| | | | | 37.67 Precision Production |
| | | | | Occupation |
| | | | | 38.18 Administrative Support, |
| | | | | Including Clerk |
| | | | | 39.18 Mechanics & Repairs |
| | | | | 39.2 Construction & Extractive |
| | | | | Occupations |
| | | | | 48.69 Technologists, Except Health |
| | | | | 52.54 Writers, Artists, Entertainers, |
| | | | | Athletes |
| | | | | 53.5 Executive, Admin, |
| | | | | Managerial Occupation |
| | | | | 57.83 Health Technologists & Technicians |
| | | | | 59 Social Scientist/Workers, |
| | | | | Lawyers |
| | | | | 61.56 Registered Nurses, |
| | | | | Pharmacists |
| | | | | 62.87 Natural Scientists & |
| | | | | Mathematicians |
| | | | | 63.43 Teacher, Except |
| | | | | Postsecondary |
| | | | | 64.89 Engineers, Surveyors, & |
| | | | | Architects |
| | | | | 72.1 Teachers; College, |
| | | | | Postsecondary Counselors, |
| | | | | Librarians |
| | | | | 77.5 Physicians, Dentists, |
| | | | | Veterinarians |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|----------------------|-----------|--|--|---|
| WKLANGST | Family/HH | The primary language other than English spoken in the child's home | P1ANYLNG (PLQ.020), P1PRMLNG (PLQ060), PRIMARYLA (PLQ060), OTHERLAN (PLQ040), P2ANYLNG (SPQ155) P2PRMLNG (SPQ157) | 1 = Non-English language 2 = English language |
| P1LANGUG | Family/HH | Language(s) spoken most often at home by the parent(s)/guardian(s) in the household | P1ANYLNG (PLQ020), OTHERLAN (PLQ040) | 1 = Both only speak English language 2 = 1 (of 2) parents mainly speaks a non-English language 3 = Both only speak a non-English language |
| P2MARSTA | Family/HH | Marital status of parent(s) in household | P2CURMAR (FSQ200) | 1 = Married 2 = Separated 3 = Divorced 4 = Widowed 5 = Never married 7 = No biological or adoptive parents in household |
| P2ERRFLG | Family/HH | A dichotomous variable indicating clear errors in the household roster | P1REL (FSQ130), P1UNR (FSQ180), P2JOI, P2RDP, P2REAS1 | 0 = False 1 = True |
| P2KSHCHG | Family/HH | Household had roster change. A dichotomous variable set to 1 if a household experienced a true change between rounds. In this context, true change means that at least one individual entered or left the household between rounds, and this change did not involve interviewer corrections for round 1 roster errors. | P1REL (FSQ130), P1UNR (FSQ180), P2JOI, P2REAS1 | 0 = False 1 = True |
| P2SPQDAT | Family/HH | Record in section SPQ (fall nonrespondent) | PARENTID | 0 = No record in SPQ 1 = Record in SPQ |
| P1DADTYP P2DADTYP | Family/HH | Type of resident father | P1REL (FSQ130), P1UNR (FSQ180), P2REL (PSQ130) P2UNR (FSQ180) | 1 = Biological 2 = Other 3 = None |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|------------------|--------------------------------------|
| P1HDAD | Family/HH | Indicates whether the birth, adoptive, step, or foster | P1REL (FSQ130), | 1 = Birth father |
| P2HDAD | | father of the focal child resides in the household | P1UNR (FSQ180), | 2 = Adoptive father |
| | | with the focal child | P2REL (FSQ130), | 3 = Step father |
| | | | P2UNR (FSQ180) | 4 = Foster father |
| | | | | 5 = Partner father |
| | | | | 6 = Father, unknown type |
| | | | | 7 = No resident father |
| P1HDAGE | Family/HH | Age of resident father | P1AGE | Continuous |
| P2HDAGE | | | P2AGE | |
| P1HDRACE | Family/HH | Race and ethnicity of the father or male guardian in | P1RC_1 (FSQ190), | 1 = White, non-Hispanic |
| P2HDRACE | | the household | P1RC_2 (FSQ190), | 2 = Black or African American, non- |
| | | | P1RC_3 (FSQ190), | Hispanic |
| | | | P1RC_4 (FSQ190), | 3 = Hispanic, race specified |
| | | | P1RC_5 (FSQ190), | 4 = Hispanic, no race specified |
| | | | P1RC_6 (FSQ190), | 5 = Asian |
| | | | RACEOS (FSQ190), | 6 = Native Hawaiian or other Pacific |
| | | | P1HSP (FSQ190), | Islander |
| | | | P2RC_1 (FSQ195), | 7 = American Indian or Alaskan |
| | | | P2RC_2 (FSQ195), | Native |
| | | | P2RC_3 (FSQ195), | 8 = More than one race, non- |
| | | | P2RC_4 (FSQ195), | Hispanic |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|------------------|---------|
| P1HDASN | Family/HH | Father or male guardian in the household is Asian | P1RC_1 (FSQ190), | 1 = Yes |
| P2HDASN | - | | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| P1HDBLCK | Family/HH | Father or male guardian in the household is African | | 1 = Yes |
| P2HDBLCK | | American | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|------------------|---------|
| P1HDIND | Family/HH | Father or male guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HDIND | - | American Indian or Native Alaskan | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| P1HDPACI | Family/HH | Father or male guardian in the household is Native | P1RC_1 (FSQ190), | 1 = Yes |
| P2HDPACI | | Hawaiian or other Pacific Islander | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|------------------|---------|
| P1HDWHT | Family/HH | Father or male guardian in the household is white | P1RC_1 (FSQ190), | 1 = Yes |
| P2HDWHT | - | - | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| P1HDHISP | Family/HH | Father or male guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HDHISP | | Hispanic | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|-------------------------------------|--------------------------------------|
| P1HDMT1R | Family/HH | Father or male guardian in the household is more | P1RC_1 (FSQ190), | 1 = Yes |
| P2HDMT1R | | than one race | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| WKDADED | Family/HH | Father's highest level of education | P1HIG (PEQ020), | 1 = 8th grade or below |
| | | | P1HIS (PEQ030) | 2 = 9th to 12th grade |
| | | | P2HIGHGR (SPQ160), | 3 = High school diploma/equivalent |
| | | | P2HSDIPL (SPQ170), | 4 = Voc/Tech program |
| | | | P2HIGHSP (SPQ180), | 5 = Some college |
| | | | P2PRTDIP (SPQ190), | 6 = Bachelor's degree |
| | | | Imputed using hotdeck imputation if | 7 = Graduate/professional school/no |
| | | | missing. | degree |
| | | | | 8 = Master's degree |
| | | | | 9 = Doctorate or professional degree |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|----------------------------|----------------------------------|
| P1HDEMP | Family/HH | The work status of the father/male guardian in the | P1HRS (EMQ050), | 1 = 35 hours or more per week |
| | - | household. | P1PAY 1 (EMQ020), | (EMQ.050) |
| | | | P1VAC (EMQ030), | 2 = Less than 35 hours per week |
| | | | P1LOK (EMQ060), | (EMQ.050) |
| | | | P1DO1 (EMQ070), | 3 = Looking for work (EMQ.060 & |
| | | | P1DO2 (EMQ070), | EMQ.070 does not $=6$) |
| | | | P1DO3 (EMQ070), | 4 = Not in the labor force |
| | | | P1DO4 (EMQ070), | |
| | | | P1DO5 (EMQ070), | |
| | | | P1DO6 (EMQ070), | |
| | | | P1DO7 (EMQ070) | |
| P1DADOCC | Family/HH | Father's occupation | FORWHOM (EMQ120), KINDOFIN | 1 Handler, Equip, Cleaner, |
| | | | (EMQ130), and KINDOFWO | Helpers, Labor |
| | | | (EMP140) | 2 Production Working |
| | | | | Occupation |
| | | | | 3 Service Occupations |
| | | | | 4 Agriculture, Forestry, Fishing |
| | | | | Occupations |
| | | | | 5 Marketing & Sales |
| | | | | Occupation |
| | | | | 6 Transportation, Material |
| | | | | Moving |
| | | | | 7 Precision Production |
| | | | | Occupation |
| | | | | 8 Administrative Support, |
| | | | | Including Clerk |
| | | | | 9 Mechanics & Repairs |
| | | | | 10 Construction & Extractive |
| | | | | Occupations |
| | | | | Technologists, Except Health |
| | | | | Writers, Artists, Entertainers, |
| | | | | Athletes |
| | | | | 13 Executive, Admin, |
| | | | | Managerial Occupation |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values | 3 |
|---------------|-------------|--|----------------------------|--------|--|
| P1DADOCC | Family/HH | Father's occupation | FORWHOM (EMQ120), KINDOFIN | 14 | Health Technologists & |
| (continued) | | | (EMQ130), and KINDOFWO | | Technicians |
| | | | (EMP140) | 15 | Social Scientist/Workers, |
| | | | | | Lawyers |
| | | | | 16 | Registered Nurses, |
| | | | | | Pharmacists |
| | | | | | Natural Scientists & |
| | | | | | Mathematicians |
| | | | | 18 | Teacher, Except |
| | | | | 1.0 | Postsecondary |
| | | | | 19 | Engineers, Surveyors, & Architects |
| | | | | 20 | |
| | | | | 20 | Teachers; College, Postsecondary Counselors, |
| | | | | | Librarians |
| | | | | 21 | Physicians, Dentists, |
| | | | | 2.1 | Veterinarians |
| | | | | 22 | Unemployed, Retired |
| | | | | | |
| | | | | | |
| P1HDLANG | Family/HH | Language used by the father when speaking to the | P1ANYLNG (PLQ020), RESLA | 1 - No | ever speaks non-English |
| IIIDLANG | ranniy/1111 | child | (PLQ.080) | | nguage |
| | | Ciniu | (1 LQ.000) | | metimes speaks non-English |
| | | | | | nguage |
| | | | | | ten speaks non-English |
| | | | | | nguage |
| | | | | | ery often speaks non-English |
| | | | | I . | nguage |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|-----------------------------------|--------------------------------------|
| P1HDLTOD | Family/HH | Language used by the child when speaking to the | P1ANYLNG (PLQ020), RESLA | 1 = Never speaks non-English |
| | | father | (PLQ.080) | language |
| | | | | 2 = Sometimes speaks non-English |
| | | | | language |
| | | | | 3 = Often speaks non-English |
| | | | | language |
| | | | | 4 = Very often speaks non-English |
| | | | | language |
| P1MOMTYP | Family/HH | Type of resident mother | P1REL (FSQ130), | 1 = Biological |
| P2MOMTYP | | | P1UNR (FSQ180), P2REL (FSQ130). | 2 = Other |
| | | | P2UNR (FSQ180) | 3 = None |
| P1HMOM | Family/HH | Indicates whether the birth, adoptive, step, or foster | r P1REL (FSQ130), P1UNR (FSQ180), | 1 = Birth mother |
| P2HMOM | | mother of the focal child resides in the household | P2REL (FSQ130), P2UNR (FSQ180) | 2 = Adoptive mother |
| | | with the focal child | | 3 = Step mother |
| | | | | 4 = Foster mother |
| | | | | 5 = Partner mother |
| | | | | 6 = Mother, unknown type |
| | | | | 7 = No resident mother |
| P1HMAGE | Family/HH | Age of resident mother | P1AGE | Continuous |
| P2HMAGE | | | P2AGE | |
| P1HMRACE | Family/HH | Race and ethnicity of the mother or female | P1RC_1 (FSQ190), | 1 = White, non-Hispanic |
| P2HMRACE | | guardian in the household | P1RC_2 (FSQ190), | 2 = Black or African American, non- |
| | | | P1RC_3 (FSQ190), | Hispanic |
| | | | P1RC_4 (FSQ190), | 3 = Hispanic, race specified |
| | | | P1RC_5 (FSQ190), | 4 = Hispanic, no race specified |
| | | | P1RC_6 (FSQ190), | 5 = Asian |
| | | | RACEOS (FSQ190), | 6 = Native Hawaiian or other Pacific |
| | | | P1HSP (FSQ190), | Islander |
| | | | P2RC_1 (FSQ195), | 7 = American Indian or Alaskan |
| | | | P2RC_2 (FSQ195), | Native |
| | | | P2RC_3 (FSQ195), | 8 = More than 1 race, non-Hispanic |
| | | | P2RC_4 (FSQ195), | 9 = Other |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|------------------|---------|
| P1HMASN | Family/HH | Mother or female guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HMASN | - | Asian | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| P1HMBLCK | Family/HH | Mother or female guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HMBLCK | | African American | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|------------------|---------|
| P1HMIND | Family/HH | Mother or female guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HMIND | - | American Indian or Native Alaskan | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC 3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| P1HMPACI | Family/HH | Mother or female guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HMPACI | | Native Hawaiian or other Pacific Islander | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|------------------|---------|
| P1HMWHT | Family/HH | Mother or female guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HMWHT | | white | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| P1HMHISP | Family/HH | Mother or female guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HMHISP | | Hispanic | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|-------------------------------------|--------------------------------------|
| P1HMMT1R | Family/HH | Mother or female guardian in the household is | P1RC_1 (FSQ190), | 1 = Yes |
| P2HMMT1R | | more than one race | P1RC_2 (FSQ190), | 2 = No |
| | | | P1RC_3 (FSQ190), | |
| | | | P1RC_4 (FSQ190), | |
| | | | P1RC_5 (FSQ190), | |
| | | | P1RC_6 (FSQ190), | |
| | | | RACEOS (FSQ190), | |
| | | | P1HSP (FSQ190), | |
| | | | P2RC_1 (FSQ195), | |
| | | | P2RC_2 (FSQ195), | |
| | | | P2RC_3 (FSQ195), | |
| | | | P2RC_4 (FSQ195), | |
| | | | P2RC_5 (FSQ195), | |
| | | | RACEOS (FSQ198), | |
| | | | P2HSP (FSQ190) | |
| WKMOMED | Family/HH | Mother's highest level of education | P1HIG (PEQ020), | 1 = 8th grade or below |
| | | | P1HIS (PEQ030), | 2 = 9th to 12th grade |
| | | | P2HIGHGR (SPQ160), | 3 = High school diploma/equivalent |
| | | | P2HSDIPL (SPQ170), | 4 = Voc/Tech program |
| | | | P2HIGHSP (SPQ180), | 5 = Some college |
| | | | P2PRTDIP (SPQ190), | 6 = Bachelor's degree |
| | | | Imputed using hotdeck imputation if | 7 = Graduate/professional school/no |
| | | | missing. | degree |
| | | | | 8 = Master's degree |
| | | | | 9 = Doctorate or professional degree |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|------------------------------|----------------------------------|
| P1HMEMP | Family/HH | The work status of the mother or female guardian | P1PAY_1 (EMQ020), | 1 = 35 hours or more per week |
| | | in the household | P1HRS (EMQ050), | (EMQ.050) |
| | | | P1VAC (EMQ030), | 2 = Less than 35 hours per week |
| | | | P1LOK (EMQ060), | (EMQ.050) |
| | | | P1DO1 (EMQ070), | 3 = Looking for work (EMQ.060 & |
| | | | P1DO2 (EMQ070), | EMQ.070 does not $=6$) |
| | | | P1DO3 (EMQ070), | 4 = Not in the labor force |
| | | | P1DO4 (EMQ070), | |
| | | | P1DO5 (EMQ070), | |
| | | | P1DO6 (EMQ070), | |
| | | | P1DO7 (EMQ070) | |
| P1MOMOCC | Family/HH | Mother's occupation | Combination of FORWHOM | 1 Handler, Equip, Cleaner, |
| | | | (EMQ120), KINDOFIN (EMQ130), | Helpers, Labor |
| | | | and KINDOFWO (EMP140) | 2 Production Working |
| | | | | Occupation |
| | | | | 3 Service Occupations |
| | | | | 4 Agriculture, Forestry, Fishing |
| | | | | Occupations |
| | | | | 5 Marketing & Sales |
| | | | | Occupation |
| | | | | 6 Transportation, Material |
| | | | | Moving |
| | | | | 7 Precision Production |
| | | | | Occupation |
| | | | | 8 Administrative Support, |
| | | | | Including Clerk |
| | | | | 9 Mechanics & Repairs |
| | | | | 10 Construction & Extractive |
| | | | | Occupations |
| | | | | 11 Technologists, Except Health |
| | | | | Writers, Artists, Entertainers, |
| | | | | Athletes |
| | | | | 13 Executive, Admin, |
| | | | | Managerial Occupation |
| | | | | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|------------|--|--|--|
| P1MOMOCC | Family/HH | Mother's occupation | Combination of FORWHOM | 14 Health Technologists & |
| (continued) | railily/HH | Mother's occupation | (EMQ120), KINDOFIN (EMQ130), and KINDOFWO (EMP140) | Technicians Technicians Social Scientist/Workers, Lawyers Registered Nurses, Pharmacists Natural Scientists & Mathematicians Teacher, Except Postsecondary Engineers, Surveyors, & Architects Teachers; College, Postsecondary Counselors, Librarians Physicians, Dentists, Veterinarians Unemployed, Retired |
| P1HMLANG | Family/HH | Language used by the mother when speaking to the child | P1ANYLNG (PLQ020), RESLA (PLQ.080) | 1 = Never speaks non-English language 2 = Sometimes speaks non-English language 3 = Often speaks non-English language 4 = Very often speaks non-English language |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|--------------------------------|-----------------------------------|
| P1HMLTOM | Family/HH | Language used by the child when speaking to the | P1ANYLNG (PLQ020), RESLA | 1 = Never speaks non-English |
| | | mother | (PLQ.080) | language |
| | | | | 2 = Sometimes speaks non-English |
| | | | | language |
| | | | | 3 = Often speaks non-English |
| | | | | language |
| | | | | 4 = Very often speaks non-English |
| | | | | language |
| P1HMAFB | Family/HH | Resident biological mother's age when she first gave birth | P1AGE, P1OLDMOM (MHQ165) | Continuous |
| WKHEARLY | Family/HH | Mother worked between the child's birth and the | P1MOMWRK (EMQ170), | 1 = Yes |
| | | start of kindergarten | P2MOMWRK (SPQ200) | 2 = No |
| WKHMOMAR | Family/HH | Resident biological mother was married to the | P1LEGMAR (MHQ020), | 1 = Yes |
| | | biological father at the time of the child's birth | P1BIOLOG (MHQ.060), | 2 = No |
| | | | P1BIOPAR (MHQ125), | |
| | | | P1WHNMAR (MHQ025), | |
| | | | P1BIOLO2 (MHQ065), | |
| | | | P1BIOLO3 (MHQ065), | |
| | | | P1MDWHN (MHQ130), | |
| | | | P1MDWH2 (MHQ130), | |
| | | | P2BIOLOG (SPQ150) | |
| P1ABSDAD | Family/HH | Type of nonresident father | P1REL (FSQ130), P1BIO (HRQ030) | 1 = Biological only |
| | | | | 2 = Both biological and adoptive |
| P1BDVITL | Family/HH | The vital status of the nonresident biological father | P1BIO (HRQ030) | 1 = Living |
| | | | | 2 = Dead |
| P1BDAGE | Family/HH | Age of biological nonresident father | P1DB1 (HRQ040), P1BIOLOG | Continuous |
| | | | (HRQ030) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|-----------------|--------------------------------------|
| P1BDRACE | Family/HH | Race and ethnicity of nonresident biological father | P1BM1 (HRQ100), | 1 = White, non-Hispanic |
| | | | P1BM2 (HRQ100), | 2 = Black or African American, non- |
| | | | P1BM3 (HRQ100), | Hispanic |
| | | | P1BM4 (HRQ100), | 3 = Hispanic, race specified |
| | | | P1BM5 (HRQ100), | 4 = Hispanic, no race specified |
| | | | P1BM6 (HRQ100), | 5 = Asian |
| | | | P1BMH (HRQ090) | 6 = Native Hawaiian or other Pacific |
| | | | | Islander |
| | | | | 7 = American Indian or Alaskan |
| | | | | Native |
| | | | | 8 = More than one race, non- |
| | | | | Hispanic |
| | | | | 9 = Other |
| P1BDASN | Family/HH | Nonresident biological father is Asian | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BDBLCK | Family/HH | Nonresident biological father is African American | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| 242222 | - " " | | P1BMH (HRQ090) | |
| P1BDIND | Family/HH | Nonresident biological father is American Indian or | | 1 = Yes |
| | | Alaskan Native | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|-----------------|---------|
| P1BDPACI | Family/HH | Nonresident biological father is Native Hawaiian or | P1BM1 (HRQ100), | 1 = Yes |
| | | other Pacific Islander | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BDWHT | Family/HH | Nonresident biological father is white | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BDHISP | Family/HH | Nonresident biological father is Hispanic | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BDMT1R | Family/HH | Nonresident biological father is more than one race | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|--|--------------------------------|--------------------------------------|
| P1BDADED | Family/HH | Education of nonresident biological father | P1HIG (PEQ020), | 1 = 8th grade or below |
| | | | P1HIS (PEQ030) | 2 = 9th to 12th grade |
| | | | | 3 = High school diploma/equivalent |
| | | | | 4 = Voc/Tech program |
| | | | | 5 = Some college |
| | | | | 6 = Bachelor's degree |
| | | | | 7 = Graduate/professional school/no |
| | | | | degree |
| | | | | 8 = Master's degree |
| | | | | 9 = Doctorate or professional degree |
| P1ABSMOM | Family/HH | Type of nonresident mother | P1REL (FSQ130), P1BIO (HRQ030) | 1 = Biological only |
| | | | | 2 = Both biological and adoptive |
| P1BMVITL | Family/HH | The vital status of the nonresident biological | P1BIO (HRQ030) | 1 = Living |
| | | mother | | 2 = Dead |
| P1BMAGE | Family/HH | Age of biological nonresident mother | P1DB1 (HRQ040), P1BIO | Continuous |
| | | | (HRQ030), MONTHINT | |
| P1BMRACE | Family/HH | Race and ethnicity of nonresident biological mothe | r P1BM1 (HRQ100), | 1 = White, non-Hispanic |
| | | | P1BM2 (HRQ100), | 2 = Black or African American, non- |
| | | | P1BM3 (HRQ100), | Hispanic |
| | | | P1BM4 (HRQ100), | 3 = Hispanic, race specified |
| | | | P1BM5 (HRQ100), | 4 = Hispanic, no race specified |
| | | | P1BM6 (HRQ100), | 5 = Asian |
| | | | P1BMH (HRQ090) | 6 = Native Hawaiian or other Pacific |
| | | | | Islander |
| | | | | 7 = American Indian or Alaskan |
| | | | | Native |
| | | | | 8 = More than 1 race, non-Hispanic |
| | | | | 9 = Other |
| P1BMASN | Family/HH | Nonresident biological mother is Asian | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|-----------------|---------|
| P1BMBLCK | Family/HH | Nonresident biological mother is African American | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BMIND | Family/HH | Nonresident biological mother is American Indian | P1BM1 (HRQ100), | 1 = Yes |
| | | or Alaskan Native | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BMPACI | Family/HH | Nonresident biological mother is Native Hawaiian | P1BM1 (HRQ100), | 1 = Yes |
| | | or other Pacific Islander | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BMWHT | Family/HH | Nonresident biological mother is white | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BMHISP | Family/HH | Nonresident biological mother is Hispanic | P1BM1 (HRQ100), | 1 = Yes |
| | | | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|--------------------|--------------------------------------|
| P1BMMT1R | Family/HH | Nonresident biological mother is more than one | P1BM1 (HRQ100), | 1 = Yes |
| | | race | P1BM2 (HRQ100), | 2 = No |
| | | | P1BM3 (HRQ100), | |
| | | | P1BM4 (HRQ100), | |
| | | | P1BM5 (HRQ100), | |
| | | | P1BM6 (HRQ100), | |
| | | | P1BMH (HRQ090) | |
| P1BMOMED | Family/HH | Education of nonresident biological mother | P1HIG (PEQ020), | 1 = 8th grade or below |
| | | | P1HIS (PEQ030) | 2 = 9th to 12th grade |
| | | | | 3 = High school diploma/equivalent |
| | | | | 4 = Voc/Tech program |
| | | | | 5 = Some college |
| | | | | 6 = Bachelor's degree |
| | | | | 7 = Graduate/professional school/no |
| | | | | degree |
| | | | | 8 = Master's degree |
| | | | | 9 = Doctorate or professional degree |
| P1BMAFB | Family/HH | Nonresident biological mother's age when she first gave birth | P1OLDMOM (MHQ165) | Continuous |
| WKBMOMAR | Family/HH | Indicates whether the nonresident biological | P1LEGMAR (MHQ020), | 1 = Yes |
| | | mother was married to the biological father at the | P1BIOLOG (MHQ060), | 2 = No |
| | | time of the child's birth | P1BIOPAR (MHQ125), | |
| | | | P1WHNMAR (MHQ025), | |
| | | | P1BIOLO2 (MHQ065), | |
| | | | P1BIOLO3 (MHQ065), | |
| | | | P1MDWHN (MHQ130), | |
| | | | P1MDWH2 (MHQ130), | |
| | | | P2BIOLOG (SPQ150) | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|-----------------------------------|---|
| P1ADADED | Family/HH | Education of adoptive nonresident father | P1HIG (PEQ020), P1HIS (PEQ030) | 1 = 8th grade or below 2 = 9th to 12th grade 3 = High school diploma/equivalent 4 = Voc/Tech program 5 = Some college 6 = Bachelor's degree 7 = Graduate/professional school/no degree 8 = Master's degree 9 = Doctorate or professional degree |
| P1AMOMED | Family/HH | Education of adoptive nonresident mother | P1HIG (PEQ020), P1HIS (PEQ030) | 1 = 8th grade or below 2 = 9th to 12th grade 3 = High school diploma/equivalent 4 = Voc/Tech program 5 = Some college 6 = Bachelor's degree 7 = Graduate/professional school/no degree 8 = Master's degree 9 = Doctorate or professional degree |
| B1AGE | Teacher | Teacher's age | B1YRBORN | 21-78 |
| A1TQUEX | Teacher | Presence of round 1 teacher questionnaire A AM data | | 0 = False 1 = True |
| A2ACLASS | Teacher | Presence of round 2 teacher questionnaire A AM data | A2ANEW | 0 = False 1 = True |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|-----------|---|------------------------------|------------|
| A2DCLASS | Teacher | Presence of round 2 teacher questionnaire A all day | A2DNEW | 0 = False |
| | | data | | 1 = True |
| A2PCLASS | Teacher | Presence of round 2 teacher questionnaire A PM | A2PNEW | 0 = False |
| | | data | | 1 = True |
| A2TQUEX | Teacher | Presence or absence of round 2 teacher | | 0 = False |
| | | questionnaire A data | | 1 = True |
| B1TQUEX | Teacher | Presence of round 1 teacher questionnaire B data | | 0 = False |
| | | | | 1 = True |
| B2TQUEX | Teacher | Presence of round 2 teacher questionnaire B data | | 0 = False |
| | | | | 1 = True |
| A1ACLASS | Classroom | Presence of round 1 teacher questionnaire A AM | A1ABLACK, A1ATOTRA | 0 = False |
| | | data | | 1 = True |
| A1APBLK | Classroom | Percentage of blacks in class-AM | A1ABLACK, A1ATOTRA | Continuous |
| A1APHIS | Classroom | Percentage of Hispanics in class-AM | A1AHISP, A1ATOTRA | Continuous |
| A1APMIN | Classroom | Percentage of minorities in class-AM | A1AASIAN, A1AHISP, | Continuous |
| | | | A1ABLACK, A1AAMRIN, | |
| | | | A1ARACEO, A1ATOTRA | |
| A1DCLASS | Classroom | Presence of round 1 teacher questionnaire A all day | | 0 = False |
| | | (AD) data | | 1 = True |
| A1DPBLK | Classroom | Percentage of blacks in class-AD | A1DBLACK, A1DTOTRA | Continuous |
| A1DPHIS | Classroom | Percentage of Hispanics in class-AD | A1DHISP, A1DTOTRA | Continuous |
| A1DPMIN | Classroom | Percentage of minorities in class-AD | A1DASIAN, A1DHISP, | Continuous |
| | | | A1DBLACK, A1DAMRIN, | |
| | | | A1DRACEO, A1DTOTRA | |
| A1PCLASS | Classroom | Presence of round 1 teacher questionnaire A PM | | 0 = False |
| | | data | | 1 = True |
| A1PPBLK | Classroom | Percentage of blacks in Class-PM | A1PBLACK, A1PTOTRA | Continuous |
| A1PPHIS | Classroom | Percentage of Hispanics in Class-PM | A1PHISP, A1PTOTRA | Continuous |
| A1PPMIN | Classroom | Percentage of minorities in Class-PM | A1PASIAN, A1PHISP, A1PBLACK, | Continuous |
| | | | A1PAMRIN, A1PRACEO, | |
| | | | A1PTOTRA | |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|---|----------------|--|
| CREGION | School | Indicates the geographic region in which the child lives | Sampling Frame | 1 = Northeast: CT, ME, MA, NH, RI, VT, NJ, NY, PA 2 = Midwest: IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD 3 = South: DE, DC, FL, GA, MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX 4 = West: AZ, CO, ID, MT, NV, NM, UT, WY, AK, CA, HA, OR, WA |
| KURBAN | School | Denoted urbanicity, from the sampling frame. Urbanicity is assigned by the Census Bureau's TIGER geographic information system. | Sampling Frame | 1 = Large city - a central city of Consolidated Metropolitan Statistical Area (CMSA) with a pop. greater than or equal to 250,000 2 = Mid-size city - a central city of a CMSA or Metropolitan Statistical Area (MSA) with a pop. less than 250,000 3 = Urban fringe of large city – any incorporated place, Census Designated Place, or nonplace territory within a CMSA or MSA of a large city and defined as urban by the Census Bureau |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|---|--|---|
| KURBAN | School | Denoted urbanicity, from the sampling frame. Urbanicity is assigned by the Census Bureau's TIGER geographic information system. | Frame | 5 = Large town – an incorporated place or Census Designated Place with a pop. greater than or equal to 25,000 and located outside a CMSA or MSA 6 = Small town – an incorporated place or Census Designated Place with a pop. less than 25,000 and greater than 2,500 – located outside a CMSA or MSA 7 = Rural – any incorporated place, Census Designated Place, or nonplace territory designated as rural by the Census Bureau |
| S2KSCTYP | School | School type from the school administrator questionnaire | S2PUBLIC, S2CATHOL, S2OTHREL, S2OTHPRI, CS_TYPE2 | 1 = Catholic 2 = Other religious 3 = Other private 4 = Public |
| S2KPUPRI | School | Public or private school | S2KSCTYP | 1 = Public 2 = Private |
| S2KENRLK | School | Total school kindergarten enrollment | S2HDCHDN, S2FDCHDN, S2KCCCHDN, S2TKCHDN, S2T1CHDN | Continuous |
| S2KENRLS | School | Total school enrollment | S2ANUMCH1, TOT_STD (from frame) | 1 = 0-149 students 2 = 150-299 students 3 = 300-499 students 4 = 500-749 students 5 = 750 and above students |
| S2KLNGTH | School | School year length | S2NUMDAY | Continuous |
| S2KMINOR | School | Percentage of minority students in school | F2STUMIN (from frame), S2PCTHIS, S2INDPCT, S2ASNPCT, S2BLKPCT, S2PCFPCT, S2WHTPCT | Continuous |
| S2KGFTED | School | Percentage of gifted/talented students in school | S2GFTNBR, S2ANUMCH | Continuous |
| S2KFLNCH | School | Percentage of students eligible for free lunch in school | S2ELILNC, S2ANUMCH | Continuous |

Table 7-6. Composite variables (continued)

| Variable Name | Category | Description | Derived from | Values |
|---------------|----------|--|---|---|
| S2KRLNCH | School | Percent of students eligible for reduced price lunch in school | S2ELIRED, S2ANUMCH | Continuous |
| S2KSCLVL | School | School instructional level from school administrator questionnaire | S212TH, S211TH, S2TENTH, S2NINTH, S28TH, S27TH, S2SIXTH, S2FIFTH, S2FOURTH, S2THIRD, S2SECOND, S2GRADE1, S2PRE1, S2KINDER, S2TRANS, S2PRKNDR, S2TWEL12, S2ELEV11, S2TEN10, S2NIN9TH, S2ATE8TH, S2SEV7TH, S2SIX6TH, S2FIF5TH, S2FOR4TH, S2THI3RD, S2SEC2ND, S2FIR1ST, S2PRE1ST, S2KINGAR, S2REDDYN, S2PREK, HIGRADE (from frame) | 1 = School high grade less than 1 st grade 2 = School high grade is 1 st , 2 nd , or 3 rd grade 3 = School high grade is 4 th , 5 th , or 6 th grade 4 = School high grade is 7-12 grade |
| K2INFAC | School | Presence or absence of facilities checklist data | | 0 = ID not in facilities checklist 1 = ID in facilities checklist |
| S2INSAQ | School | Presence or absence of school administrator questionnaire (SAQ) data | | 0 = ID not in SAQ 1 = ID in SAQ |

7.9 Masked Variables

All the variables from the ECLS-K restricted-use file are included in the same order on the ECLS-K public-use file. New variables created during the masking process are added to the end of the files. For some of the variables, certain categories were modified. The variable labels for those masked variables were updated from the restricted-use variables to reflect the new categories that were created during the masking process.

Variables on the restricted-use files were modified in different ways based on the disclosure analysis NCES conducted in order to protect the identity of the respondents and children. There are several types of modifications on the public-use files.

- 1. Outliers are top- or bottom- coded to prevent identification of unique schools, teachers, parents and children without affecting overall data quality.
- 2. Certain schools identified as at risk for disclosure have a 5 to 10 percent noise introduced in those variables that pose a risk for disclosure.
- 3. Variables with too few cases and a sparse distribution are suppressed in the public-use files.
- 4. Certain continuous variables are modified into categorical variables, and certain categorical variables have their categories collapsed in the public-use file. While this protects the cases from a disclosure risk, these variables can still be used in all different kinds of analysis such as regression analysis.

There is a comment field in the variable frequency distribution view screen of the electronic code book that displays a comment for each masked variable indicating whether the variable from the restricted-use file has been recoded or suppressed in the public-use file. Variables that were recoded in any way during the data masking process display the comment, "This data recoded for respondent confidentiality." Variables that were suppressed on the public-use file for protection of the respondent or child from identification display the comment, "This data suppressed for respondent confidentiality" and all values for the variable are set to equal –2 for that variable. New variables created during the masking process also display the comment, "This data recoded for respondent confidentiality."

The following tables present the list of the masked variables for each catalog. The tables display the variable name, variable label and the comment displayed in the electronic code book

indicating if the variable was recoded or suppressed. A crosswalk of new variables created during masking with the restricted-use variables is presented to help the user identify the recoded variables. For example, A1KGTYP was created during masking and holds the values 1=regular kindergarten type and 2=other kindergarten type. Table 7-7 presents the masked variables for the child catalog. The table is sorted sequentially by the variable Field ID (see section 8.6.1 for how to use the variable Field ID for the child catalog.) Table 7-8 presents the masked variables for the teacher catalog. The table is sorted sequentially by the variable Field ID (see section 8.7.1 for how to use the variable Field ID for the teacher catalog.) Table 7-9 presents the masked variables for the school catalog. The table is sorted sequentially by the variable Field ID (see section 8.8.1 for how to use the variable Field ID for the school catalog.)

Table 7-7. Masked variables in the child catalog

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 10 | CS_TYPE2 | TYPE OF SCHOOL IN SAMPLE FRAME | This data recoded for respondent confidentiality. |
| 11 | KURBAN | LOCATION TYPE IN SAMPLE FRAME | This data recoded for respondent confidentiality. |
| 14 | DOBYY | CHILD COMPOSITE DOB YEAR | This data recoded for respondent confidentiality. |
| 17 | R1_KAGE | R1 COMPOSITE CHILD ASSESSMENT AGE(MNTHS) | This data recoded for respondent confidentiality. |
| 227 | P1AGEENT | P1 AGE (MONTHS) AT KINDERGARTEN ENTRY | This data recoded for respondent confidentiality. |
| 320 | A1PBLK | A1 PERCENT OF BLACKS IN CLASS | This data recoded for respondent confidentiality. |
| 323 | B1AGE | B1 TEACHER'S AGE | This data recoded for respondent confidentiality. |
| 324 | B2AGE | B2 TEACHER'S AGE | This data recoded for respondent confidentiality. |
| 326 | S2KENRLK | S2 TOTAL SCHOOL K ENROLLMENT | This data recoded for respondent confidentiality. |
| 327 | S2KENRLS | S2 TOTAL SCHOOL ENROLLMENT | This data recoded for respondent confidentiality. |
| 328 | S2KMINOR | S2 PERCENT MINORITY STUDENTS | This data recoded for respondent confidentiality. |
| 329 | S2KFLNCH | S2 PCT FREE LUNCH ELIGIBLE STUDENTS | This data recoded for respondent confidentiality. |
| 330 | S2KRLNCH | S2 PCT REDUCED LUNCH ELIGIBLE STUDENTS | This data recoded for respondent confidentiality. |
| 332 | S2KLNGTH | S2 SCHOOL YEAR LENGTH | This data recoded for respondent confidentiality. |
| 333 | S2KGFTED | S2 PERCENT GIFTED/TALENTED STUDENTS | This data recoded for respondent confidentiality. |
| 816 | P1WHATDI | P1 CHQ125 1ST DIAGNOSIS-LEARNING ABILITY | This data suppressed for respondent confidentiality. |
| 817 | P1HOWOLD | P1 CHQ130 AGE AT 1ST DIAGNS-LRN ABLTY | This data suppressed for respondent confidentiality. |
| 818 | P1OLDUNT | P1 CHQ130 AGE 1ST DIAGNS-LRN ABLTY | This data suppressed for respondent confidentiality. |
| 819 | P1MMDIAG | P1 CHQ135 MNTH AT 1ST DIAGNS-LRN ABLTY | This data suppressed for respondent confidentiality. |
| 820 | P1YYDIAG | P1 CHQ135 YR AT 1ST DIAGNOSIS-LRN ABLTY | This data suppressed for respondent confidentiality. |
| 824 | P1PROFFD | P1 CHQ155 IF ACTIVITY PROBLEM DIAGNOSED | This data suppressed for respondent confidentiality. |
| 825 | P1WHATD3 | P1 CHQ160 WHAT 1ST DIAGNOSIS - ACTIVITY | This data suppressed for respondent confidentiality. |
| 826 | P1HOWOL2 | P1 CHQ165 AGE AT 1ST DIAGNOSIS-ACTIVITY | This data suppressed for respondent confidentiality. |
| 827 | P1OLDUN2 | P1 CHQ165 AGE UNIT AT 1ST DIAGNS-ACTVITY | This data suppressed for respondent confidentiality. |
| 828 | P1MMDIA2 | P1 CHQ170 MNTH AT 1ST DIAGNOSIS-ACTIVITY | This data suppressed for respondent confidentiality. |
| 829 | P1YYDIA2 | P1 CHQ170 YR AT 1ST DIAGNOSIS-ACTIVITY | This data suppressed for respondent confidentiality. |
| 833 | P1HOWOL3 | P1 CHQ190 AGE AT 1ST DIAGNOSIS-MOBILITY | This data suppressed for respondent confidentiality. |
| 834 | P1OLDUN3 | P1 CHQ190 AGE UNIT AT 1ST DIAGNS-MOBLITY | This data suppressed for respondent confidentiality. |
| 835 | P1MMDIA3 | P1 CHQ190 MONTH AT 1ST DIAGNS-MOBLITY | This data suppressed for respondent confidentiality. |
| 836 | P1YYDIA3 | P1 CHQ195 YR AT 1ST DIAGNOSIS-MOBILITY | This data suppressed for respondent confidentiality. |
| 841 | P1HOWOL4 | P1 CHQ220 AGE AT 1ST DIAGNOSIS-SPEECH | This data suppressed for respondent confidentiality. |
| 842 | P1OLDUN4 | P1 CHQ220 AGE UNIT AT 1ST DIAGNS-SPEECH | This data suppressed for respondent confidentiality. |

Table 7-7. Masked variables in the child catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 843 | P1MMDIA4 | P1 CHQ225 MONTH AT 1ST DIAGNOSIS-SPEECH | This data suppressed for respondent confidentiality. |
| 844 | P1YYDIA4 | P1 CHQ225 YEAR AT 1ST DIAGNOSIS-SPEECH | This data suppressed for respondent confidentiality. |
| 848 | P1HOWOL5 | P1 CHQ250 AGE AT 1ST DIAGNOSIS-HEARING | This data suppressed for respondent confidentiality. |
| 849 | P1OLDUN5 | P1 CHQ250 AGE UNIT AT 1ST DIAGNS-HEARING | This data suppressed for respondent confidentiality. |
| 850 | P1MMDIA5 | P1 CHQ255 MONTH AT 1ST DIAGNOSIS-HEARING | This data suppressed for respondent confidentiality. |
| 851 | P1YYDIA5 | P1 CHQ255 YR AT 1ST DIAGNOSIS-HEARING | This data suppressed for respondent confidentiality. |
| 852 | P1HEARS | P1 CHQ260 DEGREE OF CHILD'S DEAFNESS | This data suppressed for respondent confidentiality. |
| 853 | P1HEARAI | P1 CHQ265 IF CHILD WEARS HEARING AID | This data suppressed for respondent confidentiality. |
| 854 | P1COCHLE | P1 CHQ270 IF CHILD HAS COCHLEAR IMPLANTS | This data suppressed for respondent confidentiality. |
| 855 | P1HEARS2 | P1 CHQ280 DEVICE EFFECT ON CHD'S HEARING | This data suppressed for respondent confidentiality. |
| 859 | P1HOWOL6 | P1 CHQ305 AGE AT 1ST DIAGNOSIS - VISION | This data suppressed for respondent confidentiality. |
| 860 | P1OLDUN6 | P1 CHQ305 AGE UNIT AT 1ST DIAGNOS-VISION | This data suppressed for respondent confidentiality. |
| 861 | P1DIA6MM | P1 CHQ310 MONTH AT 1ST DIAGNOSIS-VISION | This data suppressed for respondent confidentiality. |
| 862 | P1DIA6YY | P1 CHQ310 YR AT 1ST DIAGNOSIS-VISION | This data suppressed for respondent confidentiality. |
| 863 | P1CORREC | P1 CHQ315 IF CHD'S VISION IS CORRECTABLE | This data suppressed for respondent confidentiality. |
| 864 | P1BESTEY | P1 CHQ320 WHAT CAN CHILD BEST SEE | This data suppressed for respondent confidentiality. |
| 882 | P1THER14 | P1 CHQ375 AGE AT THERAPY BEGINNING | This data suppressed for respondent confidentiality. |
| 883 | P1THER15 | P1 CHQ375 AGE UNIT AT THERAPY BEGINNING | This data suppressed for respondent confidentiality. |
| 884 | P1THER16 | P1 CHQ380 MONTH AT THERAPY BEGINNING | This data suppressed for respondent confidentiality. |
| 885 | P1THER17 | P1 CHQ380 YEAR AT THERAPY BEGINNING | This data suppressed for respondent confidentiality. |
| 887 | P1LASTMM | P1 CHQ390 LAST THERAPY MONTH | This data suppressed for respondent confidentiality. |
| 888 | P1LASTYY | P1 CHQ390 LAST THERAPY YEAR | This data suppressed for respondent confidentiality. |
| 890 | P1SPECIL | P1 CHQ410 IF CHD USES SPECIAL EQUIPMENT | This data suppressed for respondent confidentiality. |
| 1025 | P1PRMLNG | P1 PLQ060 WHAT PRIMARY LANGUAGE AT HOME | This data recoded for respondent confidentiality. |
| 1482 | P2CNTRYB | P2 INQ310 COUNTRY OF BIRTH | This data suppressed for respondent confidentiality. |
| 1517 | P2PRMLNG | P2 SPQ157 WHAT PRIMARY LANGUAGE AT HOME | This data recoded for respondent confidentiality. |
| 1831 | P2INCOME | P2 PAQ100 TOTAL HOUSEHOLD INCOME (\$) | This data recoded for respondent confidentiality. |
| 1836 | P2HOWPAY | P2 PAQ137 HOW MUCH PAID IN TUITION (\$) | This data recoded for respondent confidentiality. |
| 1848 | A1TPREK | A1 Q4A TCH PREKINDERGARTEN LEVELS | This data suppressed for respondent confidentiality. |
| 1849 | A1TTRNK | A1 Q4B TCH TRANSITIONAL KINDERGARTEN | This data suppressed for respondent confidentiality. |
| 1850 | A1TREGK | A1 Q4C TEACHES REGULAR KINDERGARTEN | This data suppressed for respondent confidentiality. |
| 1851 | A1TPRE1 | A1 Q4D TCH PRE-1ST GRADE LEVEL | This data suppressed for respondent confidentiality. |
| 1852 | A1T1ST | A1 Q4E TCH 1ST GRADE LEVEL | This data suppressed for respondent confidentiality. |
| 1853 | A1T2ND | A1 Q4F TCH 2ND GRADE LEVEL | This data suppressed for respondent confidentiality. |

Table 7-7. Masked variables in the child catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|---------------------------------------|--|
| 1854 | A1T3RD | A1 Q4G TCH 3RD GRADE OR HIGHER LEVEL | This data suppressed for respondent confidentiality. |
| 1855 | A13YROL | A1 Q5A HOW MANY 3-YEAR-OLDS IN CLASS | This data recoded for respondent confidentiality. |
| 1856 | A14YROL | A1 Q5B HOW MANY 4-YEAR-OLDS IN CLASS | This data recoded for respondent confidentiality. |
| 1857 | A15YROL | A1 Q5C HOW MANY 5-YEAR-OLDS IN CLASS | This data recoded for respondent confidentiality. |
| 1858 | A16YROL | A1 Q5D HOW MANY 6-YEAR-OLDS IN CLASS | This data recoded for respondent confidentiality. |
| 1859 | A17YROL | A1 Q5E HOW MANY 7-YEAR-OLDS IN CLASS | This data recoded for respondent confidentiality. |
| 1860 | A18YROL | A1 Q5F HOW MANY 8-YEAR-OLDS IN CLASS | This data recoded for respondent confidentiality. |
| 1861 | A19YROL | A1 Q5G HOW MANY 9-YEAR-OLDS IN CLASS | This data recoded for respondent confidentiality. |
| 1862 | A1TOTAG | A1 Q5H TOTAL CLASS ENROLLMENT (AGE) | This data recoded for respondent confidentiality. |
| 1863 | A1ASIAN | A1 Q6A # OF ASIAN/PACIFIC ISLANDERS | This data recoded for respondent confidentiality. |
| 1864 | A1HISP | A1 Q6B # OF HISPANICS (ALL RACES) | This data recoded for respondent confidentiality. |
| 1865 | A1BLACK | A1 Q6C # OF NON-HISPANIC BLACKS | This data recoded for respondent confidentiality. |
| 1866 | A1WHITE | A1 Q6D # OF NON-HISPANIC WHITES | This data recoded for respondent confidentiality. |
| 1867 | A1AMRIN | A1 Q6E # OF AMERICAN INDIANS | This data recoded for respondent confidentiality. |
| 1868 | A1RACEO | A1 Q6F # OF STUDENTS OF OTHER RACES | This data recoded for respondent confidentiality. |
| 1869 | A1TOTRA | A1 Q6 TOTAL CLASS ENROLLMENT (RACES) | This data recoded for respondent confidentiality. |
| 1896 | A1TVTNM | A1 Q18C TCHRS SPEAK VIETNAMESE | This data suppressed for respondent confidentiality. |
| 1897 | A1TCHNS | A1 Q18D TCHRS SPEAK CHINESE | This data suppressed for respondent confidentiality. |
| 1898 | A1TJPNS | A1 Q18E TCHRS SPEAK JAPANESE | This data suppressed for respondent confidentiality. |
| 1899 | A1TKRN | A1 Q18F TCHRS SPEAK KOREAN | This data suppressed for respondent confidentiality. |
| 1900 | A1TFLPN | A1 Q18G TCHRS SPEAK A FILIPINO LNG | This data suppressed for respondent confidentiality. |
| 1901 | A1TOTAS | A1 Q18H TCHRS SPEAK OTHER ASIAN LNG | This data suppressed for respondent confidentiality. |
| 1902 | A1TOTLG | A1 Q18I TCHRS SPEAK ANOTHER LANGUAGE | This data suppressed for respondent confidentiality. |
| 1910 | A2GIFT | A2 Q2A # CLASSIFIED AS GFTED/TALENTED | This data recoded for respondent confidentiality. |
| 1911 | A2PRTGF | A2 Q2B # TAKE PART IN GIFTED/TALENTED | This data recoded for respondent confidentiality. |
| 1916 | A2DISAB | A2 Q3A NUMBER WITH DISABILITIES | This data recoded for respondent confidentiality. |
| 1920 | A2RETAR | A2 Q4D MENTAL RETARDATION | This data recoded for respondent confidentiality. |
| 1926 | A2MULTI | A2 Q4J MULTIPLE DISABILITIES | This data suppressed for respondent confidentiality. |
| 1927 | A2AUTSM | A2 Q4K AUTISM | This data suppressed for respondent confidentiality. |
| 1929 | A2DEAF | A2 Q4M DEAFNESS AND BLINDNESS | This data suppressed for respondent confidentiality. |
| 1938 | A2CVTNM | A2 Q7C STUDENTS SPEAK VIETNAMESE | This data suppressed for respondent confidentiality. |
| 1939 | A2CCHNS | A2 Q7D STUDENTS SPEAK CHINESE | This data suppressed for respondent confidentiality. |
| 1940 | A2CJPNS | A2 Q7E STUDENTS SPEAK JAPANESE | This data suppressed for respondent confidentiality. |

Table 7-7. Masked variables in the child catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 1941 | A2CKRN | A2 Q7F STUDENTS SPEAK KOREAN | This data suppressed for respondent confidentiality. |
| 1942 | A2CFLPN | A2 Q7G STUDENTS SPEAK FILIPINO LNG | This data suppressed for respondent confidentiality. |
| 1943 | A2OTASN | A2 Q7H STUDENTS SPEAK OTHER ASIAN LNG | This data suppressed for respondent confidentiality. |
| 1944 | A2OTLNG | A2 Q7I STUDENTS SPEAK ANOTHER LNG | This data suppressed for respondent confidentiality. |
| 1945 | A2LNGOS | A2 Q7I LANGUAGE OF INSTRUCTION - OTHER | This data suppressed for respondent confidentiality. |
| 2255 | B1YRBORN | B1 Q16 TEACHER'S YEAR OF BIRTH | This data recoded for respondent confidentiality. |
| 2257 | B1RACE1 | B1 Q18 NATIVE AMERICAN OR PACIF ISLANDER | This data recoded for respondent confidentiality. |
| 2260 | B1RACE4 | B1 Q18 NATIVE HAWAIIAN OR OTHER PAC IS | This data suppressed for respondent confidentiality. |
| 2262 | B1YRSPRE | B1 Q19A YRS TEACHER TAUGHT PRESCHOOL | This data recoded for respondent confidentiality. |
| 2263 | B1YRSKIN | B1 Q19B YRS TEACHER TAUGHT KINDERGARTEN | This data recoded for respondent confidentiality. |
| 2264 | B1YRSFST | B1 Q19C YRS TEACHER TAUGHT FIRST GRADE | This data recoded for respondent confidentiality. |
| 2265 | B1YRS2T5 | B1 Q19D YRS TEACHER TAUGHT 2 TO 5 GRADE | This data recoded for respondent confidentiality. |
| 2266 | B1YRS6PL | B1 Q19E YRS TEACHER TAUGHT 6 GRADE OR UP | This data recoded for respondent confidentiality. |
| 2267 | B1YRSESL | B1 Q19F YRS TEACHER TAUGHT ESL | This data recoded for respondent confidentiality. |
| 2268 | B1YRSBIL | B1 Q19G YRS TEACHER TAUGHT BILINGUAL ED | This data recoded for respondent confidentiality. |
| 2269 | B1YRSSPE | B1 Q19H YRS TEACHER TAUGHT SPECIAL ED | This data recoded for respondent confidentiality. |
| 2270 | B1YRSPE | B1 Q19I YRS TEACHER TAUGHT PHYSICAL ED | This data recoded for respondent confidentiality. |
| 2271 | B1YRSART | B1 Q19J YRS TEACHER TAUGHT ART OR MUSIC | This data recoded for respondent confidentiality. |
| 2272 | B1YRSCH | B1 Q20 YRS TEACHER TAUGHT AT THIS SCHOOL | This data recoded for respondent confidentiality. |
| 2273 | B1HGHSTD | B1 Q21 HIGHEST ED LEVEL TEACHER ACHIEVED | This data recoded for respondent confidentiality. |
| 2364 | B2YRBORN | B2 Q16 TEACHER'S YEAR OF BIRTH | This data recoded for respondent confidentiality. |
| 2366 | B2RACE1 | B1 Q18 NATIVE AMERICAN OR PACIF ISLANDER | This data recoded for respondent confidentiality. |
| 2369 | B2RACE4 | B2 Q18 NATIVE HAWAIIAN OR OTHER PAC IS | This data suppressed for respondent confidentiality. |
| 2371 | B2YRSPRE | B2 Q19A YRS TEACHER TAUGHT PRESCHOOL | This data recoded for respondent confidentiality. |
| 2372 | B2YRSKIN | B2 Q19B YRS TEACHER TAUGHT KINDERGARTEN | This data recoded for respondent confidentiality. |
| 2373 | B2YRSFST | B2 Q19C YRS TEACHER TAUGHT FIRST GRADE | This data recoded for respondent confidentiality. |
| 2374 | B2YRS2T5 | B2 Q19D YRS TEACHER TAUGHT 2 TO 5 GRADE | This data recoded for respondent confidentiality. |
| 2375 | B2YRS6PL | B2 Q19E YRS TEACHER TAUGHT 6 GRADE OR UP | This data recoded for respondent confidentiality. |
| 2376 | B2YRSESL | B2 Q19F YRS TEACHER TAUGHT ESL | This data recoded for respondent confidentiality. |
| 2377 | B2YRSBIL | B2 Q19G YRS TEACHER TAUGHT BILINGUAL ED | This data recoded for respondent confidentiality. |
| 2378 | B2YRSSPE | B2 Q19H YRS TEACHER TAUGHT SPECIAL ED | This data recoded for respondent confidentiality. |
| 2379 | B2YRSPE | B2 Q19I YRS TEACHER TAUGHT PHYSICAL ED | This data recoded for respondent confidentiality. |
| 2380 | B2YRSART | B2 Q19J YRS TEACHER TAUGHT ART OR MUSIC | This data recoded for respondent confidentiality. |
| 2381 | B2YRSCH | B2 Q20 YRS TEACHER TAUGHT AT THIS SCHOOL | This data recoded for respondent confidentiality. |

Table 7-7. Masked variables in the child catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 2382 | B2HGHSTD | B2 Q21 HIGHEST ED LEVEL TEACHER ACHIEVED | This data recoded for respondent confidentiality. |
| 2476 | S2NUMDAY | S2 Q1 NUMBER OF DAYS MUST ATTEND | This data recoded for respondent confidentiality. |
| 2477 | S2ADA | S2 Q2 % AVERAGE DAILY ATTENDANCE FOR YR. | This data recoded for respondent confidentiality. |
| 2478 | S2ANUMCH | S2 Q3A # ENROLLED AROUND 10/1/1998 | This data recoded for respondent confidentiality. |
| 2479 | S2BNUMCH | S2 Q3B # ENROLLED SINCE 10/1/1998 | This data recoded for respondent confidentiality. |
| 2480 | S2CNUMCH | S2 Q3C # WHO LEFT - DIDN'T RETURN | This data recoded for respondent confidentiality. |
| 2503 | S2BIASKL | S2 Q6D IS IT A TRIBAL SCHOOL | This data suppressed for respondent confidentiality. |
| 2504 | S2SPEDSK | S2 Q6E IS IT A SPECIAL ED SCHOOL | This data suppressed for respondent confidentiality. |
| 2509 | S2PRIVRD | S2 Q7A4 IS IT A PRIVATE ORDER | This data suppressed for respondent confidentiality. |
| 2511 | S2NAISKL | S2 Q7C PRIVATE-ACCREDITED BY NAIS | This data suppressed for respondent confidentiality. |
| 2513 | S2PVTSPD | S2 Q7E IS IT SPECIAL EDUCATION | This data suppressed for respondent confidentiality. |
| 2516 | S2EMPHAS | S2 Q9 WHAT'S THE SCHOOL EMPHASIS | This data suppressed for respondent confidentiality. |
| 2517 | S2PREK | S2 Q10 PRE-K PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2518 | S2REDDYN | S2 Q10 TRANSITIONAL PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2519 | S2KINGAR | S2 Q10 KINDERGARTEN PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2520 | S2PRE1ST | S2 Q10 PREFIRST PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2521 | S2FIR1ST | S2 Q10 1ST GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2522 | S2SEC2ND | S2 Q10 2ND GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2523 | S2THI3RD | S2 Q10 3RD GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2524 | S2FOR4TH | S2 Q10 4TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2525 | S2FIF5TH | S2 Q10 5TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2526 | S2SIX6TH | S2 Q10 6TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2527 | S2SEV7TH | S2 Q10 7TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2528 | S2ATE8TH | S2 Q10 8TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2529 | S2NIN9TH | S2 Q10 9TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2530 | S2TEN10 | S2 Q10 10TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2531 | S2ELEV11 | S2 Q10 11TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2532 | S2TWEL12 | S2 Q10 12TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 2533 | S2SPENR | S2 Q11 NUMBER IN SPECIAL PROGRAM | This data suppressed for respondent confidentiality. |
| 2550 | S2PCTHSP | S2 Q14 PERCENT OF HISPANIC STUDENTS | This data recoded for respondent confidentiality. |
| 2551 | S2INDPCT | S2 Q15A PERCENT OF NATIVE AMERICANS | This data suppressed for respondent confidentiality. |
| 2552 | S2ASNPCT | S2 Q15B PERCENT OF ASIAN STUDENTS | This data suppressed for respondent confidentiality. |
| 2553 | S2BLKPCT | S2 Q15C PERCENT OF BLACK STUDENTS | This data recoded for respondent confidentiality. |
| 2554 | S2PCFPCT | S2 Q15D PERCENT OF HAWAIIAN STUDENT | This data suppressed for respondent confidentiality. |

Table 7-7. Masked variables in the child catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 2555 | S2WHTPCT | S2 Q15E PERCENT OF WHITE STUDENTS | This data suppressed for respondent confidentiality. |
| 2556 | S2ELIBRK | S2 Q16A1 ELIGIBLE FOR FREE BREAKFAST | This data suppressed for respondent confidentiality. |
| 2557 | S2PARBRK | S2 Q16A2 PARTICIPATES IN BREAKFAST | This data suppressed for respondent confidentiality. |
| 2558 | S2ELILNC | S2 Q16B1 ELIGIBLE FOR FREE LUNCH | This data suppressed for respondent confidentiality. |
| 2559 | S2PARLNC | S2 Q16B2 PARTICIPATES IN FREE LUNCH | This data suppressed for respondent confidentiality. |
| 2560 | S2ELIRED | S2 Q16C1 ELIGIBLE IN REDUCED-PRICE LUNCH | This data suppressed for respondent confidentiality. |
| 2561 | S2PARRED | S2 Q16C2 PARTICIPATES IN RED-PRICE LUNCH | This data suppressed for respondent confidentiality. |
| 2571 | S2CHSRVD | S2 Q20 NUMBER SERVED BY TITLE 1 | This data recoded for respondent confidentiality. |
| 2572 | S2HDCHDN | S2 Q21A1 HALFDAY - NUMBER OF CHILDREN | This data recoded for respondent confidentiality. |
| 2573 | S2HDCLS | S2 Q21B1 HALFDAY - NUMBER OF CLASSES | This data recoded for respondent confidentiality. |
| 2574 | S2HDDAYS | S2 Q21C1 HALFDAY - NUMBER OF DAYS PER WK | This data suppressed for respondent confidentiality. |
| 2576 | S2FDCHDN | S2 Q21A2 FULLDAY - NUMBER OF CHILDREN | This data recoded for respondent confidentiality. |
| 2577 | S2FDCLS | S2 Q21B2 FULLDAY - NUMBER OF CLASSES | This data recoded for respondent confidentiality. |
| 2578 | S2FDDAYS | S2 Q21C2 FULLDAY - NUMBER OF DAYS PER WK | This data suppressed for respondent confidentiality. |
| 2580 | S2KCCHDN | S2 Q21A3 K COMBINATION - # OF CHILDREN | This data recoded for respondent confidentiality. |
| 2581 | S2KCCLS | S2 Q21B3 K COMBINATION - # OF CLASSES | This data suppressed for respondent confidentiality. |
| 2582 | S2KCDAYS | S2 Q21C3 K COMBINATION - # DAYS PER WK | This data suppressed for respondent confidentiality. |
| 2584 | S2TKCHDN | S2 Q21A4 TRANSITIONAL K - # OF CHILDREN | This data recoded for respondent confidentiality. |
| 2585 | S2TKCLS | S2 Q21B4 TRANSITIONAL K - # OF CLASSES | This data suppressed for respondent confidentiality. |
| 2586 | S2TKDAYS | S2 Q21C4 TRANSITIONAL K - # DAYS PER WK | This data suppressed for respondent confidentiality. |
| 2588 | S2T1CHDN | S2 Q21A5 TRANSITIONAL 1ST- # OF CHILDREN | This data recoded for respondent confidentiality. |
| 2589 | S2T1CLS | S2 Q21B5 TRANSITIONAL 1ST- # OF CLASSES | This data suppressed for respondent confidentiality. |
| 2590 | S2T1DAYS | S2 Q21C5 TRANSITIONAL 1ST - DAYS PER WK | This data suppressed for respondent confidentiality. |
| 2595 | S2NOCUTO | S2 Q22A NO CUTOFF DATE TO TURN FIVE | This data suppressed for respondent confidentiality. |
| 2607 | S2CHLDNM | S2 Q24 # OF CHILDREN SITE ACCOMMODATES | This data recoded for respondent confidentiality. |
| 2608 | S2RMNUM | S2 Q25 NUMBER OF INSTRUCTIONAL ROOMS | This data recoded for respondent confidentiality. |
| 2619 | S2INSTCM | S2 Q27A # INSTRUCTIONAL COMPUTERS | This data recoded for respondent confidentiality. |
| 2620 | S2ADMNCM | S2 Q27B # INSTRUCT/ADMIN COMPUTERS | This data recoded for respondent confidentiality. |
| 2621 | S2TOTCM | S2 Q27C TOTAL NUMBER OF COMPUTERS | This data recoded for respondent confidentiality. |
| 2624 | S2LANRMS | S2 Q28A3 TOTAL ROOMS W/LAN ACCESS | This data recoded for respondent confidentiality. |
| 2627 | S2CDRRMS | S2 Q28B3 TOTAL ROOMS W/CD-ROM ACCESS | This data recoded for respondent confidentiality. |
| 2630 | S2NETRMS | S2 Q28C3 TOTAL RMS W/INTERNET ACCESS | This data recoded for respondent confidentiality. |
| 2634 | S2CMNITY | S2 Q30 COMMUNITY SCHOOL IS LOCATED IN | This data recoded for respondent confidentiality. |
| 2690 | S2NMBKPT | S2 Q40 NUMBER RETAINED GRADE-K | This data recoded for respondent confidentiality. |

Table 7-7. Masked variables in the child catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|---------------------------------------|--|
| 2732 | S2NMADMN | S2 Q47A2 NUMBER OF ADMINISTRATORS | This data recoded for respondent confidentiality. |
| 2734 | S2NMTECH | S2 Q47B2 NUMBER OF TEACHERS | This data recoded for respondent confidentiality. |
| 2736 | S2NMDSTR | S2 Q47C2 NUMBER FROM DISTRICT OFFICE | This data recoded for respondent confidentiality. |
| 2738 | S2NUMBRD | S2 Q47D2 NUMBER OF BOARD MEMBERS | This data recoded for respondent confidentiality. |
| 2740 | S2NMOMDD | S2 Q47E2 NUMBER OF PARENTS | This data recoded for respondent confidentiality. |
| 2742 | S2NMREPS | S2 Q47F2 NUMBER OF REPRESENTATIVES | This data recoded for respondent confidentiality. |
| 2744 | S2NUMOTH | S2 Q47G2 NUMBER OF OTHER GROUPS | This data recoded for respondent confidentiality. |
| 2748 | S2BILING | S2 Q50 BILINGUAL SERVICES PERCENT | This data suppressed for respondent confidentiality. |
| 2749 | S2ESLONL | S2 Q50 ESL SERVICES PERCENT | This data suppressed for respondent confidentiality. |
| 2750 | S2ESLBIL | S2 Q50 ESL AND BILINGUAL PERCENT | This data suppressed for respondent confidentiality. |
| 2751 | S2YRSESL | S2 Q51A YEARS FOR ESL SERVICES | This data recoded for respondent confidentiality. |
| 2752 | S2YRSBIL | S2 Q51B YEARS FOR BILINGUAL SERVICES | This data recoded for respondent confidentiality. |
| 2753 | S2SRVBTH | S2 Q51C YEARS FOR ESL & BILINGUAL SER | This data recoded for respondent confidentiality. |
| 2777 | S2GFTNBR | S2 Q57 NUMBER GIFTED/TALENTED | This data suppressed for respondent confidentiality. |
| 2778 | S2ADMFTE | S2 Q58A FTE ADMINISTRATIVE STAFF | This data recoded for respondent confidentiality. |
| 2779 | S2TCHFTE | S2 Q58B FTE CLASSROOM TEACHERS | This data recoded for respondent confidentiality. |
| 2780 | S2GYMFTE | S2 Q58C FTE GYM/DRAMA/ART TEACHERS | This data recoded for respondent confidentiality. |
| 2781 | S2CMPFTE | S2 Q58D FTE COMPUTER SPECIALISTS | This data recoded for respondent confidentiality. |
| 2782 | S2HDSFTE | S2 Q58E FTE HEAD START/PRE-K TEACHERS | This data recoded for respondent confidentiality. |
| 2783 | S2CRDFTE | S2 Q58F FTE COORDINATOR/SPECIALIST | This data recoded for respondent confidentiality. |
| 2784 | S2TT1FTE | S2 Q58G FTE TITLE 1 TEACHERS | This data recoded for respondent confidentiality. |
| 2785 | S2AIDFTE | S2 Q58H FTE TEACHER AIDES | This data recoded for respondent confidentiality. |
| 2786 | S2SPEFTE | S2 Q58I FTE SPECIAL ED TEACHERS | This data recoded for respondent confidentiality. |
| 2787 | S2SPAFTE | S2 Q58J FTE SPECIAL ED AIDES | This data recoded for respondent confidentiality. |
| 2788 | S2ESLFTE | S2 Q58K FTE ESL-BILINGUAL TEACHERS | This data recoded for respondent confidentiality. |
| 2789 | S2ESAFTE | S2 Q58L FTE ESL-BILINGUAL AIDES | This data recoded for respondent confidentiality. |
| 2790 | S2LIAFTE | S2 Q58M FTE PARENT LIAISONS | This data recoded for respondent confidentiality. |
| 2791 | S2COUFTE | S2 Q58N FTE SOCIAL WORKERS | This data recoded for respondent confidentiality. |
| 2792 | S2LIBFTE | S2 Q58O LIBRARY/MEDIA SPECIALISTS | This data recoded for respondent confidentiality. |
| 2793 | S2THRFTE | S2 Q58P SPEECH/PHYSICAL THERAPISTS | This data recoded for respondent confidentiality. |
| 2794 | S2NRSFTE | S2 Q58Q FTE SCHOOL NURSES | This data recoded for respondent confidentiality. |
| 2795 | S2NONFTE | S2 Q58R FTE NON-INSTRUCTIONAL STAFF | This data recoded for respondent confidentiality. |
| 2796 | S2REAFTE | S2 Q58S FTE READING RECOVERY TCHRS | This data suppressed for respondent confidentiality. |
| 2797 | S2MSCFTE | S2 Q58T FTE MATH/SCIENCE SPECIALISTS | This data recoded for respondent confidentiality. |

Table 7-7. Masked variables in the child catalog (continued)

| FieldID | FieldName | FieldLabel | Comment | | |
|---------|--------------|--------------------------------------|--|------------|------------------------------------|
| 2798 | S2FRLFTE | S2 Q58U FTE FOREIGN LNG SPECIALISTS | This data recoded for respondent confidentiality. | | |
| 2799 | S2OTHFTE | S2 Q58V OTHER FTE | This data suppressed for respondent confidentiality. | | |
| 2800 | S2FTETOT | S2 Q58W TOTAL FTE SCHOOL STAFF | This data recoded for respondent confidentiality. | | |
| 2803 | S2ETHNIC | S2 Q61 % HISPANIC/LATINO TEACHERS | This data recoded for respondent confidentiality. | | |
| 2804 | S2Q62IND | S2 Q62 % AMERICAN NATIVE TEACHERS | This data recoded for respondent confidentiality. | | |
| 2805 | S2Q62ASN | S2 Q62 % ASIAN TEACHERS | This data recoded for respondent confidentiality. | | |
| 2806 | S2Q62BLK | S2 Q62 % BLACK TEACHERS | This data recoded for respondent confidentiality. | | |
| 2807 | S2Q62HAW | S2 Q62 % HAWAIIAN TEACHERS | This data suppressed for respondent confidentiality. | | |
| 2904 | S2YSTCH | S2 Q74A NUMBER OF YRS TEACHING | This data recoded for respondent confidentiality. | | |
| 2905 | S2TOTPRI | S2 Q74B NUMBER OF YRS AS PRINCIPAL | This data recoded for respondent confidentiality. | | |
| 2906 | S2PRINHR | S2 Q74C NUMBER YRS A PRINCIPAL HERE | This data recoded for respondent confidentiality. | | |
| 2926 | S2EDLVL | S2 Q77 HIGHEST LEVEL OF EDUCATION | This data recoded for respondent confidentiality. | | |
| | New Variable | s Replacing Suppressed Variables | | Suppressed | Variables |
| 3989 | P1LANGS1 | P1 PLQ040 OTHER LANGUAGE - SPANISH | This data recoded for respondent confidentiality. | P1LANG12 | P1 PLQ040 OTHER LANGUAGE - SPANISH |
| | | 1=Yes | | | |
| | | 2=No | | | |
| | | -1=Not applicable | | | |
| | | -7=Refused | | | |
| | | -8=Don't know | | | |
| | | -9=Not ascertained | | | |
| 3990 | P1LANGS2 | P1 PLQ040 OTHER-OTHER EUROPEAN LANGS | This data recoded for respondent confidentiality. | P1LANG4 | P1 PLQ040 OTHER LANGUAGE - FRENCH |
| | | 1=Yes | | P1LANG5 | P1 PLQ040 OTHER LANGUAGE - GERMAN |
| | | 2=No | | P1LANG6 | P1 PLQ040 OTHER LANGUAGE - GREEK |
| | | -1=Not applicable | | P1LANG7 | P1 PLQ040 OTHER LANGUAGE - ITALIAN |
| | | -7=Refused | | P1LANG10 | P1 PLQ040 OTHER LANGUAGE - POLISH |
| | | -8=Don't know | | P1LANG11 | P1 PLQ040 OTHER LANGUAGE - |
| | | -9=Not ascertained | | | PORTUGUESE |
| | | | | P1LANG16 | P1 PLQ040 OTHER-EASTERN EUROPEAN |
| | | | | | LANGS |
| | | | | P1LANG20 | P1 PLQ040 OTHER-WESTERN EUROPEAN |
| | | | | | LANGS |

Table 7-7. Masked variables in the child catalog (continued)

| New V | /ariables Replacing Suppressed Variables | | Suppressed Variables | |
|------------|--|---|----------------------|--------------------------------------|
| 3991 P1LAN | NGS3 P1 PLQ040 OTHER-ASIAN LANGUAGES | This data recoded for respondent confidentiality. | P1LANG2 | P1 PLQ040 OTHER LANGUAGE - CHINESE |
| | 1=Yes | | P1LANG3 | P1 PLQ040 OTHER LANGUAGE - FILIPINO |
| | 2=No | | P1LANG8 | P1 PLQ040 OTHER LANGUAGE - |
| | -1=Not applicable | | | JAPANESE |
| | -7=Refused | | P1LANG9 | P1 PLQ040 OTHER LANGUAGE - KOREAN |
| | -8=Don't know | | P1LANG13 | P1 PLQ040 OTHER LANGUAGE - |
| | -9=Not ascertained | | | VIETNAMESE |
| | | | P1LANG17 | P1 PLQ040 OTHER-NATIVE AMERICAN |
| | | | | LANGS |
| | | | P1LANG21 | P1 PLQ040 OTHER-INDIAN SUBCONTINTL |
| | | | | LANGS |
| | | | P1LANG22 | P1 PLQ040 OTHER-SOUTHEAST ASIAN |
| | | | | LANGS |
| | | | P1LANG23 | P1 PLQ040 OTHER-PACIFIC ISLANDER |
| | | | | LANGS |
| 3992 P1LAN | NGS4 P1 PLQ040 OTHER LANGUAGE - OTHER LANG | S This data recoded for respondent confidentiality. | P1LANG1 | P1 PLQ040 OTHER LANGUAGE - ARABIC |
| | 1=Yes | | P1LANG14 | P1 PLQ040 OTHER LANGUAGE - SPECIFY |
| | 2=No | | P1LANG15 | P1 PLQ040 OTHER-AFRICAN LANGUAGES |
| | -1=Not applicable | | P1LANG18 | P1 PLQ040 OTHER-SIGN LANGUAGES |
| | -7=Refused | | P1LANG19 | P1 PLQ040 OTHER-MIDDLE EASTERN |
| | -8=Don't know | | | LANGS |
| | -9=Not ascertained | | | |
| 3993 A1KGT | TYP A1 Q3 TYPE OF KINDERGARTEN PROG TCH | This data recoded for respondent confidentiality. | A1REGK | A1 Q3A TCH REGULAR 1-YR |
| | | | | KINDERGARTEN |
| | 1=Regular kindergarten only | | A12YRK1 | A1 Q3B TEACHES 1ST YR OF 2-YR K |
| | 2=Other kindergarten type | | A12YRK2 | A1 Q3C TEACHES 2ND YR OF 2-YR K |
| | | | A1TRNK | A1 Q3D TCH TRANSITIONAL |
| | | | | KINDERGARTEN |
| | | | A1PR1ST | A1 Q3E TEACHES PRE-1ST GRADE AFTER |
| | | | | K |
| | | | A1UNGR | A1 Q3F TEACHES UNGRADED CLASS |
| | | | A1MULGR | A1 Q3G TEACHES MULTIGRADE CLASS |
| 3994 S2PRA | | This data recoded for respondent confidentiality. | S2RACE1 | S2 Q73A PRINCIPAL IS AMERICAN INDIAN |
| | 1=White, non-Hispanic | | S2RACE2 | S2 Q73B PRINCIPAL IS ASIAN |
| | 2=Black, or African-American, non-Hispanic | | S2RACE3 | S2 Q73C PRINCIPAL IS BLACK |
| | 3=Other race | | S2RACE4 | S2 Q73D PRINCIPAL IS HAWAIIAN OR PAC |
| | -9=Not Ascertained | | | IS |
| | | | S2RACE5 | S2 Q73E PRINCIPAL IS WHITE |

Table 7-8. Masked variables in the teacher catalog

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|---|--|
| 3 | KURBAN | LOCATION TYPE IN SAMPLE FRAME | This data recoded for respondent confidentiality. |
| 5 | CS_TYPE2 | TYPE OF SCHOOL IN SAMPLE FRAME | This data recoded for respondent confidentiality. |
| 20 | S2KENRLS | S2 TOTAL SCHOOL ENROLLMENT | This data recoded for respondent confidentiality. |
| 22 | S2KMINOR | S2 PERCENT MINORITY STUDENTS | This data recoded for respondent confidentiality. |
| 24 | A1APBLK | A1 PERCENT OF BLACKS IN CLASS-AM | This data recoded for respondent confidentiality. |
| 27 | A1PPBLK | A1 PERCENT OF BLACKS IN CLASS-PM | This data recoded for respondent confidentiality. |
| 30 | A1DPBLK | A1 PERCENT OF BLACKS IN CLASS-AD | This data recoded for respondent confidentiality. |
| 33 | B1AGE | B1 TEACHER'S AGE | This data recoded for respondent confidentiality. |
| 43 | A1ATPREK | A1 Q4A TCH PREKINDERGARTEN LEVELS-AM | This data suppressed for respondent confidentiality. |
| 44 | A1ATTRNK | A1 Q4B TCH TRANSITIONAL KINDERGARTEN-AM | This data suppressed for respondent confidentiality. |
| 45 | A1ATREGK | A1 Q4C TEACHES REGULAR KINDERGARTEN-AM | This data suppressed for respondent confidentiality. |
| 46 | A1ATPRE1 | A1 Q4D TCH PRE-1ST GRADE LEVEL-AM | This data suppressed for respondent confidentiality. |
| 47 | A1AT1ST | A1 Q4E TCH 1ST GRADE LEVEL-AM | This data suppressed for respondent confidentiality. |
| 48 | A1AT2ND | A1 Q4F TCH 2ND GRADE LEVEL-AM | This data suppressed for respondent confidentiality. |
| 49 | A1AT3RD | A1 Q4G TCH 3RD GRADE OR HIGHER LEVEL-AM | This data suppressed for respondent confidentiality. |
| 50 | A1A3YROL | A1 Q5A HOW MANY 3-YEAR-OLDS IN CLASS-AM | This data recoded for respondent confidentiality. |
| 51 | A1A4YROL | A1 Q5B HOW MANY 4-YEAR-OLDS IN CLASS-AM | This data recoded for respondent confidentiality. |
| 52 | A1A5YROL | A1 Q5C HOW MANY 5-YEAR-OLDS IN CLASS-AM | This data recoded for respondent confidentiality. |
| 53 | A1A6YROL | A1 Q5D HOW MANY 6-YEAR-OLDS IN CLASS-AM | This data recoded for respondent confidentiality. |
| 54 | A1A7YROL | A1 Q5E HOW MANY 7-YEAR-OLDS IN CLASS-AM | This data recoded for respondent confidentiality. |
| 55 | A1A8YROL | A1 Q5F HOW MANY 8-YEAR-OLDS IN CLASS-AM | This data recoded for respondent confidentiality. |
| 56 | A1A9YROL | A1 Q5G HOW MANY 9-YEAR-OLDS IN CLASS-AM | This data recoded for respondent confidentiality. |
| 57 | A1ATOTAG | A1 Q5H TOTAL CLASS ENROLLMENT (AGE)-AM | This data recoded for respondent confidentiality. |
| 58 | A1AASIAN | A1 Q6A # OF ASIAN/PACIFIC ISLANDERS-AM | This data recoded for respondent confidentiality. |
| 59 | A1AHISP | A1 Q6B # OF HISPANICS (ALL RACES)-AM | This data recoded for respondent confidentiality. |
| 60 | A1ABLACK | A1 Q6C # OF NON-HISPANIC BLACKS-AM | This data recoded for respondent confidentiality. |
| 61 | A1AWHITE | A1 Q6D # OF NON-HISPANIC WHITES-AM | This data recoded for respondent confidentiality. |
| 62 | A1AAMRIN | A1 Q6E # OF AMERICAN INDIANS-AM | This data recoded for respondent confidentiality. |
| 63 | A1ARACEO | A1 Q6F # OF STUDENTS OF OTHER RACES-AM | This data recoded for respondent confidentiality. |
| 64 | A1ATOTRA | A1 Q6 TOTAL CLASS ENROLLMENT (RACES)-AM | This data recoded for respondent confidentiality. |
| 91 | A1ATVTNM | A1 Q18C TCHRS SPEAK VIETNAMESE-AM | This data suppressed for respondent confidentiality. |
| 92 | A1ATCHNS | A1 Q18D TCHRS SPEAK CHINESE-AM | This data suppressed for respondent confidentiality. |
| 93 | A1ATJPNS | A1 Q18E TCHRS SPEAK JAPANESE-AM | This data suppressed for respondent confidentiality. |

Table 7-8. Masked variables in the teacher catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|---|--|
| 94 | A1ATKRN | A1 Q18F TCHRS SPEAK KOREAN-AM | This data suppressed for respondent confidentiality. |
| 95 | A1ATFLPN | A1 Q18G TCHRS SPEAK A FILIPINO LNG-AM | This data suppressed for respondent confidentiality. |
| 96 | A1ATOTAS | A1 Q18H TCHRS SPEAK OTHER ASIAN LNG-AM | This data suppressed for respondent confidentiality. |
| 97 | A1ATOTLG | A1 Q18I TCHRS SPEAK ANOTHER LANGUAGE-AM | This data suppressed for respondent confidentiality. |
| 109 | A1PTPREK | A1 Q4A TCH PREKINDERGARTEN LEVELS-PM | This data suppressed for respondent confidentiality. |
| 110 | A1PTTRNK | A1 Q4B TCH TRANSITIONAL KINDERGARTEN-PM | This data suppressed for respondent confidentiality. |
| 111 | A1PTREGK | A1 Q4C TEACHES REGULAR KINDERGARTEN-PM | This data suppressed for respondent confidentiality. |
| 112 | A1PTPRE1 | A1 Q4D TCH PRE-1ST GRADE LEVEL-PM | This data suppressed for respondent confidentiality. |
| 113 | A1PT1ST | A1 Q4E TCH 1ST GRADE LEVEL-PM | This data suppressed for respondent confidentiality. |
| 114 | A1PT2ND | A1 Q4F TCH 2ND GRADE LEVEL-PM | This data suppressed for respondent confidentiality. |
| 115 | A1PT3RD | A1 Q4G TCH 3RD GRADE OR HIGHER LEVEL-PM | This data suppressed for respondent confidentiality. |
| 116 | A1P3YROL | A1 Q5A HOW MANY 3-YEAR-OLDS IN CLASS-PM | This data recoded for respondent confidentiality. |
| 117 | A1P4YROL | A1 Q5B HOW MANY 4-YEAR-OLDS IN CLASS-PM | This data recoded for respondent confidentiality. |
| 118 | A1P5YROL | A1 Q5C HOW MANY 5-YEAR-OLDS IN CLASS-PM | This data recoded for respondent confidentiality. |
| 119 | A1P6YROL | A1 Q5D HOW MANY 6-YEAR-OLDS IN CLASS-PM | This data recoded for respondent confidentiality. |
| 120 | A1P7YROL | A1 Q5E HOW MANY 7-YEAR-OLDS IN CLASS-PM | This data recoded for respondent confidentiality. |
| 121 | A1P8YROL | A1 Q5F HOW MANY 8-YEAR-OLDS IN CLASS-PM | This data recoded for respondent confidentiality. |
| 122 | A1P9YROL | A1 Q5G HOW MANY 9-YEAR-OLDS IN CLASS-PM | This data recoded for respondent confidentiality. |
| 123 | A1PTOTAG | A1 Q5H TOTAL CLASS ENROLLMENT (AGE)-PM | This data recoded for respondent confidentiality. |
| 124 | A1PASIAN | A1 Q6A # OF ASIAN/PACIFIC ISLANDERS-PM | This data recoded for respondent confidentiality. |
| 125 | A1PHISP | A1 Q6B # OF HISPANICS (ALL RACES)-PM | This data recoded for respondent confidentiality. |
| 126 | A1PBLACK | A1 Q6C # OF NON-HISPANIC BLACKS-PM | This data recoded for respondent confidentiality. |
| 127 | A1PWHITE | A1 Q6D # OF NON-HISPANIC WHITES-PM | This data recoded for respondent confidentiality. |
| 128 | A1PAMRIN | A1 Q6E # OF AMERICAN INDIANS-PM | This data recoded for respondent confidentiality. |
| 129 | A1PRACEO | A1 Q6F # OF STUDENTS OF OTHER RACES-PM | This data recoded for respondent confidentiality. |
| 130 | A1PTOTRA | A1 Q6 TOTAL CLASS ENROLLMENT (RACES)-PM | This data recoded for respondent confidentiality. |
| 157 | A1PTVTNM | A1 Q18C TCHRS SPEAK VIETNAMESE-PM | This data suppressed for respondent confidentiality. |
| 158 | A1PTCHNS | A1 Q18D TCHRS SPEAK CHINESE-PM | This data suppressed for respondent confidentiality. |
| 159 | A1PTJPNS | A1 Q18E TCHRS SPEAK JAPANESE-PM | This data suppressed for respondent confidentiality. |
| 160 | A1PTKRN | A1 Q18F TCHRS SPEAK KOREAN-PM | This data suppressed for respondent confidentiality. |
| 161 | A1PTFLPN | A1 Q18G TCHRS SPEAK A FILIPINO LNG-PM | This data suppressed for respondent confidentiality. |
| 162 | A1PTOTAS | A1 Q18H TCHRS SPEAK OTHER ASIAN LNG-PM | This data suppressed for respondent confidentiality. |
| 163 | A1PTOTLG | A1 Q18I TCHRS SPEAK ANOTHER LANGUAGE-PM | This data suppressed for respondent confidentiality. |

Table 7-8. Masked variables in the teacher catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 175 | A1DTPREK | A1 Q4A TCH PREKINDERGARTEN LEVELS-AD | This data suppressed for respondent confidentiality. |
| 176 | A1DTTRNK | A1 Q4B TCH TRANSITIONAL KINDERGARTEN-AD | This data suppressed for respondent confidentiality. |
| 177 | A1DTREGK | A1 Q4C TEACHES REGULAR KINDERGARTEN-AD | This data suppressed for respondent confidentiality. |
| 178 | A1DTPRE1 | A1 Q4D TCH PRE-1ST GRADE LEVEL-AD | This data suppressed for respondent confidentiality. |
| 179 | A1DT1ST | A1 Q4E TCH 1ST GRADE LEVEL-AD | This data suppressed for respondent confidentiality. |
| 180 | A1DT2ND | A1 Q4F TCH 2ND GRADE LEVEL-AD | This data suppressed for respondent confidentiality. |
| 181 | A1DT3RD | A1 Q4G TCH 3RD GRADE OR HIGHER LEVEL-AD | This data suppressed for respondent confidentiality. |
| 182 | A1D3YROL | A1 Q5A HOW MANY 3-YEAR-OLDS IN CLASS-AD | This data recoded for respondent confidentiality. |
| 183 | A1D4YROL | A1 Q5B HOW MANY 4-YEAR-OLDS IN CLASS-AD | This data recoded for respondent confidentiality. |
| 184 | A1D5YROL | A1 Q5C HOW MANY 5-YEAR-OLDS IN CLASS-AD | This data recoded for respondent confidentiality. |
| 185 | A1D6YROL | A1 Q5D HOW MANY 6-YEAR-OLDS IN CLASS-AD | This data recoded for respondent confidentiality. |
| 186 | A1D7YROL | A1 Q5E HOW MANY 7-YEAR-OLDS IN CLASS-AD | This data recoded for respondent confidentiality. |
| 187 | A1D8YROL | A1 Q5F HOW MANY 8-YEAR-OLDS IN CLASS-AD | This data recoded for respondent confidentiality. |
| 188 | A1D9YROL | A1 Q5G HOW MANY 9-YEAR-OLDS IN CLASS-AD | This data recoded for respondent confidentiality. |
| 189 | A1DTOTAG | A1 Q5H TOTAL CLASS ENROLLMENT (AGE)-AD | This data recoded for respondent confidentiality. |
| 190 | A1DASIAN | A1 Q6A # OF ASIAN/PACIFIC ISLANDERS-AD | This data recoded for respondent confidentiality. |
| 191 | A1DHISP | A1 Q6B # OF HISPANICS (ALL RACES)-AD | This data recoded for respondent confidentiality. |
| 192 | A1DBLACK | A1 Q6C # OF NON-HISPANIC BLACKS-AD | This data recoded for respondent confidentiality. |
| 193 | A1DWHITE | A1 Q6D # OF NON-HISPANIC WHITES-AD | This data recoded for respondent confidentiality. |
| 194 | A1DAMRIN | A1 Q6E # OF AMERICAN INDIANS-AD | This data recoded for respondent confidentiality. |
| 195 | A1DRACEO | A1 Q6F # OF STUDENTS OF OTHER RACES-AD | This data recoded for respondent confidentiality. |
| 196 | A1DTOTRA | A1 Q6 TOTAL CLASS ENROLLMENT (RACES)-AD | This data recoded for respondent confidentiality. |
| 223 | A1DTVTNM | A1 Q18C TCHRS SPEAK VIETNAMESE-AD | This data suppressed for respondent confidentiality. |
| 224 | A1DTCHNS | A1 Q18D TCHRS SPEAK CHINESE-AD | This data suppressed for respondent confidentiality. |
| 225 | A1DTJPNS | A1 Q18E TCHRS SPEAK JAPANESE-AD | This data suppressed for respondent confidentiality. |
| 226 | A1DTKRN | A1 Q18F TCHRS SPEAK KOREAN-AD | This data suppressed for respondent confidentiality. |
| 227 | A1DTFLPN | A1 Q18G TCHRS SPEAK A FILIPINO LNG-AD | This data suppressed for respondent confidentiality. |
| 228 | A1DTOTAS | A1 Q18H TCHRS SPEAK OTHER ASIAN LNG-AD | This data suppressed for respondent confidentiality. |
| 229 | A1DTOTLG | A1 Q18I TCHRS SPEAK ANOTHER LANGUAGE-AD | This data suppressed for respondent confidentiality. |
| 310 | B1YRBORN | B1 Q16 TEACHER'S YEAR OF BIRTH | This data recoded for respondent confidentiality. |
| 312 | B1RACE1 | B1 Q18 NATIVE AMERICAN OR PACIF ISLANDER | This data recoded for respondent confidentiality. |
| 315 | B1RACE4 | B1 Q18 NATIVE HAWAIIAN OR OTHER PAC IS | This data suppressed for respondent confidentiality. |
| 317 | B1YRSPRE | B1 Q19A YRS TEACHER TAUGHT PRESCHOOL | This data recoded for respondent confidentiality. |

Table 7-8. Masked variables in the teacher catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|---|--|
| 318 | B1YRSKIN | B1 Q19B YRS TEACHER TAUGHT KINDERGARTEN | This data recoded for respondent confidentiality. |
| 319 | B1YRSFST | B1 Q19C YRS TEACHER TAUGHT FIRST GRADE | This data recoded for respondent confidentiality. |
| 320 | B1YRS2T5 | B1 Q19D YRS TEACHER TAUGHT 2 TO 5 GRADE | This data recoded for respondent confidentiality. |
| 321 | B1YRS6PL | B1 Q19E YRS TEACHER TAUGHT 6 GRADE OR UP | This data recoded for respondent confidentiality. |
| 322 | B1YRSESL | B1 Q19F YRS TEACHER TAUGHT ESL | This data recoded for respondent confidentiality. |
| 323 | B1YRSBIL | B1 Q19G YRS TEACHER TAUGHT BILINGUAL ED | This data recoded for respondent confidentiality. |
| 324 | B1YRSSPE | B1 Q19H YRS TEACHER TAUGHT SPECIAL ED | This data recoded for respondent confidentiality. |
| 325 | B1YRSPE | B1 Q19I YRS TEACHER TAUGHT PHYSICAL ED | This data recoded for respondent confidentiality. |
| 326 | B1YRSART | B1 Q19J YRS TEACHER TAUGHT ART OR MUSIC | This data recoded for respondent confidentiality. |
| 327 | B1YRSCH | B1 Q20 YRS TEACHER TAUGHT AT THIS SCHOOL | This data recoded for respondent confidentiality. |
| 328 | B1HGHSTD | B1 Q21 HIGHEST ED LEVEL TEACHER ACHIEVED | This data recoded for respondent confidentiality. |
| 346 | A2AGIFT | A2 Q2A # CLASSIFIED AS GFTED/TALENTED-AM | This data recoded for respondent confidentiality. |
| 347 | A2APRTGF | A2 Q2B # TAKE PART IN GIFTED/TALENTED-AM | This data recoded for respondent confidentiality. |
| 352 | A2ADISAB | A2 Q3A NUMBER WITH DISABILITIES-AM | This data recoded for respondent confidentiality. |
| 356 | A2ARETAR | A2 Q4D MENTAL RETARDATION-AM | This data recoded for respondent confidentiality. |
| 362 | A2AMULTI | A2 Q4J MULTIPLE DISABILITIES-AM | This data suppressed for respondent confidentiality. |
| 363 | A2AAUTSM | A2 Q4K AUTISM-AM | This data suppressed for respondent confidentiality. |
| 365 | A2ADEAF | A2 Q4M DEAFNESS AND BLINDNESS-AM | This data suppressed for respondent confidentiality. |
| 374 | A2ACVTNM | A2 Q7C STUDENTS SPEAK VIETNAMESE-AM | This data suppressed for respondent confidentiality. |
| 375 | A2ACCHNS | A2 Q7D STUDENTS SPEAK CHINESE-AM | This data suppressed for respondent confidentiality. |
| 376 | A2ACJPNS | A2 Q7E STUDENTS SPEAK JAPANESE-AM | This data suppressed for respondent confidentiality. |
| 377 | A2ACKRN | A2 Q7F STUDENTS SPEAK KOREAN-AM | This data suppressed for respondent confidentiality. |
| 378 | A2ACFLPN | A2 Q7G STUDENTS SPEAK FILIPINO LNG-AM | This data suppressed for respondent confidentiality. |
| 379 | A2AOTASN | A2 Q7H STUDENTS SPEAK OTHER ASIAN LNG-AM | This data suppressed for respondent confidentiality. |
| 380 | A2AOTLNG | A2 Q7I STUDENTS SPEAK ANOTHER LNG-AM | This data suppressed for respondent confidentiality. |
| 381 | A2ALNGOS | A2 Q7I LANGUAGE OF INSTRUCTION - OTHER-AM | This data suppressed for respondent confidentiality. |
| 384 | A2PGIFT | A2 Q2A # CLASSIFIED AS GFTED/TALENTED-PM | This data recoded for respondent confidentiality. |
| 385 | A2PPRTGF | A2 Q2B # TAKE PART IN GIFTED/TALENTED-PM | This data recoded for respondent confidentiality. |
| 390 | A2PDISAB | A2 Q3A NUMBER WITH DISABILITIES-PM | This data recoded for respondent confidentiality. |
| 394 | A2PRETAR | A2 Q4D MENTAL RETARDATION-PM | This data recoded for respondent confidentiality. |
| 400 | A2PMULTI | A2 Q4J MULTIPLE DISABILITIES-PM | This data suppressed for respondent confidentiality. |
| 401 | A2PAUTSM | A2 Q4K AUTISM-PM | This data suppressed for respondent confidentiality. |
| 403 | A2PDEAF | A2 Q4M DEAFNESS AND BLINDNESS-PM | This data suppressed for respondent confidentiality. |

7-87

Table 7-8. Masked variables in the teacher catalog (continued)

| FieldID | FieldName | FieldLabel | Comment | | |
|---------|--------------|---|--|------------|------------------------------------|
| 412 | A2PCVTNM | A2 Q7C STUDENTS SPEAK VIETNAMESE-PM | This data suppressed for respondent confidentiality. | | |
| 413 | A2PCCHNS | A2 Q7D STUDENTS SPEAK CHINESE-PM | This data suppressed for respondent confidentiality. | | |
| 414 | A2PCJPNS | A2 Q7E STUDENTS SPEAK JAPANESE-PM | This data suppressed for respondent confidentiality. | | |
| 415 | A2PCKRN | A2 Q7F STUDENTS SPEAK KOREAN-PM | This data suppressed for respondent confidentiality. | | |
| 416 | A2PCFLPN | A2 Q7G STUDENTS SPEAK FILIPINO LNG-PM | This data suppressed for respondent confidentiality. | | |
| 417 | A2POTASN | A2 Q7H STUDENTS SPEAK OTHER ASIAN LNG-PM | This data suppressed for respondent confidentiality. | | |
| 418 | A2POTLNG | A2 Q7I STUDENTS SPEAK ANOTHER LNG-PM | This data suppressed for respondent confidentiality. | | |
| 419 | A2PLNGOS | A2 Q7I LANGUAGE OF INSTRUCTION - OTHER-PM | This data suppressed for respondent confidentiality. | | |
| 422 | A2DGIFT | A2 Q2A # CLASSIFIED AS GFTED/TALENTED-AD | This data recoded for respondent confidentiality. | | |
| 423 | A2DPRTGF | A2 Q2B # TAKE PART IN GIFTED/TALENTED-AD | This data recoded for respondent confidentiality. | | |
| 428 | A2DDISAB | A2 Q3A NUMBER WITH DISABILITIES-AD | This data recoded for respondent confidentiality. | | |
| 432 | A2DRETAR | A2 Q4D MENTAL RETARDATION-AD | This data recoded for respondent confidentiality. | | |
| 438 | A2DMULTI | A2 Q4J MULTIPLE DISABILITIES-AD | This data suppressed for respondent confidentiality. | | |
| 439 | A2DAUTSM | A2 Q4K AUTISM-AD | This data suppressed for respondent confidentiality. | | |
| 441 | A2DDEAF | A2 Q4M DEAFNESS AND BLINDNESS-AD | This data suppressed for respondent confidentiality. | | |
| 450 | A2DCVTNM | A2 Q7C STUDENTS SPEAK VIETNAMESE-AD | This data suppressed for respondent confidentiality. | | |
| 451 | A2DCCHNS | A2 Q7D STUDENTS SPEAK CHINESE-AD | This data suppressed for respondent confidentiality. | | |
| 452 | A2DCJPNS | A2 Q7E STUDENTS SPEAK JAPANESE-AD | This data suppressed for respondent confidentiality. | | |
| 453 | A2DCKRN | A2 Q7F STUDENTS SPEAK KOREAN-AD | This data suppressed for respondent confidentiality. | | |
| 454 | A2DCFLPN | A2 Q7G STUDENTS SPEAK FILIPINO LNG-AD | This data suppressed for respondent confidentiality. | | |
| 455 | A2DOTASN | A2 Q7H STUDENTS SPEAK OTHER ASIAN LNG-AD | This data suppressed for respondent confidentiality. | | |
| 456 | A2DOTLNG | A2 Q7I STUDENTS SPEAK ANOTHER LNG-AD | This data suppressed for respondent confidentiality. | | |
| 457 | A2DLNGOS | A2 Q7I LANGUAGE OF INSTRUCTION - OTHER-AD | This data suppressed for respondent confidentiality. | | |
| | New Variable | s Replacing Suppressed Variables | | Suppressed | Variables |
| 886 | A1AKGTYP | A1 Q3 TYPE OF KINDERGARTEN PROG TCH-AM | This data recoded for respondent confidentiality. | A1AREGK | A1 Q3A TCH REGULAR 1-YR |
| | | | | | KINDERGARTEN-AM |
| | | 1=Regular kindergarten only | | A1A2YRK1 | A1 Q3B TEACHES 1ST YR OF 2-YR K-AM |
| | | 2=Other kindergarten type | | | A1 Q3C TEACHES 2ND YR OF 2-YR K-AM |
| | | | | A1ATRNK | A1 Q3D TCH TRANSITIONAL |
| | | | | | KINDERGARTEN-AM |
| | | | | A1APR1ST | A1 Q3E TEACHES PRE-1ST GRADE AFTER |
| | | | | | K-AM |
| | | | | | A1 Q3F TEACHES UNGRADED CLASS-AM |
| | | | | A1AMULGR | A1 Q3G TEACHES MULTIGRADE CLASS-AM |

Table 7-8. Masked variables in the teacher catalog (continued)

| | New Variable | es Replacing Suppressed Variables | | Suppressed | Variables |
|-----|--------------|--|---|------------|------------------------------------|
| 887 | A1PKGTYP | A1 Q3 TYPE OF KINDERGARTEN PROG TCH-PM | This data recoded for respondent confidentiality. | A1PREGK | A1 Q3A TCH REGULAR 1-YR |
| | | | | | KINDERGARTEN-PM |
| | | 1=Regular kindergarten only | | A1P2YRK1 | A1 Q3B TEACHES 1ST YR OF 2-YR K-PM |
| | | 2=Other kindergarten type | | A1P2YRK2 | A1 Q3C TEACHES 2ND YR OF 2-YR K-PM |
| | | | | A1PTRNK | A1 Q3D TCH TRANSITIONAL |
| | | | | | KINDERGARTEN-PM |
| | | | | A1PPR1ST | A1 Q3E TEACHES PRE-1ST GRADE AFTER |
| | | | | | K-PM |
| | | | | A1PUNGR | A1 Q3F TEACHES UNGRADED CLASS-PM |
| | | | | A1PMULGR | A1 Q3G TEACHES MULTIGRADE CLASS-PM |
| 888 | A1DKGTYP | A1 Q3 TYPE OF KINDERGARTEN PROG TCH-AD | This data recoded for respondent confidentiality. | A1DREGK | A1 Q3A TCH REGULAR 1-YR |
| | | | | | KINDERGARTEN-AD |
| | | 1=Regular kindergarten only | | A1D2YRK1 | A1 Q3B TEACHES 1ST YR OF 2-YR K-AD |
| | | 2=Other kindergarten type | | A1D2YRK2 | A1 Q3C TEACHES 2ND YR OF 2-YR K-AD |
| | | | | A1DTRNK | A1 Q3D TCH TRANSITIONAL |
| | | | | | KINDERGARTEN-AD |
| | | | | A1DPR1ST | A1 Q3E TEACHES PRE-1ST GRADE AFTER |
| | | | | | K-AD |
| | | | | A1DUNGR | A1 Q3F TEACHES UNGRADED CLASS-AD |
| | | | | A1DMULGR | A1 Q3G TEACHES MULTIGRADE CLASS-AD |

Table 7-9. Masked variables in the school catalog

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 3 | CS_TYPE2 | TYPE OF SCHOOL IN SAMPLE FRAME | This data recoded for respondent confidentiality. |
| 4 | KURBAN | LOCATION TYPE IN SAMPLE FRAME | This data recoded for respondent confidentiality. |
| 9 | S2KENRLK | S2 TOTAL SCHOOL K ENROLLMENT | This data recoded for respondent confidentiality. |
| 10 | S2KENRLS | S2 TOTAL SCHOOL ENROLLMENT | This data recoded for respondent confidentiality. |
| 11 | S2KMINOR | S2 PERCENT MINORITY STUDENTS | This data recoded for respondent confidentiality. |
| 12 | S2KFLNCH | S2 PCT FREE LUNCH ELIGIBLE STUDENTS | This data recoded for respondent confidentiality. |
| 13 | S2KRLNCH | S2 PCT REDUCED LUNCH ELIGIBLE STUDENTS | This data recoded for respondent confidentiality. |
| 15 | S2KLNGTH | S2 SCHOOL YEAR LENGTH | This data recoded for respondent confidentiality. |
| 16 | S2KGFTED | S2 PERCENT GIFTED/TALENTED STUDENTS | This data recoded for respondent confidentiality. |
| 18 | S2NUMDAY | S2 Q1 NUMBER OF DAYS MUST ATTEND | This data recoded for respondent confidentiality. |
| 19 | S2ADA | S2 Q2 % AVERAGE DAILY ATTENDANCE FOR YR. | This data recoded for respondent confidentiality. |
| 20 | S2ANUMCH | S2 Q3A # ENROLLED AROUND 10/1/1998 | This data recoded for respondent confidentiality. |
| 21 | S2BNUMCH | S2 Q3B # ENROLLED SINCE 10/1/1998 | This data recoded for respondent confidentiality. |
| 22 | S2CNUMCH | S2 Q3C # WHO LEFT - DIDN'T RETURN | This data recoded for respondent confidentiality. |
| 45 | S2BIASKL | S2 Q6D IS IT A TRIBAL SCHOOL | This data suppressed for respondent confidentiality. |
| 46 | S2SPEDSK | S2 Q6E IS IT A SPECIAL ED SCHOOL | This data suppressed for respondent confidentiality. |
| 51 | S2PRIVRD | S2 Q7A4 IS IT A PRIVATE ORDER | This data suppressed for respondent confidentiality. |
| 53 | S2NAISKL | S2 Q7C PRIVATE-ACCREDITED BY NAIS | This data suppressed for respondent confidentiality. |
| 55 | S2PVTSPD | S2 Q7E IS IT SPECIAL EDUCATION | This data suppressed for respondent confidentiality. |
| 58 | S2EMPHAS | S2 Q9 WHAT'S THE SCHOOL EMPHASIS | This data suppressed for respondent confidentiality. |
| 59 | S2PREK | S2 Q10 PRE-K PARTICIPATES | This data suppressed for respondent confidentiality. |
| 60 | S2REDDYN | S2 Q10 TRANSITIONAL PARTICIPATES | This data suppressed for respondent confidentiality. |
| 61 | S2KINGAR | S2 Q10 KINDERGARTEN PARTICIPATES | This data suppressed for respondent confidentiality. |
| 62 | S2PRE1ST | S2 Q10 PREFIRST PARTICIPATES | This data suppressed for respondent confidentiality. |

Table 7-9. Masked variables in the school catalog

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 63 | S2FIR1ST | S2 Q10 1ST GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 64 | S2SEC2ND | S2 Q10 2ND GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 65 | S2THI3RD | S2 Q10 3RD GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 66 | S2FOR4TH | S2 Q10 4TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 67 | S2FIF5TH | S2 Q10 5TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 68 | S2SIX6TH | S2 Q10 6TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 69 | S2SEV7TH | S2 Q10 7TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 70 | S2ATE8TH | S2 Q10 8TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 71 | S2NIN9TH | S2 Q10 9TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 72 | S2TEN10 | S2 Q10 10TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 73 | S2ELEV11 | S2 Q10 11TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 74 | S2TWEL12 | S2 Q10 12TH GRADE PARTICIPATES | This data suppressed for respondent confidentiality. |
| 75 | S2SPENR | S2 Q11 NUMBER IN SPECIAL PROGRAM | This data suppressed for respondent confidentiality. |
| 92 | S2PCTHSP | S2 Q14 PERCENT OF HISPANIC STUDENTS | This data recoded for respondent confidentiality. |
| 93 | S2INDPCT | S2 Q15A PERCENT OF NATIVE AMERICANS | This data suppressed for respondent confidentiality. |
| 94 | S2ASNPCT | S2 Q15B PERCENT OF ASIAN STUDENTS | This data suppressed for respondent confidentiality. |
| 95 | S2BLKPCT | S2 Q15C PERCENT OF BLACK STUDENTS | This data recoded for respondent confidentiality. |
| 96 | S2PCFPCT | S2 Q15D PERCENT OF HAWAIIAN STUDENT | This data suppressed for respondent confidentiality. |
| 97 | S2WHTPCT | S2 Q15E PERCENT OF WHITE STUDENTS | This data suppressed for respondent confidentiality. |
| 98 | S2ELIBRK | S2 Q16A1 ELIGIBLE FOR FREE BREAKFAST | This data suppressed for respondent confidentiality. |
| 99 | S2PARBRK | S2 Q16A2 PARTICIPATES IN BREAKFAST | This data suppressed for respondent confidentiality. |
| 100 | S2ELILNC | S2 Q16B1 ELIGIBLE FOR FREE LUNCH | This data suppressed for respondent confidentiality. |
| 101 | S2PARLNC | S2 Q16B2 PARTICIPATES IN FREE LUNCH | This data suppressed for respondent confidentiality. |
| 102 | S2ELIRED | S2 Q16C1 ELIGIBLE IN REDUCED-PRICE LUNCH | This data suppressed for respondent confidentiality. |
| 103 | S2PARRED | S2 Q16C2 PARTICIPATES IN RED-PRICE LUNCH | This data suppressed for respondent confidentiality. |
| 113 | S2CHSRVD | S2 Q20 NUMBER SERVED BY TITLE 1 | This data recoded for respondent confidentiality. |
| 114 | S2HDCHDN | S2 Q21A1 HALFDAY - NUMBER OF CHILDREN | This data recoded for respondent confidentiality. |
| 115 | S2HDCLS | S2 Q21B1 HALFDAY - NUMBER OF CLASSES | This data recoded for respondent confidentiality. |
| 116 | S2HDDAYS | S2 Q21C1 HALFDAY - NUMBER OF DAYS PER WK | This data suppressed for respondent confidentiality. |
| 118 | S2FDCHDN | S2 Q21A2 FULLDAY - NUMBER OF CHILDREN | This data recoded for respondent confidentiality. |
| 119 | S2FDCLS | S2 Q21B2 FULLDAY - NUMBER OF CLASSES | This data recoded for respondent confidentiality. |
| 120 | S2FDDAYS | S2 Q21C2 FULLDAY - NUMBER OF DAYS PER WK | This data suppressed for respondent confidentiality. |

Table 7-9. Masked variables in the school catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|--|--|
| 122 | S2KCCHDN | S2 Q21A3 K COMBINATION - # OF CHILDREN | This data recoded for respondent confidentiality. |
| 123 | S2KCCLS | S2 Q21B3 K COMBINATION - # OF CLASSES | This data suppressed for respondent confidentiality. |
| 124 | S2KCDAYS | S2 Q21C3 K COMBINATION - # DAYS PER WK | This data suppressed for respondent confidentiality. |
| 126 | S2TKCHDN | S2 Q21A4 TRANSITIONAL K - # OF CHILDREN | This data recoded for respondent confidentiality. |
| 127 | S2TKCLS | S2 Q21B4 TRANSITIONAL K - # OF CLASSES | This data suppressed for respondent confidentiality. |
| 128 | S2TKDAYS | S2 Q21C4 TRANSITIONAL K - # DAYS PER WK | This data suppressed for respondent confidentiality. |
| 130 | S2T1CHDN | S2 Q21A5 TRANSITIONAL 1ST- # OF CHILDREN | This data recoded for respondent confidentiality. |
| 131 | S2T1CLS | S2 Q21B5 TRANSITIONAL 1ST- # OF CLASSES | This data suppressed for respondent confidentiality. |
| 132 | S2T1DAYS | S2 Q21C5 TRANSITIONAL 1ST - DAYS PER WK | This data suppressed for respondent confidentiality. |
| 137 | S2NOCUTO | S2 Q22A NO CUTOFF DATE TO TURN FIVE | This data suppressed for respondent confidentiality. |
| 149 | S2CHLDNM | S2 Q24 # OF CHILDREN SITE ACCOMMODATES | This data recoded for respondent confidentiality. |
| 150 | S2RMNUM | S2 Q25 NUMBER OF INSTRUCTIONAL ROOMS | This data recoded for respondent confidentiality. |
| 161 | S2INSTCM | S2 Q27A # INSTRUCTIONAL COMPUTERS | This data recoded for respondent confidentiality. |
| 162 | S2ADMNCM | S2 Q27B # INSTRUCT/ADMIN COMPUTERS | This data recoded for respondent confidentiality. |
| 163 | S2TOTCM | S2 Q27C TOTAL NUMBER OF COMPUTERS | This data recoded for respondent confidentiality. |
| 166 | S2LANRMS | S2 Q28A3 TOTAL ROOMS W/LAN ACCESS | This data recoded for respondent confidentiality. |
| 169 | S2CDRRMS | S2 Q28B3 TOTAL ROOMS W/CD-ROM ACCESS | This data recoded for respondent confidentiality. |
| 172 | S2NETRMS | S2 Q28C3 TOTAL RMS W/INTERNET ACCESS | This data recoded for respondent confidentiality. |
| 176 | S2CMNITY | S2 Q30 COMMUNITY SCHOOL IS LOCATED IN | This data recoded for respondent confidentiality. |
| 232 | S2NMBKPT | S2 Q40 NUMBER RETAINED GRADE-K | This data recoded for respondent confidentiality. |
| 274 | S2NMADMN | S2 Q47A2 NUMBER OF ADMINISTRATORS | This data recoded for respondent confidentiality. |
| 276 | S2NMTECH | S2 Q47B2 NUMBER OF TEACHERS | This data recoded for respondent confidentiality. |
| 278 | S2NMDSTR | S2 Q47C2 NUMBER FROM DISTRICT OFFICE | This data recoded for respondent confidentiality. |
| 280 | S2NUMBRD | S2 Q47D2 NUMBER OF BOARD MEMBERS | This data recoded for respondent confidentiality. |
| 282 | S2NMOMDD | S2 Q47E2 NUMBER OF PARENTS | This data recoded for respondent confidentiality. |
| 284 | S2NMREPS | S2 Q47F2 NUMBER OF REPRESENTATIVES | This data recoded for respondent confidentiality. |
| 286 | S2NUMOTH | S2 Q47G2 NUMBER OF OTHER GROUPS | This data recoded for respondent confidentiality. |
| 290 | S2BILING | S2 Q50 BILINGUAL SERVICES PERCENT | This data suppressed for respondent confidentiality. |
| 291 | S2ESLONL | S2 Q50 ESL SERVICES PERCENT | This data suppressed for respondent confidentiality. |
| 292 | S2ESLBIL | S2 Q50 ESL AND BILINGUAL PERCENT | This data suppressed for respondent confidentiality. |
| 293 | S2YRSESL | S2 Q51A YEARS FOR ESL SERVICES | This data recoded for respondent confidentiality. |
| 294 | S2YRSBIL | S2 Q51B YEARS FOR BILINGUAL SERVICES | This data recoded for respondent confidentiality. |

Table 7-9. Masked variables in the school catalog (continued)

| FieldID | FieldName | FieldLabel | Comment |
|---------|-----------|---------------------------------------|--|
| 295 | S2SRVBTH | S2 Q51C YEARS FOR ESL & BILINGUAL SER | This data recoded for respondent confidentiality. |
| 319 | S2GFTNBR | S2 Q57 NUMBER GIFTED/TALENTED | This data suppressed for respondent confidentiality. |
| 320 | S2ADMFTE | S2 Q58A FTE ADMINISTRATIVE STAFF | This data recoded for respondent confidentiality. |
| 321 | S2TCHFTE | S2 Q58B FTE CLASSROOM TEACHERS | This data recoded for respondent confidentiality. |
| 322 | S2GYMFTE | S2 Q58C FTE GYM/DRAMA/ART TEACHERS | This data recoded for respondent confidentiality. |
| 323 | S2CMPFTE | S2 Q58D FTE COMPUTER SPECIALISTS | This data recoded for respondent confidentiality. |
| 324 | S2HDSFTE | S2 Q58E FTE HEAD START/PRE-K TEACHERS | This data recoded for respondent confidentiality. |
| 325 | S2CRDFTE | S2 Q58F FTE COORDINATOR/SPECIALIST | This data recoded for respondent confidentiality. |
| 326 | S2TT1FTE | S2 Q58G FTE TITLE 1 TEACHERS | This data recoded for respondent confidentiality. |
| 327 | S2AIDFTE | S2 Q58H FTE TEACHER AIDES | This data recoded for respondent confidentiality. |
| 328 | S2SPEFTE | S2 Q58I FTE SPECIAL ED TEACHERS | This data recoded for respondent confidentiality. |
| 329 | S2SPAFTE | S2 Q58J FTE SPECIAL ED AIDES | This data recoded for respondent confidentiality. |
| 330 | S2ESLFTE | S2 Q58K FTE ESL-BILINGUAL TEACHERS | This data recoded for respondent confidentiality. |
| 331 | S2ESAFTE | S2 Q58L FTE ESL-BILINGUAL AIDES | This data recoded for respondent confidentiality. |
| 332 | S2LIAFTE | S2 Q58M FTE PARENT LIAISONS | This data recoded for respondent confidentiality. |
| 333 | S2COUFTE | S2 Q58N FTE SOCIAL WORKERS | This data recoded for respondent confidentiality. |
| 334 | S2LIBFTE | S2 Q58O LIBRARY/MEDIA SPECIALISTS | This data recoded for respondent confidentiality. |
| 335 | S2THRFTE | S2 Q58P SPEECH/PHYSICAL THERAPISTS | This data recoded for respondent confidentiality. |
| 336 | S2NRSFTE | S2 Q58Q FTE SCHOOL NURSES | This data recoded for respondent confidentiality. |
| 337 | S2NONFTE | S2 Q58R FTE NON-INSTRUCTIONAL STAFF | This data recoded for respondent confidentiality. |
| 338 | S2REAFTE | S2 Q58S FTE READING RECOVERY TCHRS | This data suppressed for respondent confidentiality. |
| 339 | S2MSCFTE | S2 Q58T FTE MATH/SCIENCE SPECIALISTS | This data recoded for respondent confidentiality. |
| 340 | S2FRLFTE | S2 Q58U FTE FOREIGN LNG SPECIALISTS | This data recoded for respondent confidentiality. |
| 341 | S2OTHFTE | S2 Q58V OTHER FTE | This data suppressed for respondent confidentiality. |
| 342 | S2FTETOT | S2 Q58W TOTAL FTE SCHOOL STAFF | This data recoded for respondent confidentiality. |
| 345 | S2ETHNIC | S2 Q61 % HISPANIC/LATINO TEACHERS | This data recoded for respondent confidentiality. |
| 346 | S2Q62IND | S2 Q62 % AMERICAN NATIVE TEACHERS | This data recoded for respondent confidentiality. |
| 347 | S2Q62ASN | S2 Q62 % ASIAN TEACHERS | This data recoded for respondent confidentiality. |
| 348 | S2Q62BLK | S2 Q62 % BLACK TEACHERS | This data recoded for respondent confidentiality. |
| 349 | S2Q62HAW | S2 Q62 % HAWAIIAN TEACHERS | This data suppressed for respondent confidentiality. |
| 446 | S2YSTCH | S2 Q74A NUMBER OF YRS TEACHING | This data recoded for respondent confidentiality. |
| 447 | S2TOTPRI | S2 Q74B NUMBER OF YRS AS PRINCIPAL | This data recoded for respondent confidentiality. |
| 448 | S2PRINHR | S2 Q74C NUMBER YRS A PRINCIPAL HERE | This data recoded for respondent confidentiality. |
| 468 | S2EDLVL | S2 Q77 HIGHEST LEVEL OF EDUCATION | This data recoded for respondent confidentiality. |

Table 7-9. Masked variables in the school catalog (continued)

| | New Variable | es Replacing Suppressed Variables | | Suppresse | d Variables |
|-----|--------------|---|---|-----------|---|
| 703 | S2PRACE | S2 Q73 PRINCIPAL'S RACE | This data recoded for respondent confidentiality. | S2RACE1 | S2 Q73A PRINCIPAL IS AMERICAN INDIAN |
| | | 1=White, non-Hispanic | | S2RACE2 | S2 Q73B PRINCIPAL IS ASIAN |
| | | 2=Black or African-American, non-Hispanic | | S2RACE3 | S2 Q73C PRINCIPAL IS BLACK |
| | | 3=Other race | | S2RACE4 | S2 Q73D PRINCIPAL IS HAWAIIAN OR PAC IS |
| | | -9=Not ascertained | | S2RACE5 | S2 Q73E PRINCIPAL IS WHITE |

8. GUIDE TO THE ECLS-K BASE YEAR PUBLIC-USE ELECTRONIC CODE BOOK

8.1 Introduction

The purpose of this guide is to provide data users of the Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K) specific directions for using the ECLS-K Base Year Public-Use ECB CD-ROM and Electronic Code Book (ECB). The information in this guide provides a comprehensive tour through the ECLS-K Base Year Public-Use ECB that addresses all of the functions and capabilities of the program. These functions allow users to interact with accompanying catalogs and "view" the data in various ways by performing customized searches, queries, and extractions. The organization of this document provides a "start to finish" approach through the system beginning with the installation of the ECB, utilizing the ECB's functions, navigating through the catalogs, and performing user-specified data extractions.

The ECLS-K Base Year Public-Use ECB CD-ROM contains an ECB that allows users to easily examine the variables in each of the ECLS-K Base Year Public-Use ECB data sets. The data user can create SAS, SPSS for Windows, and STATA programs that will generate an extract data file from any of the data files on the CD-ROM. The following flat (ASCII) data files are contained on the CD-ROM:

- Base Year Child Data (child.dat)
 - Fall 1998
 - Spring 1999
- Base Year Teacher Data (teacher.dat)
 - Fall 1998
 - Spring 1999
- Base Year School Data (school.dat)
 - Spring 1999

Additionally, the CD-ROM contains Windows 95 and Portable Document Format (PDF) files of the Base Year questionnaires in Appendix A and the record layout for each data file in Appendix B. The menu bars are described in section 8.10.

8.1.1 Hardware/Software Requirements

The ECB program is designed to run under Windows $95^{\$}$ or Windows $98^{\$}$ on a Pentium-class or higher PC. The PC should also have a minimum of 200 Megabytes (MB) of available disk space. The program will visually fit best on screens set to a desktop area of 800×600 pixels. It will still work on other screen settings, but it may not make the best use of the available screen space. You can check and/or set your desktop area as follows:

- 1. Click on the Windows Start button.
- 2. Select the Settings menu and then the Control Panel folder icon.
- 3. In the Control Panel window, click on the Display icon.
- 4. Select the Settings tab.
- 5. Set the Desktop Area to 800 x 600 pixels with the Desktop Area slidebar.

The ECB requires approximately 20 MB of available disk space on your hard drive. If 20 MB of space is not available, you may wish to delete unnecessary files from the drive to make space for the ECB.

8.1.2 ECLS-K Base Year Public-Use ECB Features

- Search the names and labels of variables in the databases (called catalogs) to select variables for analysis (see section 8.3, The Variable List).
- Examine the question wording, response categories, and response frequencies for variables the user selects (see section 8.4.7, Viewing Code Book and Variable Information).
- Create a list of variables to be extracted from the catalog, save the list for later use, print the list as a code book, or use a predefined list on the ECB (see section 8.4, The Working Taglist).
- Automatically generate SAS, SPSS for Windows, or STATA programs to extract selected variables from the whole data set or for a subset of the cases that are defined by the user (see section 8.5, Extracting Data from the ECB).

The ECLS-K Base Year Public-Use ECB does not create a SAS, SPSS for Windows, or STATA data file. It will prepare the statements that you can use with your own SAS or SPSS for Windows software to create your file. As noted above, the CD-ROM contains all three ASCII data sets that the ECB uses to extract specific sub-data files.

8.2 Installing, Starting, and Exiting the ECLS-K Base Year Public-Use ECB

The ECLS-K Base Year Public-Use ECB is provided on a CD-ROM and is intended to be installed and run from within the Windows 95 environment. The sections in this chapter provide you with step-by-step instructions for installing the program on your PC, starting the program, and exiting the program once you have completed your tasks.

If you installed the ECLS-K Base Year Public-Use ECB on your PC before, you have to uninstall the old program before installing this version. For details of how to remove the ECB program from your PC, please see section 8.2.4.

8.2.1 Installing the ECLS-K Base Year Public-Use ECB Program on Your PC

Program installation is initiated by running the Setup.exe file found within the CD-ROM's root directory.

How to Install the Program:

- 1. Close all applications on your computer.
- 2. Insert the installation CD-ROM into your PC's CD-ROM drive.
- 3. From the Windows 95 Start menu, select Run.
- 4. Type "D:\Setup.exe" into the "Open" field of the Run screen, shown in figure 8-1. If your CD-ROM drive is assigned a different drive letter, substitute it for the "D."

Figure 8-1. Windows Run screen



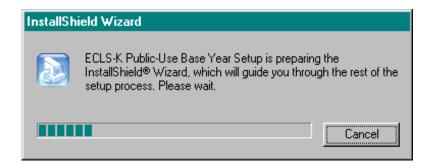
5. Click on the OK button to start the installation. You will now see several installation screens, some of which will prompt you for a response.

Depending on your PC's configuration, you may encounter warning messages during installation. To respond, always keep the newer version of a file being copied and ignore any access violation occurred during file copying.

If you are installing multiple ECB (not different versions of the same ECB) on your PC, you may receive a message warning that setup is about to replace pre-existing files. To respond, always insists to continue the installation although the default is to cancel the setup. When you get a follow-up message to confirm whether the installation should be continued, press "Yes" to continue although the default is "No."

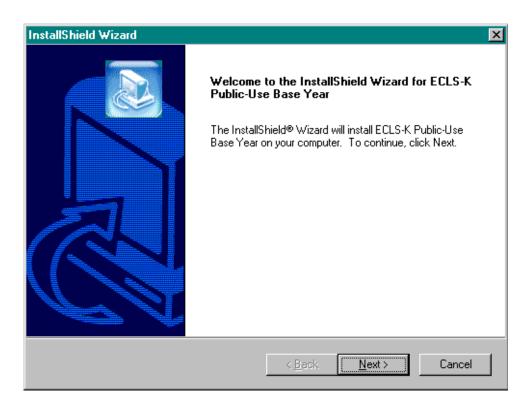
6. The screen shown in figure 8-2 indicates that the setup is being prepared.

Figure 8-2. InstallShield Wizard



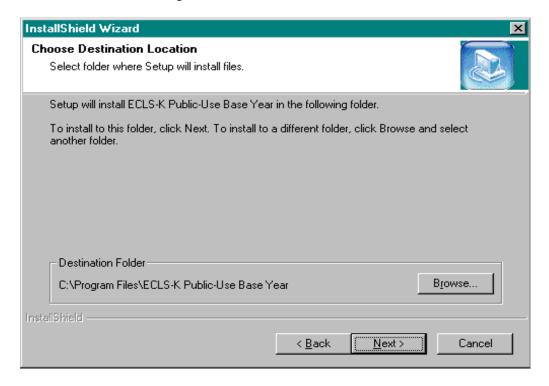
7. You will be prompted to continue with the installation in the Welcome window shown in figure 8-3. Click on the Next button to continue.

Figure 8-3. Welcome Window



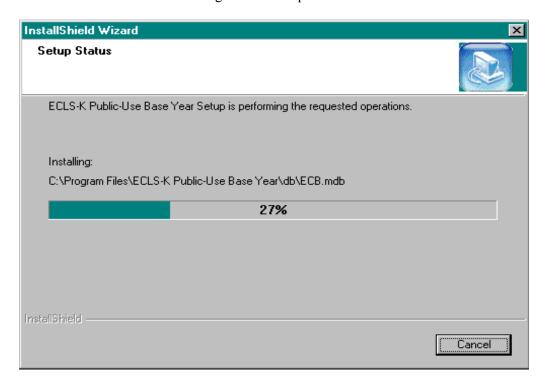
8. When you continue, you will be prompted to choose a destination location for the installation in the window shown in figure 8-4. If you wish to change the destination location, click on the Browse button to change the directory. Click on the Next button when the desirable destination folder is shown.

Figure 8-4. Choose Destination Location



9. Setup will then start installing files. Figure 8-5 shows the setup status.

Figure 8-5. Setup Status



10. Once the installation is completed, the InstallShield Wizard Complete window shown in figure 8-6 will appear. Click on the Finish button to finish the process and return to your PC's desktop.

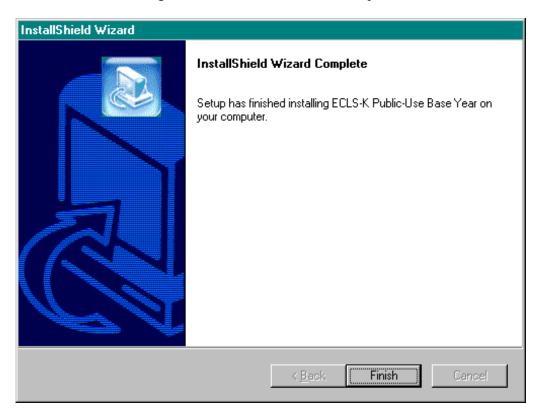


Figure 8-6. InstallShield Wizard Complete

11. The installation process should take about a minute, depending on the speed of the computer on which the ECB is being installed.

The other option would be to go to the Start menu and go to Settings. Select Control Panel and select Add/Remove Programs from the options. Click on the Install button and follow directions. Make sure the ECLS-K Base Year Public-Use ECB CD-ROM is in the CD-ROM drive before starting. The program will automatically find the file Setup.exe in the ECB and begin installation. The process will begin at point 5 in the section above.

8.2.2 Starting the ECLS-K Base Year Public-Use ECB

Now that you have installed the ECLS-K Base Year Public-Use ECB on your PC, you can start the program by simply selecting it from the Windows Start, Programs Menu, ECLS-K Base Year Public-Use.

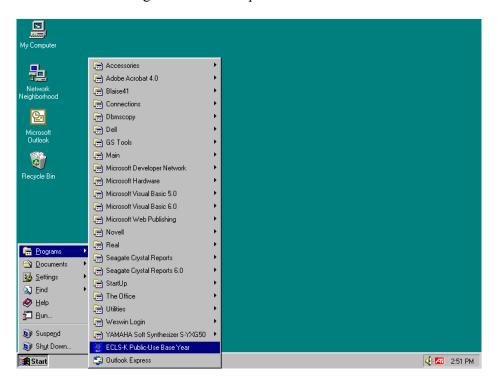
How to Start the ECB:

1. On the desktop screen (figure 8-7b), click on the Start button and then point to Programs. Click on the ECLS-K Base Year Public-Use title to invoke the program. Alternatively, click on the ECLS-K Base Year Public-Use desktop icon (figure 8-7a) shown below to invoke the program.

Figure 8-7a. Desktop icon

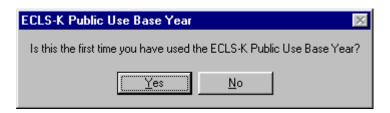


Figure 8-7b. Desktop screen - click start



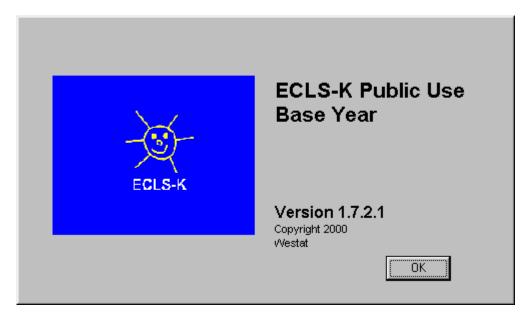
2. If you are a first time user of the ECLS-K Base Year Public-Use ECB, figure 8-8 will display and ask if you are a new ECB user.

Figure 8-8. First time user dialog box



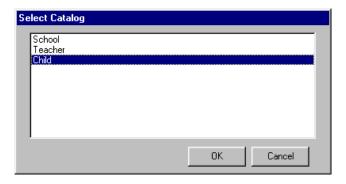
3. Click Yes if you are a first time user. The ECLS-K Base Year Public-Use ECB splash-screen shown in figure 8-9 will display.

Figure 8-9. The ECLS-K Base Year ECB splash screen



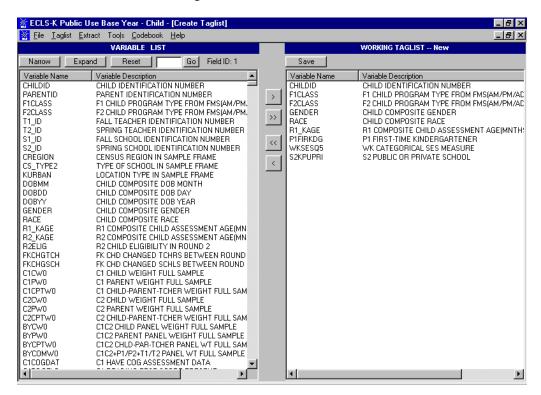
4. On the Select Catalog screen (figure 8-10), highlight the catalog you want to work with.

Figure 8-10. Select Catalog screen



5. Click OK to open the Main ECB screen, shown in figure 8-11.

Figure 8-11. Main ECB screen



6. You are now ready to use the functions of the ECLS-K Base Year Public-Use ECB as described in the following sections.

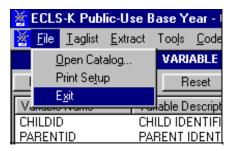
8.2.3 Exiting the ECLS-K Base Year Public-Use ECB

The ECLS-K Base Year Public-Use ECB can be shut down at any time; however, you will be prompted to save any unsaved information.

How to Shut Down the ECB:

1. From the File menu, click on the Exit option as shown in figure 8-12.

Figure 8-12. Exit screen



2. If you have not saved your Working Taglist, you will be prompted with the dialog box shown in figure 8-13.

Figure 8-13. Save Working Taglist dialog box



3. If you DO NOT wish to save your Working Taglist, click on the No button. If you DO wish to save your Working Taglist, click on the Yes button and refer to section 8.4.4, Saving Taglists.

8.2.4 Removing the ECB Program From Your PC

How to Uninstall the ECB:

- 1. Click on the Windows Start button.
- 2. Select the Settings menu.

- 3. In the Control Panel window, click on the Add/Remove Programs.
- 4. Select "ECLS-K Base Year Public-Use" and click on the "Add/Remove button."
- 5. Follow any prompts. You will be prompted by the InstallShield Wizard to confirm the uninstallation and finish the process.
- 6. It is designed that the uninstallation will keep the taglists when the ECB program is uninstalled in order that all the saved taglists will be retained when the ECB is reinstalled. As a result, the uninstallation will not remove the directory where the ECB was.

8.2.5 The Title Bar

The Title Bar, shown below in figure 8-14, is the horizontal bar located at the top of the main screen. It will list the name of the program and the catalog that you have opened, and it will indicate that you are in the "Create Taglist" mode.

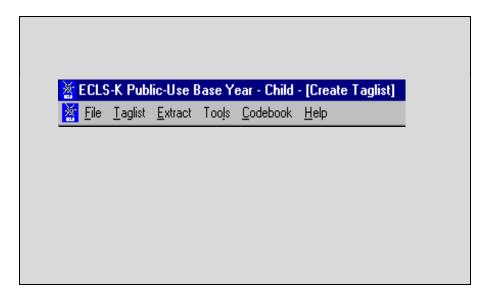
Figure 8-14. Title Bar

ECLS-K Public-Use Base Year - Child - [Create Taglist]

8.2.6 The Menu Bar

Selecting items from the pull-down menus listed on the Menu Bar (figure 8-15) provides access to the available action commands. Section 8.10 shows the choices and functions available within each menu.

Figure 8-15. Menu Bar



How to Access the Menu Bar Items:

- 1. Point to an item on the Menu Bar and click.
- 2. Click on a command from the drop-down list.

The Menu Bar may also be activated, and its options selected using the shortcut keys described in section 8.2.7.

8.2.7 Using Shortcut Keys to Navigate

The shortcut keys provide a means for selecting menu options and screen buttons without the use of a mouse. These shortcut keys are identified by an <u>underscore</u> under the shortcut letter within the option or button label.

The menus that appear on the windows are activated by simultaneously selecting the <ALT> key and the <u>underscored</u> letter. An example of this is the activation of the Taglist Menu by selecting the key combination of <ALT>-<T>. Once the menu is activated and all options are displayed, the options can be selected by then pressing the underscored letter for the desired option or by pressing the arrow keys to move between the options.

Not all screens have shortcut keys. They may, however, be used without mouse capability by pressing the <TAB> key. The <TAB> key moves the cursor or highlight through the options and buttons within the windows. When the desired option or button is highlighted, it can be selected by pressing the <ENTER> key.

8.3 The Variable List

The ECLS-K Base Year Public-Use ECB main screen, shown in figure 8-16, comprises two primary lists that each provide functions for reviewing, grouping, and extracting variable data from the opened catalog. These lists include the Variable List and the Working Taglist.

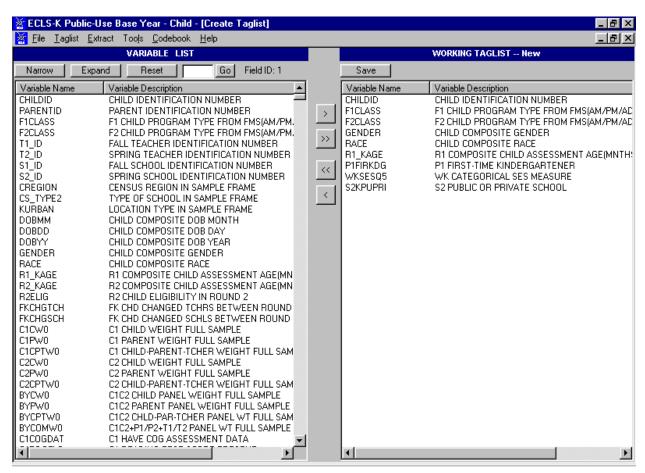


Figure 8-16. The ECLS-K Base Year ECB main screen

The Variable List, shown in figure 8-17, is a list of all variables associated with the current catalog. For the ECLS-K Base Year Public-Use ECB, you can open the school, teacher, or child catalogs. When you first open a catalog, all variables contained in the catalog are displayed in the Variable List. Once the catalog is open and the Variable List is displayed, you can scroll through the list using the scrollbar controls at the right side of the Variable List screen. Additionally, you can press <PgUp> and <PgDn> to scroll the list one screen at a time. <Ctrl><Home> and <Ctrl><End> will move to the first and last variable in the list, respectively. Also, the arrow keys can be used to move through the list of variable names.

Narrow Expand Reset Variable Name Variable Description SCHOOL IDENTIFICATION NUMBER CREGION CENSUS REGION IN SAMPLE FRAME TYPE OF SCHOOL IN SAMPLE FRAMI TYPE OF SCHOOL IN SAMPLE FRAME S2FS NONPSEPSONSE AD J. SAQ WEIGHT S2 CASE IN SCHOOL ADMIN QUEST K2 CASE IN SCHOOL ADMIN QUEST K2 CASE IN FACILITIES CHECKLIST QUEST S2 SCHOOL TYPE FROM THE SCHL ADMIN QUEST S2 TOTAL SCHOOL K ENROLLMENT S2 TOTAL SCHOOL KE NROLLMENT S2 TOTAL SCHOOL KE NROLLMENT S2 PERCENT HINDERTY SUPPLIENTS S2 PERCENT FREE LUNCH ELIGIBLE STUDENTS S2 SCHOOL WISTRUCTIONAL LEVEL FROM SAQ S2 SCHOOL YEAR LENGTH 21NSAQ 21NSAQ 21NFAC 2KSCTYP 2KENRLK 2KENRLS 2KMINOR 2KFLNCH 2KRLNCH SZ PERICEN I THE EUROPE LEWIS PLANDERS
SZ PAROUCED LUNCH ELIGIBLE STUDENTS
SZ SCHOOL INSTRUCTIONAL LEVEL FROM SAG
SZ SCHOOL YAFA LENGTH
SZ PERICENT GIFTED/TALENTED STUDENTS
SZ SAMPLING FRAME SCHOOL LOCALE CODE
SZ PUBLIC OR PRIVATE SCHOOL
SZ OL NUMBER OF DAYS MUST ATTEND
SZ 02 PCT AVG DAILY ATTENDANCE FOR YR
SZ 03.4 # ENROLLED SINCE 107/1798
SZ 03.6 # ENROLLED SINCE 107/1798
SZ 03.6 # ENROLLED SINCE 107/1798
SZ 04 GRADE LEVEL-FECAL NEEDS
SZ 04 GRADE LEVEL-FECHINDERGARTEN
SZ 04 GRADE LEVEL-FECHINDERGARTEN
SZ 04 GRADE LEVEL-FREHINST
SZ 04 GRADE LEVE 2KSCLVL 2KLNGTH 2KGFTED 2KURBAN 2KPUPRI 2NUMDAY 2ADA 2ANUMKD SZANUMKD SZBNUMKD SZCNUMKD SZUNGRAD SZSPLNDS SZPRKNDR SZTRANS SZKINDER S2PRE1 S2GRADE1 S2SECOND S2THIRD
S2FOURTH
S2FIFTH
S2FIFTH
S2FITH
S2STH
S2STH
S2SINTH
S2TENTH
S2TENTH
S212TH
S212TH
S2PUBLIC
S2PUBLIC
S2PUBLIC
S2PUBLIC
S2PUBLIC

Figure 8-17. The Variable List

The Variable List provides you with a comprehensive means of reviewing and identifying the variables that you want to use. To help you select the desired variables, the ECB provides you with the following capabilities:

- Perform searches of variable names and descriptions (see section 8.3.1);
- View code book information for each variable (see section 8.4.7); and
- Move selected variables to a Working Taglist (see section 8.4).

8.3.1 Searching the Code Book for Variables

The ECB allows you to search a catalog's Variable List for variables meeting criteria you specify. The Narrow Search and Expand Search functions are used to develop and refine the variables listed in your Variable List before adding them to your Working Taglist. Help screens were designed for each catalog to expedite searching. The help screen for the child catalog is provided in table 8-7, for the teacher catalog in table 8-13, and for the school catalog in table 8-16.

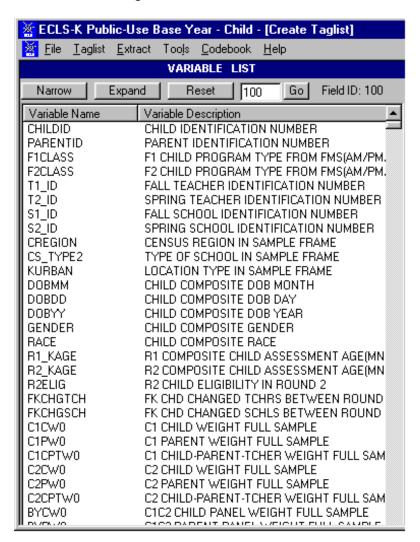
8.3.1.1 Using the "Go" Button

Using the "Go" button, located at the top of the Variable List column, allows you to quickly move to a particular variable in the Variable List. You use the field ID presented in the help screens described above.

How to Use the GO Button:

- 1. Type the field ID in the input box on the left of the "Go" button.
- 2. Click on the "Go" button.
- 3. The Variable List will then scroll down automatically to show the selected variable.
- 4. The selected variable is highlighted.
- 5. The field ID of the current variable selected is showed on the left of the "Go" button (figure 8-18).
- 6. Click the Reset to return to the original Variable List or enter another field ID to scroll to another variable.

Figure 8-18. The "Go" button



For field IDs that identify different groups of variables, please refer to table 8-7 for child catalog topical variable groupings, table 8-13 for teacher catalog topical variable groupings, and table 8-16 for school catalog topical variable groupings.

The "Go" button will not be available in narrowed or expanded list. After a Narrow Search or an Expand Search, you have to reset the Variable List (see section 8.3.1.4) before you can use the "Go" button.

8.3.1.2 Narrowing Your Variable Search

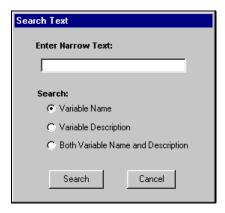
The Narrow Search function can be used to narrow the list of variables displayed in the Variable List. Since some catalogs have several thousand variables, this feature helps eliminate the variables that do not apply to your analysis. In performing the Narrow Search, you can enter key characters, words, or phrases as your criteria for searching the variable names; variable descriptions; or both. Use the keywords in the "Variable Identifier" column in tables 8-7, 8-13, or 8-16 to search the child, teacher, or school catalog variables, respectively, by variable description. If "(Variable Name)" appears under the variable in the "Variable Identifier" column, you must search by variable name. Also, the Narrow Search can be performed multiple times allowing you to repeatedly refine the list of variables displayed in the Variable List column.

Performing the Narrow Search function will only search the variables listed in the Variable List window and will not affect those in the Working Taglist window.

How to Conduct a Narrow Search:

- 1. Click on the Narrow button located above the Variable List window.
- 2. The Narrow Search dialog box appears as shown in figure 8-19.

Figure 8-19. Narrow Text Search dialog box

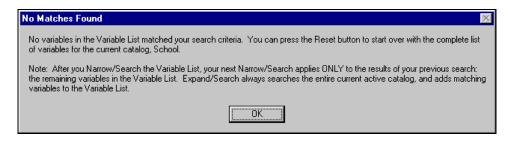


3. Enter a key character string, word, or phrase in the Enter Narrow Text: field. Character strings can include a single alphanumeric character or a sequence of several characters. The search is not case sensitive. The results returned will be all entries that contain that exact sequence of letters, numbers, spaces, and words.

- 4. Click in the Variable Name, Variable Description, or Both Variable Name and Description radio button to specify where to search.
- 5. Click on the Search button to initiate the search.
- 6. The variables meeting the specified criteria will be displayed in the Variables List column.

If no variable names or descriptions in the catalog contain the specified search text, then the message shown in figure 8-20 will appear.

Figure 8-20. No matches found message



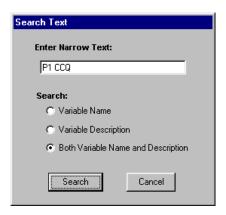
7. Repeat the Narrow Search procedure if necessary.

Example of Narrowing a Search

The following example shows you how to narrow the Variable List. In this example, you want to include the childcare variables in the Fall-Kindergarten Parent Interview. This is what you need to do:

- 1. Go to table 8-7, Child Catalog Topical Variable Groupings.
- 2. Look for "Fall K PI: Child Care" in the "Topic" column.
- 3. We will find the matching keywords in the "Variable Identifier" column to be "P1 CCO."
- 4. In the Variable List, click in the "Narrow" button.
- 5. In the Search Text Box (shown in figure 8-21), type in "P1 CCQ" and then click on the "Search" button.

Figure 8-21. Example of narrowing a search



6. The new Variable List will include only the childcare variables in the Fall-Kindergarten Parent Interview.

8.3.1.3 Expanding Your Variable Search

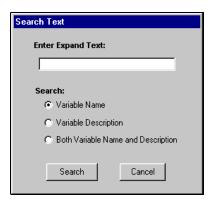
The Expand Search function can be used to expand a previously narrowed list of variables displayed in the Variable List. After performing a Narrow Search operation, you can add variables to your current Variable List that meet your specified criteria. In performing the Expand Search, you can enter key characters, words, or phrases as your criteria for searching the variable names, variable descriptions, or both. Also, the Expand Search can be performed multiple times, allowing you to repeatedly refine the list of variables displayed in the Variable List column.

Performing the Expand Search function will only search the variables listed in the Variable List window and will not affect those in the Working Taglist window.

How to Conduct an Expand Search:

- 1. Click on the Expand button located above the Variable List window.
- 2. The Expand Search dialog box will appear as shown in figure 8-22.

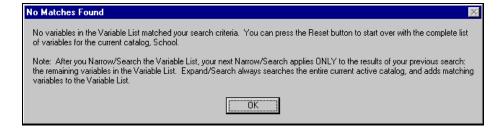
Figure 8-22. Expand Text Search dialog box



- 3. Enter a key character string, word, or phrase in the Enter Expand Text: field. Character strings can include a single alphanumeric character or a sequence of several characters. The search is not case sensitive. The results returned will be all entries that contain that exact sequence of letters, numbers, spaces, and words.
- 4. Click in the Variable Name, Variable Description, or Both Variable Name and Description radio button to specify where to search.
- 5. Click on the Search button to initiate the search.
- 6. The variables meeting the specified criteria will be added to the variables already displaying in the Variables List column.

If no variable names or descriptions in the catalog contain the specified search text, then the message shown in figure 8-23 will appear.

Figure 8-23. No matches found message



7. Repeat the Expand Search procedure if necessary.

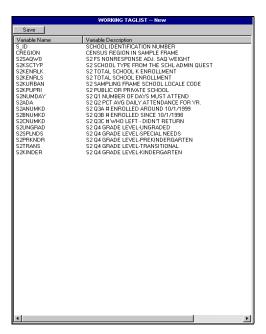
8.3.1.4 Resetting Your Variable List

Following a narrowing or expanding of the Variable List as described above, it is possible to reset the list to display ALL of the variables available in the catalog. The Variable List is reset by clicking on the Reset button located at the top of the Variable List column. Resetting the Variable List does not affect the variables listed in the Working Taglist.

8.4 The Working Taglist

The Working Taglist, shown in figure 8-24, displays a list of variables that are currently selected or tagged for extraction. All Working Taglists contain a set of variables, called required variables, that will be automatically included in all data files that the user creates. For each catalog in the ECLS-K Base Year Public-Use ECB, the required variables provide a foundational data set upon which other variables rely. These required variables cannot be untagged or deleted from the Working Taglist by the user. When a catalog is first opened, the default Working Taglist consists of only the required variables for that catalog. (See table 8-8 for the child catalog, table 8-11 for the teacher catalog, and table 8-14 for the school catalog.) To create a taglist, add the variables you have selected to the required variables.

Figure 8-24. The ECB Working Taglist



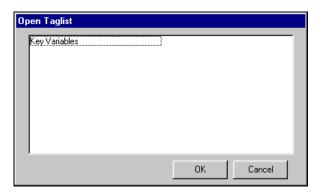
8.4.1 Opening A Taglist

The ECLS-K Base Year Public-Use ECB allows you to open a predefined or previously saved taglist and display it in the Working Taglist column. Taglists, however, are saved as part of a particular catalog and can only be opened as part of the associated catalog.

How to Open a Taglist:

- 1. Open a catalog.
- 2. Select Open from the Taglist pulldown menu.
- 3. The Open Taglist dialog box, shown in figure 8-25, appears.

Figure 8-25. Open Taglist dialog box



- 4. Highlight the taglist that you wish to open.
- 5. Click on the OK button.

If you have made modifications to the taglist currently open in the Working Taglist column, you will be prompted to save your changes.

8.4.2 Adding Variables to the Working Taglist

Variables can be added to your Working Taglist after you have identified the variables in the ECB's catalog that you want to extract. The user-selected variables can be added to the Working Taglist

by selecting one of the two command buttons described in table 8-1 below. The Working Taglist may also have variables added to it from a previously saved taglist. When moving or adding variables to the Working Taglist, the ECB will not permit variables to be listed multiple times. This is an automatic feature of the ECLS-K Base Year Public-Use ECB.

Table 8-1. Add variables buttons

| Command Button | Description |
|----------------|--|
| > | The Tag button moves variables that are selected in the Variable List to the Working Taglist for extraction. |
| >> | The Tag All button moves all variables in the Variable List to the Working Taglist for extraction. |

Multiple variables can be selected by using the Microsoft Windows[©] techniques of:

- Simultaneously pressing the <SHIFT> + Up/Down arrow keys; or
- Pressing <CTRL> + left-mouse clicking on the items to be selected (or deselected). Also, <SHIFT> + left-mouse clicking extends the selection to include all list items between the current selection and the location of the click.

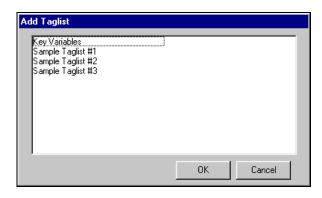
How to Add Variables to a Working Taglist:

- 1. Highlight the variable(s) in the Variables List that you wish to add. (See Microsoft Windows© techniques discussed above.)
- 2. Click on the Tag button, and the selected variables are added to your Working Taglist. To add all variables from the catalog displayed in the Variable List window to your Working Taglist, click on the Tag All button.

How to Add Variables from Another Taglist:

- 1. Click on the Taglist pulldown menu to display the menu options.
- 2. Select the Add option to display a list of previously saved taglists, shown in figure 8-26.

Figure 8-26. Add Taglist dialog box



- 3. Highlight the saved taglist whose variables you wish to add to your Working Taglist.
- 4. Click on the OK button.
- 5. The new variables are added to your Working Taglist.

8.4.3 Removing Variables from the Working Taglist

Variables are removed from your Working Taglist by selecting one or more of the non-required variables and clicking one of the two command buttons described in table 8-2. All variables can be removed by clicking on the Untag All button. All but the required variables will be deleted from your Working Taglist. Required variables are variables that are automatically extracted for all user-created files and cannot be removed from the taglist by the user.

Table 8-2. Remove variables buttons

| Command Button | Description |
|----------------|---|
| < | The Untag button removes variables that are selected from the Working Taglist. |
| << | The Untag All button removes all non-required variables from the Working Taglist. |

Attempting to remove or untag required variables from the Working Taglist is not permitted by the ECLS-K Base Year Public-Use ECB. A message will display indicating that the required variable cannot be untagged.

How to Untag Variables from the Working Taglist:

- 1. Highlight the variable(s) in the Working Taglist that you wish to remove. (See Microsoft Windows© techniques discussed in previous page.)
- 2. Click on the Untag button, and the selected variables are removed from your Working Taglist. To remove all non-required variables from the Working Taglist, click on the Untag All button.

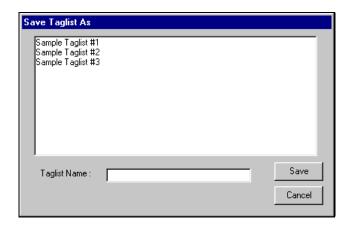
8.4.4 Saving Taglists

The ECLS-K Base Year Public-Use ECB has the ability to save the newly created or modified taglist displayed in the Working Taglist column. Taglists can be saved either under the name already assigned or under a new name. If you have opened a new taglist and have not yet assigned it a name, you will be presented with the Save As dialog box. If you have opened a predefined taglist and have made modifications to it, you must save the modified taglist to a new name. You will also be prompted to save your Working Taglist changes if you attempt to close the catalog or if you open another taglist.

How to Save a **New** Taglist:

- 1. Complete any changes you wish to make to the new taglist.
- 2. Click on the Save button above the Working Taglist column. You can also select the Save or Save As options from the Taglist pulldown menu.
- 3. The Save Taglist As dialog box appears as shown in figure 8-27.

Figure 8-27. Save Taglist as dialog box



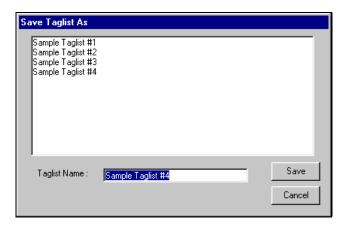
- 4. Enter the new name for the taglist in the Taglist Name: field.
- 5. Click on the Save button.
- 6. The newly assigned taglist name now appears in the Working Taglist header bar.

If a name that already exists is entered, you will be prompted to replace the old taglist with the new taglist. Click "YES" only if you wish to replace the old taglist with the new taglist.

How to Save an Existing Taglist Under a New Name:

- 1. Complete any changes you wish to make to the existing taglist.
- 2. Click on the Taglist pulldown menu and select the Save As option.
- 3. The Save Taglist As dialog box appears, shown in figure 8-28, with the current taglist name in the Taglist Name: field.

Figure 8-28. Save Taglist as dialog box (#2)



- 4. Enter the new name of the taglist in the Taglist Name: field.
- 5. Click on the Save button.
- 6. The newly assigned taglist name now appears in the Working Taglist header bar.

If a name that already exists is entered, you will be prompted to replace the old taglist with the new taglist. Click "YES" <u>only</u> if you wish to replace the old taglist with the new taglist or enter a unique name.

8.4.5 Using Predefined Taglists

The ECLS-K Base Year Public-Use ECB provides predefined taglists within each catalog, which address specific topics. These predefined taglists can be added to your Working Taglist or can be opened as a new Working Taglist. Opening these predefined taglists is performed using the same steps as opening a user-saved taglist presented in section 8.4.1. Users can add as many of the predefined taglists as desired to the open Working Taglist. See sections 8.6.2, 8.7.2, and 8.8.2 for listings and descriptions of the predefined taglists found in the child, teacher, and school catalogs, respectively.

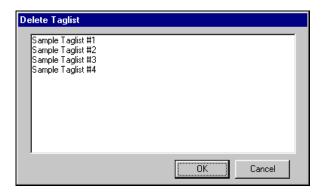
8.4.6 Deleting Taglists

The ECLS-K Base Year Public-Use ECB provides the capability of permanently deleting previously saved taglists. Predefined taglists provided with the ECB, however, can not be deleted through this function.

How to Delete a Taglist:

- 1. Close the taglist currently displayed in the Working Taglist column by selecting the Close option from the Taglist pulldown menu.
- 2. Neither the Working Taglist or Variable List columns are displayed.
- 3. Click on the Taglist pulldown menu and select the Delete option.
- 4. The Delete Taglist Selection screen, shown in figure 8-29, appears with the taglists listed that may be deleted.

Figure 8-29. Delete Taglist Selection screen



- 5. Highlight the taglist that is to be deleted and click on the OK button.
- 6. A confirmation screen, shown in figure 8-30, verifies your intention to delete the taglist.

Figure 8-30. Delete Taglist confirmation window



7. Click on the Yes button to permanently delete the saved taglist.

8.4.7 Viewing Code Book and Variable Information

The code book for a taglist displayed in the Working Taglist column can be created, viewed, and printed from the ECLS-K Base Year Public-Use ECB main screen. The code book displays several pieces of information about each variable that are described in the table 8-3.

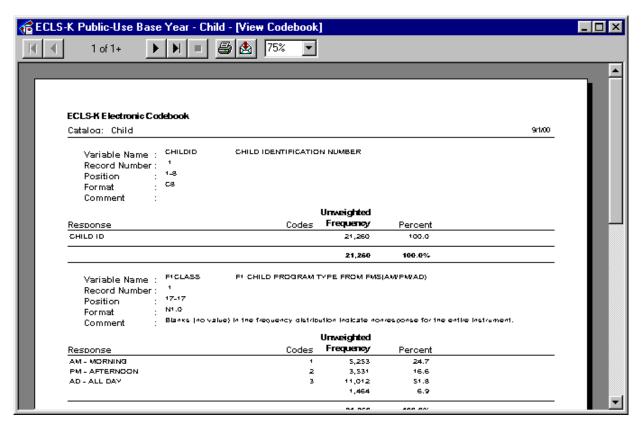
Table 8-3. Code book information

| Field | Description | | |
|----------------|---|--|--|
| Question Text | The question that was asked the respondent by the interviewer or that was on the self-administered instruments. | | |
| Variable Name/ | The name of the variable as it appears in the catalog and a brief | | |
| Description | description of its content. | | |
| Record Number | The row number of the variable within the catalog data file. | | |
| Format | The format of the variable. The first character is either "A" or "N" for | | |
| | alphabetical or numeric. All variables are numeric except the | | |
| | identifiers—which begin with an "A." The number following the "A" or | | |
| | "N" is the length of the variable. For numeric variables, the number after | | |
| | the decimal point is the number of decimal places. | | |
| Comment | Information to clarify specific information about a variable. | | |
| Position | The column number (position) of the variable within the catalog data file | | |
| Response | A brief statement of each response code's meaning. | | |
| Codes | The numeric codes specifying each response. | | |
| Frequency | The numeric count of respondents providing the corresponding response | | |
| | code. The frequency counts are unweighted. | | |
| Percent | The percentage of respondents providing the corresponding response code. The percents are unweighted. | | |

How to View the Code Book for Tagged Variables:

- 1. Complete any changes you wish to make to the displayed taglist.
- 2. Click on the Code Book pulldown menu and select the View option.
- 3. The ECB for the current taglist opens in a new window as shown in figure 8-31.

Figure 8-31. ECB view



4. Use the buttons described in table 8-4 to navigate through the displayed code book. Note that the code book program will try to select a screen width percentage based on the screen settings on your workstation. This may accidentally truncate some of the labels shown in figure 8-31 (such as "Variable Name" or "Record Number"). If this occurs, just select or enter "100%" in the magnification box on the toolbar. You will always see the code book entries correctly when the magnification is set at 100%.

Table 8-4. Navigation buttons

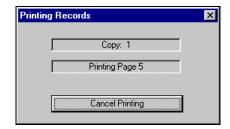
| Command Button | Description |
|----------------|---|
| H | Click this button to change the displayed page to the first page. |
| • | Click this button to change to the previous page. |
| | Click this button to advance to the next page. |
| ▶ | Click this button to change the displayed page to the last page. |
| | Click this button to discontinue a page change. This button is often unavailable in the ECB since page changes occur quickly. |
| | Click this button to print the ECB. Refer to the procedure below for steps on printing the code book. |
| | Click this button to send the ECB to a different destination and save it as a different file format. Refer to the procedure below for steps on exporting the code book. |
| 100% | Click the dropdown arrow to select a display magnification of the code book. |

5. Once you have finished viewing the code book, close the screen by clicking on the Windows "X" control located in the top right corner of the window. You may also close the window using the other standard Windows defaults: by clicking on the windows icon in the upper left corner and selecting Close, or by pressing Alt-F4.

How to Print the ECB:

- 1. Complete any changes you wish to make to the displayed taglist.
- 2. Click on the Code Book pulldown menu and select the Print option.
- 3. The Printing Status screen, shown in figure 8-32, appears, and the code book prints on your PC's default printer.

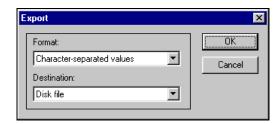
Figure 8-32. Printing Status screen



How to Export the Code Book:

- 1. Complete any changes you wish to make to the displayed taglist.
- 2. Click on the Code Book pulldown menu and select the View option.
- 3. The ECB for the current taglist opens in a new window, similar to the one shown in figure 8-31.
- 4. Click on the Export Code Book button:
- 5. The Export Taglist selection screen, shown in figure 8-33, appears.

Figure 8-33. Export Taglist selection screen



- 6. Select the desired options from the Format: pulldown menu and the Destination: pulldown menu.
- 7. Click on the OK button and complete any subsequent screens required for exporting the file.

The child catalog is too large to export in its entirety.

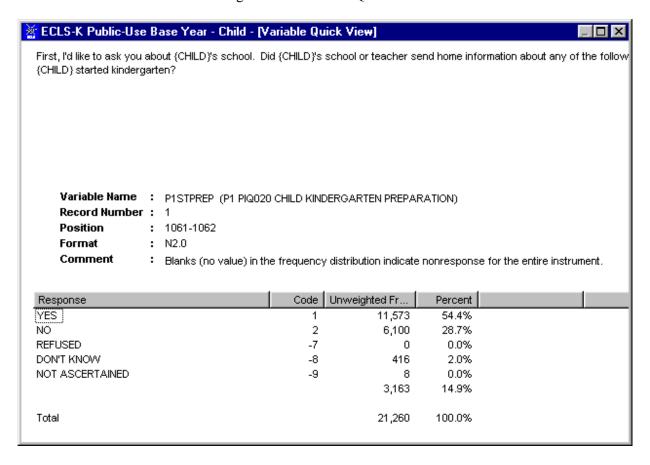
The code book and its variables can be selected to display their information from either the Variable List or the Working Taglist. The information that can be displayed for a variable includes the variable name and label, the question wording associated with the variable, the position and format of the variable on the data file, each value and its label, unweighted frequencies, and the unweighted percentage distributions as listed on table 8-3. The entire code book can also be viewed after moving all of the catalog's variables to the Working Taglist. The following procedures describe how to view some or all code book variables.

How to Display Information for a Single Code Book Variable:

- 1. Locate the desired variable from either the Variable List or the Working Taglist.
- 2. Click on the variable name to highlight it and press <ENTER> -or- double-click on the variable name to view the variable information. Figure 8-34 shows the Variable Quick View that displays data for a specific variable from the Base Year School Catalog.

The Variable Name is the only field that can be highlighted for displaying the variable's code book information. Clicking on the variable description field will not activate the Variable Quick View.

Figure 8-34. Variable Quick View



3. When you are done reviewing the variable information, close the window by clicking on the Windows control "X" in the upper right corner of the screen. You'll return to the main screen.

How to Print Information for a Single Code Book Variable:

The ECB currently does not support printing the information for a single variable directly to the printer. If you must print the information for a single variable, please follow the these steps:

- 1. Double-click on the variable to activate the Variable Quick View (see the previous "How To" section for details).
- 2. With the Variable Quick View being the active window on top, press <Alt> + <Print Screen> to save the image of the Variable Quick View window.
- 3. In any application that supports bitmap images, e.g., Microsoft Paint, Microsoft Word, etc., paste the saved image.
- 4. Print the image to the printer using the print function of the application that you are using.

How to Display and Print the Entire Code Book or Selected Pages:

- 1. Move all of the catalog's variables displayed in the Variable List to the Working Taglist by clicking on the Tag All button.
- 2. Click on the OK button of the Add All Variables Confirmation dialog box, shown in figure 8-35.

Figure 8-35. Add All Variables dialog box



- 3. All of the variables listed in the Variable List are now displayed in the Working Taglist.
- 4. Select View from the Code Book pulldown menu.
- 5. The entire code book displays as shown in figure 8-36. Note that this view includes ALL variables in the catalog and can span several hundred pages. The page number is in the upper left corner of the window.

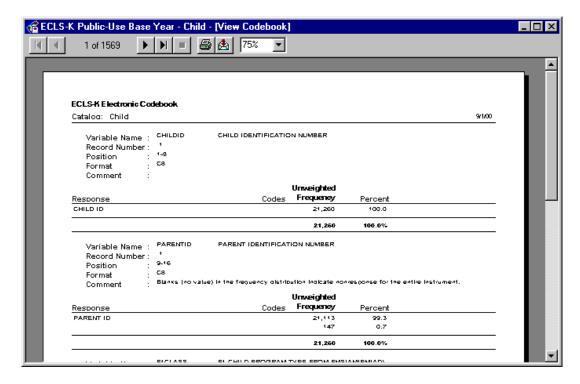


Figure 8-36. View of the entire code book

6. To print the entire code book, click on the printer icon displayed at the top of the code book screen. Select "ALL" from the Printer Dialog box (figure 8-37). Enter the number of copies you want and click on the OK button.

Figure 8-37. Printer Dialog box



- 7. To print selected pages of the code book, select "Pages" from the Printer Dialog box. Enter the pages you want to print and the number of copies you want. Click on the OK button.
- 8. When you are done viewing the entire code book, close the window by clicking on the Windows control "X" in the upper right corner of the screen. You'll return to the main screen.

8.5 Extracting Data from the ECB

Once the variables have been selected (tagged) for extraction and reside in the Working Taglist, the next step is to generate the code through which the statistical analysis software can retrieve and display the results. The ECLS-K Base Year Public-Use ECB provides options for generating the code for analyzing data with the SAS, SPSS for Windows, or STATA statistical analysis programs.

To run these programs, you will need the appropriate statistical software and the ECLS-K Base Year Public-Use ECB CD-ROM from which the program can extract data.

SPSS users should note that certain catalogs will produce a Frequencies command statement with more than 500 variables. This may produce a warning of "too many variables," and the Frequencies command will not execute. Users may work around this limitation by dividing the Variable List into two or more Frequencies commands.

When extracting data to be used with either the SAS, SPSS for Windows, or STATA programs, a dialog box will be presented that allows the user to define the extract population through the Limiting Fields. See figure 8-38. The Limiting Fields include various subgroups of respondents that are typically of interest to analysts. These subgroups can be selected or deselected to narrow the data field that is extracted.

Also, please note that the ECB extract function allows the user to specify the drive letter of the CD-ROM drive. If you attempt to run the resulting SAS, SPSS, and STATA programs on a workstation with a different CD-ROM drive letter, you must alter the program code accordingly or regenerate the program code using the ECB.

The SAS, SPSS, or STATA source code generated by the ECB to read in the ECLS-K data may contain code statements that are "commented" out (e.g., with * in SAS). These code statements either run descriptive statistics, e.g., frequencies, means, etc., or associate formats with variables. They are commented out because not all analysts will want them included in the source code.

SAS users (prior to SAS, Version 8) should note that, although the ECB will allow dataset names larger than eight characters, the SAS system will reject these names at run-time.

Teacher Extract Specifications The extract will include data marked 'Yes' in the 'Select' column below. To customize the extraction, change the 'Select' column settings for discrete variables, and change the 'Low' and 'High' settings for continuous variables. Variable Label High S2KPUPRI S2 PUBLIC OR PRIVATE SCHOOL PHRIC Yes n/a n/a PRIVATE Yes n/a n/a NOT ASCERTAINED Yes n/a n/a KGCLASS KINDERGARTEN TEACHER CLASS CO. AM ONLY Yes n/a n/a PM ONLY Yes n/a n/a AM AND PM Yes n/a n/a ALL DAY ONLY Yes n/a n/a AM AND ALL DAY Yes n/a n/a PM AND ALL DAY Yes n/a n/a AM, PM, AND ALL DAY Yes n/a n/a NOT ASCERTAINED Yes n/a n/a CD-ROM Drive: D: ▼ Cancel ✓ Set as permanent drive

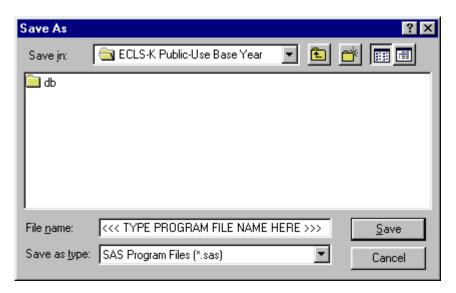
Figure 8-38. Teacher catalog limiting fields dialog box

Refer to sections 8.6.3, 8.7.3, and 8.8.3 for instructions on using and modifying the limiting variables for the child, teacher, and school catalogs, respectively.

How to Extract a File to SAS Format:

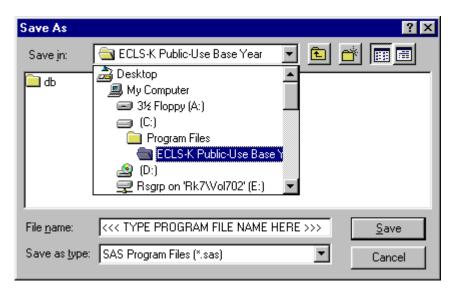
- 1. Complete any changes you wish to make to the displayed taglist.
- 2. Click on the Extract pulldown menu and select the SAS option.
- 3. The Limiting Fields screen for the open catalog appears. Make your selections for each limiting variable indicator.
- 4. Verify that the ECLS-K Base Year Public-Use ECB CD-ROM is mounted in your PC's default CD-ROM drive and then click on the OK button.
- 5. Type the desired name of the extract program file in the file name field of the screen shown in figure 8-39.

Figure 8-39. Save SAS program file dialog box



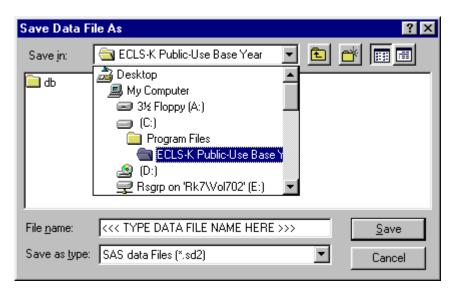
6. To save the file to another directory, click on the Save in: dropdown menu button to browse to the new location, as shown in figure 8-40.

Figure 8-40. Save SAS program file location browse screen



- 7. Click on the Save button to store the file.
- 8. In the Save Data File As window (figure 8-41) type in the file name you want the data file to save to and then click on Save.

Figure 8-41. Save SAS data file dialog box

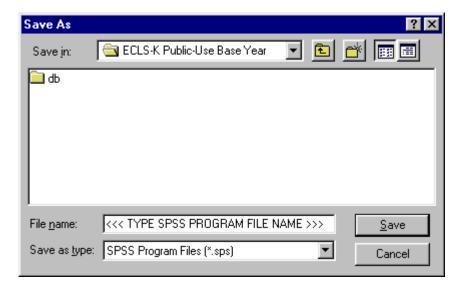


9. Run the saved extract program in SAS to extract the data.

How to Extract a File to SPSS Format:

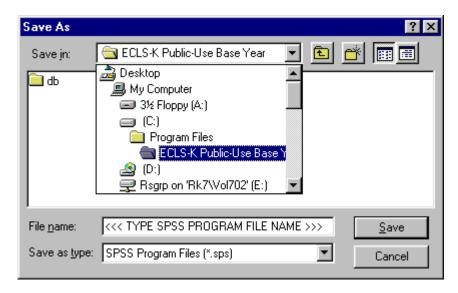
- 1. Complete any changes you wish to make to the displayed taglist.
- 2. Click on the Extract pulldown menu and select the SPSS option.
- 3. The Limiting Fields screen for the open catalog appears. Make your selections for each limiting variable indicator.
- 4. Verify that the ECLS-K Base Year Public-Use ECB CD-ROM is mounted in your PC's default CD-ROM drive and then click on the OK button.
- 5. Type the desired name of the extract program file in the file name field of the screen shown in figure 8-42.

Figure 8-42. Save SPSS program file dialog box



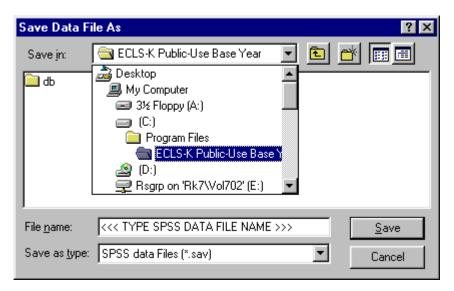
6. To save the file to another directory, click on the Save in: dropdown menu button to browse to the new location, as shown in figure 8-43.

Figure 8-43. Save SPSS program file location browse screen



- 7. Click on the Save button to store the file.
- 8. In the Save Data File As window (figure 8-44), type in the file name you want the data file to save to and then click on Save.

Figure 8-44. Save SPSS data file dialog box

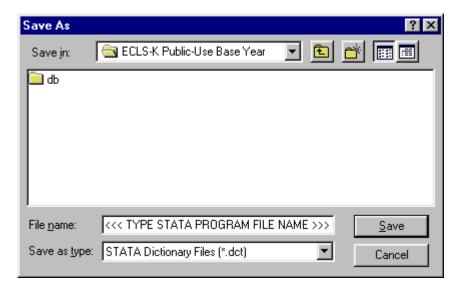


9. Run the saved extract program in SPSS to extract the data.

How to Extract a File to STATA Format:

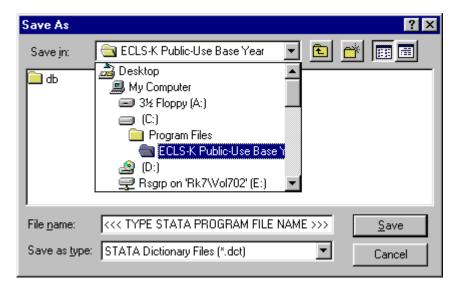
- 1. Complete any changes you wish to make to the displayed taglist.
- 2. Click on the Extract pulldown menu and select the STATA option.
- 3. The Limiting Fields screen for the open catalog appears. Make your selections for each limiting variable indicator.
- 4. Verify that the ECLS-K Base Year Public-Use ECB CD-ROM is mounted in your PC's default CD-ROM drive and then click on the OK button.
- 5. Type the desired name of the extract program file in the file name field of the screen shown in figure 8-45.

Figure 8-45. Save STATA program file dialog box



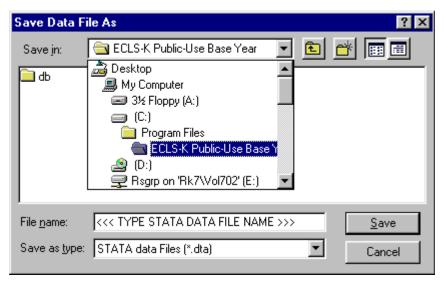
6. To save the file to another directory, click on the Save in: dropdown menu button to browse to the new location, as shown in figure 8-46.

Figure 8-46. Save STATA program file location browse screen



- 7. Click on the Save button to store the file.
- 8. In the Save Data File As window (figure 8-47), type in the file name you want the data file to save to and then click on Save.

Figure 8-47. Save STATA data file dialog box



9. Run the saved extract program in STATA to extract the data.

8.5.1 Reviewing the Extract Specifications

It is recommended that users review the SAS, SPSS, or STATA program code that is generated before running it, to check that any statements subsetting the data are correct. Note that the ECB sometimes outputs superfluous code for selecting cases; this code is consistent with extract specifications, but users may wish to delete it.

If a mistake in defining the criteria is made, and it is not discovered until after writing out or running the extract program, it is very easy to correct if the taglist was saved before exiting the ECB program. Simply restart the ECB and select the appropriate catalog, open the taglist that you saved, define the extract criteria correctly by modifying the saved taglist as desired and saving it, and write out the extract program again. Reviewing the program before running it is recommended because it may need to be customized.

8.5.2 Repairing and Compacting the Database

Periodically users may wish to repair and compact the database that contains the data of the ECB program. If many taglists are created and deleted on a regular basis, the database will contain lingering references to old taglists that are no longer needed. When the database is repaired and compacted, the ECB program "cleans house" and makes the database more efficient. It also decreases the size of the database, so space is conserved.

How to Repair and Compact the ECLS-K Database:

- 1. Select the Tools pulldown menu and select the Repair and Compact Database option.
- 2. After a few seconds, the screen shown in figure 8-48 appears indicating that the repair and compact of the database was successfully completed.

Figure 8-48. Repair database completed screen



3. Click on the **OK** button.

8.6 The Child Catalog

The child catalog contains information for children selected to participate in the ECLS-K survey and includes data collected at the child level from the child and from the child's parents, teachers, and schools. Table 8-5 presents the pretagged required variables that will be automatically extracted for all user-created data files. The user cannot remove the required variables from the taglist. The last two variables on the list, S2 Public or Private School and P1 First-Time Kindergartner, are also limiting fields, meaning that they may be used to subset the data being extracted. See section 8.6.3 for an explanation and description of limiting fields.

Table 8-5. Child catalog required variables

| Field Name | Field Label |
|------------|--|
| CHILDID | Child Identification Number |
| F1CLASS | F1 Child Program Type from FMS (AM/PM/AD) |
| F2CLASS | F2 Child Program Type from FMS (AM/PM/AD) |
| GENDER | Child Composite Gender |
| RACE | Child Composite Race |
| R1_KAGE | R1 Composite Child Assessment Age (months) |
| P1FIRKDG | P1 First-Time Kindergartner |
| WKSESQ5 | WK Categorical SES Measure |
| S2KPUPRI | S2 Public or Private School |

The child catalog is organized into blocks of data corresponding to specific content areas.

They are:

- Identifiers are the school, child, parent, and teacher identification number and the class type the child attended, i.e., morning, afternoon, or all-day class.
- School demographic data are from the sampling frame, e.g., Census region.
- Child demographic composite variables include age, gender, race-ethnicity, and date of birth.
- Child status indicates if a child changed schools or teachers within the base year and whether the child was eligible in spring-kindergarten.
- Weights are described in detail in chapter 4. Round 1 weights are for fall-kindergarten; round 2 weights are for spring-kindergarten; and panel weights are for both rounds combined.
- Flags indicate unit response for the data source, e.g., direct child assessment, parent interview, or that the parent interview data were edited.
- **Scores** are for the direct or indirect child assessment, which are computed for round 1 and round 2 separately.
- Composite variables were created to facilitate data analysis. See chapter 7, section 7.4 for a detailed description of the composite variables and table 7-6 for a list of all composite variables.
- **Direct assessment data** are the child's home language, date of assessment, and exclusions from the direct assessment. Direct assessment items are not released.
- **Parent interview data** are the data items from the parent interview.

- **Teacher questionnaire data** are the data items from the teacher questionnaires.
- School data are the data items from the school administrator questionnaire and the facility checklist.
- Taylor Series Sampling Strata and PSUs are the stratum and first-stage unit identifiers that are required for estimating standard errors with the Taylor Series linearization method using software such as SUDAAN or STATA.
- Weight replicates are used to estimate standard errors using the paired jackknife replication method (JK2) with WesVar. Each replicate is a subsample of the full sample. The variability of the replicate estimates about the full sample estimate is used to estimate the variance of the full sample estimate.
- New variables for public-use file are variables created for respondent confidentiality.

Table 8-6 presents the order of the data blocks on the child data file.

8.6.1 Child Catalog Topical Variable Groupings

The variables within the child catalog are organized into topical categories to help locate and identify desired variables. These categories are identified in table 8-7. The first column of the table describes the topic, the second column lists the variable identifiers, which generally indicate the source of the data, e.g., the parent interview, the teacher questionnaires, as well as when the data was collected, i.e., fall- or spring-kindergarten. The third column is a description of the topic. The last column is the "Field ID," which is how you search the data file for the topics. Use the keywords in the "Variable Identifier" column to search for variables while using the ECB Narrow or Expand function (see sections 8.3.1.2 and 8.3.1.3). If "(Variable Name)" appears under the variable in the "Variable Identifier" column, you must search using the variable name. The field ID can be used by the "Go" function in the Variable List.

Table 8-7 is only for your convenience in searching for variables and includes only variables that belong to certain topics. It does not reflect the contents of the entire child catalog.

Table 8-6. Child catalog blocks

| Order | Block |
|-------|--|
| 1 | Identifiers |
| 2 | School demographic data |
| 3 | Child demographic composites |
| 4 | Child status flags |
| | Weights |
| 5 | Round 1 child weight full sample |
| 6 | Round 1 parent weight full sample |
| 7 | Round 1 CPT weight full sample |
| 8 | Round 2 child weight full sample |
| 9 | Round 2 parent weight full sample |
| 10 | Round 2 CPT weight full sample |
| 11 | Panel child weight full sample |
| 12 | Panel parent weight full sample |
| 13 | Panel CPT weight full sample |
| 14 | Panel combined weight full sample |
| | Flags |
| 15 | Round 1 child assessment data status flags |
| 16 | Round 2 child assessment data status flags |
| 17 | Round 1 parent interview data status flags |
| 18 | Round 2 parent interview data status flags |
| 19 | Round 1 teacher questionnaire A data status flags |
| 20 | Round 2 teacher questionnaire A data status flags |
| 21 | Round 1 teacher questionnaire B data status flags* |
| 22 | Round 2 teacher questionnaire B data status flags |
| 23 | Round 1 teacher questionnaire C data status flags |
| 24 | Round 2 teacher questionnaire C data status flags |
| 25 | School administrator questionnaire data status flags |
| 26 | Facility checklist data status flags |
| 27 | Parent data edit flags and error flags |
| | Scores |
| 28 | Round 1 child assessment scores |
| 29 | Round 2 child assessment scores |
| 30 | Round 1 parent SRS scores |
| 31 | Round 2 parent SRS scores |
| 32 | Round 1 teacher questionnaire C scores |
| 33 | Round 2 teacher questionnaire C scores |
| 2.4 | Composite Variables |
| 34 | Round 1 child composites |
| 35 | Round 2 child composites |
| 36 | Round 1 parent composites |
| 37 | Round 2 parent composites |
| 38 | Cross-round Parent composites |
| 39 | Round 1 teacher questionnaire A composites |
| 40 | Cross-round teacher questionnaire A composites |

Table 8-6. Child catalog blocks (continued)

| Order | Block | | | |
|----------|--|--|--|--|
| 41 | Round 1 teacher questionnaire B composites | | | |
| 42 | Round 2 teacher questionnaire B composites | | | |
| 43 | School administrator questionnaire composites | | | |
| | Direct Assessment Data | | | |
| 44 | Round 1 child assessment data (language & date) | | | |
| 45 | Round 2 child assessment data (language & date) | | | |
| | Parent Interview Data | | | |
| 46 | Round 1 parent interview data | | | |
| 47 | Round 2 parent interview data | | | |
| | Teacher Questionnaire Data | | | |
| 48 | Round 1 teacher questionnaire A data | | | |
| 49 | Round 2 teacher questionnaire A data | | | |
| 50 | Round 1 teacher questionnaire B data | | | |
| 51 | Round 2 teacher questionnaire B data | | | |
| 52 | Round 1 teacher questionnaire C data | | | |
| 53 | Round 2 teacher questionnaire C data | | | |
| | School Data | | | |
| 54 | School administrator data | | | |
| 55 | Facility checklist data | | | |
| | Taylor Series Sampling Strata And Primary Sampling Units (PSU) | | | |
| 56 | Round 1 child Taylor series sampling strata and PSU | | | |
| 57 | Round 2 child Taylor series sampling strata and PSU | | | |
| 58 | Round 1 parent Taylor series sampling strata and PSU | | | |
| 59 | Round 2 parent Taylor series sampling strata and PSU | | | |
| 60 | Round 1 CPT Taylor series sampling strata and PSU | | | |
| 61 | Round 2 CPT Taylor series sampling strata and PSU | | | |
| 62 | Panel child Taylor series sampling strata and PSU | | | |
| 63 | Panel parent Taylor series sampling strata and PSU | | | |
| 64 | Panel CPT Taylor series sampling strata and PSU | | | |
| 65 | Panel combined Taylor series sampling strata and PSU | | | |
| | Replicate Weights | | | |
| 66 | Round 1 child replicate weights | | | |
| 67 | Round 2 child replicate weights | | | |
| 68 | Round 1 parent replicate weights | | | |
| 69 70 | Round 2 parent replicate weights | | | |
| 70 | Round 1 CPT replicate weights | | | |
| 71 | Round 2 CPT replicate weights | | | |
| 72 72 | Panel child replicate weights | | | |
| 73 | Panel parent replicate weights | | | |
| 74 75 | Panel CPT replicate weights | | | |
| 75 76 | Panel combined replicate weights | | | |
| 76 | New variables for public-use file | | | |

^{*}Background information from teachers was collected in teacher questionnaire B for all teachers. New kindergarten teachers in spring-kindergarten completed this questionnaire. The child's teacher may have changed between fall and spring. Block 50 contains the teacher questionnaire B data for fall-kindergarten; block 51 contains the teacher questionnaire B data for spring-kindergarten.

Table 8-7. Child catalog topical variable groupings

| Topic | Variable Identifier | Description | FieldID |
|--|---------------------------------------|---|-------------------------------|
| Identifiers | CHILDID – S2_ID (Variable Name) | School identification number Teacher identification number Parent/Child identification numbers | 1-8 |
| Variables from the sampling | Variable from Sample Frame | Census region, type of school, locale of school | 9-11 |
| Status flags | C1COGDAT - K2INFAC (Variable Name) | Child assessment status indicators (e.g., cognitive data available), parent data available, teacher data available, school data available | 32-54 |
| Cognitive Skills | C1 Reading | Reading, Mathematics, and General | 76-78 |
| and Knowledge Fall-Kindergarten | C1 Math C1 Gen | Knowledge T-scores and IRT scale scores | 90-92 103-105 |
| Cognitive Skills and Knowledge Spring- | C2 Reading C2 Math C2 Gen. Know | Reading, Mathematics, and General Knowledge T-scores and IRT scale scores | 117-119 131-133 144-146 |
| Kindergarten | | | |
| Cognitive Skills and Knowledge Fall-Kindergarten | C1 Prof Reading C1 Prof Math | Reading and Mathematics proficiency scores | 79-83 93-97 |
| Cognitive Skills and Knowledge Spring- Kindergarten | C2 Prof Reading C2 Prof Math | Reading and Mathematics proficiency scores | 120-124 134-138 |
| Cognitive Skills and Knowledge Fall-Kindergarten | C1 Prob Reading C1 Prob Math | Reading and Mathematics probability scores | 84-88 98-102 |
| Cognitive Skills and Knowledge Spring- Kindergarten | C2 Prob Reading C2 Prob Math | Reading and Mathematics probability scores | 125-129 139-143 |
| Social Skills and Knowledge | P1 Approaches P1 Self | Five factor scores from the social | 147 |
| _ | P1 Social | rating scale in the parent interview: approaches to learning, self-control, | 148 149 |
| Parent Rating Fall-Kindergarten | P1 Sad P1 Impulsive | social interaction, sad/lonely, impulsive/overactive | 150 151 |

Table 8-7. Child catalog topical variable groupings (continued)

| Торіс | Variable Identifier | Description | FieldID |
|-------------------|---------------------|---|---------|
| Social Skills and | P2 Approaches | Five factor scores from the social | 152 |
| Knowledge | P2 Self | rating scale in the parent interview: | 153 |
| | P2 Social | approaches to learning, self-control, | 154 |
| Parent Rating | P2 Sad | social interaction, sad/lonely, | 155 |
| Spring- | P2 Impulsive | impulsive/overactive | 156 |
| Kindergarten | _ | | |
| Social Skills and | T1 Approaches | Five factor scores from the social | 160 |
| Knowledge | T1 Self | rating scale in teacher form C: | 161 |
| C | T1 Interpersonal | approaches to learning, self control, | 162 |
| Teacher Rating | T1 Externalizing | interpersonal, externalizing problem | 163 |
| Fall-Kindergarten | T1 Internalizing | behaviors, internalizing problem | 164 |
| w. 11au 8v | 11 | behaviors | 10. |
| Social Skills and | T2 Approaches | Five factor scores from the social | 168 |
| Knowledge | T2 Self | rating scale in teacher form C: | 169 |
| | T2 Interpersonal | approaches to learning, self control, | 170 |
| Гeacher Rating | T2 Externalizing | interpersonal, externalizing problem | 171 |
| Spring- | T2 Internalizing | behaviors, internalizing problem | 172 |
| Kindergarten | 12 memanzing | behaviors | 1/2 |
| | DODMM D2 KACE | | 12 10 |
| Composite/ | DOBMM - R2_KAGE | Related to child (e.g., child DOB, | 12-18 |
| Derived | C1HEIGHT – C2BMI | child race, child gender, etc.) | 173-178 |
| Variables | (Variable Name) | | 150 210 |
| | P1HMEMMP – IF_INC | Related to parent interview (e.g., | 179-319 |
| | (Variable Name) | parent occupation, parent highest | |
| | | education, etc.) | |
| | A1PBLK – B2AGE | Related to teacher information (e.g., | 320-324 |
| | (Variable Name) | kindergarten teacher class type, | |
| | | percentage minority in class, etc.) | |
| | S2KSCTYP – S2KPUPRI | Related to school information (e.g., | 325-334 |
| | (Variable Name) | school type, school enrollment, | |
| | | percent minority, etc.) | |
| Fall-K PI: | P1 PIQ | Includes: school providing parents | 353-374 |
| Parent's | ` | with information about kindergarten, | |
| nvolvement | | choice of school, whether child started | |
| with Child's | | kindergarten on time and whether he | |
| School | | or she was retained, child's adjustment | |
| CHOOL | | to school, parents' kindergarten | |
| | | | |
| Call V DI: | D1 ESO | readiness beliefs | 275 (20 |
| Fall-K PI: | P1 FSQ | Includes: number of people in | 375-628 |
| Family Structure | | household, relationship of people to | |
| | | child, age of people, gender of people, | |
| | | and race/ethnicity of people | |
| Fall-K PI: | P1 HEQ | Includes: how frequently family | 629-642 |
| Home | | members do such things as reading, | |
| Environment, | | singing and telling stories to child, | |
| Activities, and | | how often child reads to self, whether | |
| Cognitive | | child watched Sesame Street | |
| Stimulation | | | |

Table 8-7. Child catalog topical variable groupings (continued)

| Topic | Variable Identifier | Description | FieldID |
|------------------------|---------------------|--|-----------|
| Fall-K PI: | P1 CFQ | Includes: presence of social support | 643-674 |
| Critical Family | | to family | |
| Processes | | | |
| Fall-K PI: | P1 CCQ | Includes: child care history for child | 675-785 |
| Child Care | | prior to kindergarten and the present | |
| | | (i.e., relative care, non-relative care, | |
| | | center care, Head Start) | |
| Fall-K PI: | P1 CHQ | Includes: birth weight, prematurity, | 786-890 |
| Child's Health | | twin status, early indicators for | |
| and Well-Being | | developmental difficulties (e.g., | |
| | | attention, coordination, hearing, | |
| | | vision), services for disabilities | |
| Fall-K PI: | P1 MHQ | Includes: marital history of parents | 891-933 |
| Parent Marital | | , , , , , , , , , , , , , , , , , , , | |
| History | | | |
| Fall-K PI: | P1 ALQ | Includes: where the child has lived | 934-945 |
| Child's Living | • | and with whom if situation has | |
| Arrangement | P1 HRQ | changed within the past year | 946-987 |
| History and | | 5 | |
| Historical Roster | | | |
| Fall-K PI: | P1 NRQ | Includes: status of biological parents | 988-999 |
| Non-resident | 1111112 | (if not in household) and contact | ,00,,,, |
| Parent Questions | | with non-resident parents | |
| Fall-K PI: | P1 PLQ | Includes: information on languages | 1000-1041 |
| Primary | 11124 | spoken in the home | 3989-3992 |
| Language | | | 5,0,5,,2 |
| Fall-K PI: | P1 PEQ | Includes: educational attainment of | 1042-1088 |
| Parent Education | 11124 | parents | 10.2 1000 |
| and Human | | parents | |
| Capital | | | |
| Fall-K PI: | P1 EMQ | Includes: employment history and | 1089-1124 |
| Parent | 1 1 11117 | occupation of parents, history of | 1007 1127 |
| Employment | | financial hardship | |
| Fall-K PI: | P1 WPQ | Includes: family's utilization of | 1125-1132 |
| Welfare and | 11 WI Q | services such as WIC, AFDC, food | 1125-1152 |
| Other Public | | stamps | |
| Transfers | | samps | |
| Fall-K PI: | P1 CMQ | Includes: how many different places | 1133-1135 |
| Mobility | 1 1 01/10 | child has lived for four months or | 1133-1133 |
| | | more since birth | |
| Spring-K PI: | P2 INQ | Includes: child's place of birth | 1480-1484 |
| Introduction | 121110 | metades. emid 3 piace of offul | 1700-1707 |
| Spring-K PI: | P2 PIQ | Includes: parents' contact with | 1525-1583 |
| Spring-K P1. Parent | 12114 | school, parent attendance in school | 1343-1303 |
| Parent Involvement | | related activities, barriers to | |
| with Child's | | attendance to school related | |
| | | | |
| School | | activities | |

Table 8-7. Child catalog topical variable groupings (continued)

| Topic | Variable Identifier | Description | FieldID |
|---|---------------------|--|-----------|
| Spring-K PI: Family Structure | P2SPRHHM – P2RC6_17 | Includes: number of people in household, relationship of people to child, age of people, gender of people, and race/ethnicity of people | 1136-1479 |
| Spring-K PI: Home Environment, Activities and Cognitive Stimulation | P2 HEQ | Includes: attending activities in the community (e.g., museums, zoos, athletic events), home computer access and use, participation in extra-curricular activities (e.g., music lessons, craft classes), information on community crime and safety, mealtimes and bedtimes | 1584-1622 |
| Spring-K PI: Critical Family Processes | P2 CFQ | Includes: information on parents' relationship to one another | 1623-1644 |
| Spring-K PI: Non-resident Parent Question | P2 NRQ | Includes: information on non- resident parent and custody arrangements | 1645-1710 |
| Spring-K PI: Discipline, Warmth and Emotional Supportiveness | P2 DWQ | Includes: parents' interaction with child and discipline strategies (e.g., spanking, time-out) | 1711-1741 |
| Spring-K PI: Child's Health and Well-Being | P2 CHQ | Includes: information on dentist and doctor, updates fall information screener on indicators for developmental difficulties | 1742-1766 |
| Spring-K PI: Parent's Psychological Well-Being and Health | P2 PPQ | Includes: parent depression, parent health problems | 1767-1787 |
| Spring-K PI: Food Security | P2 FDQ | Includes: food sufficiency in the household | 1788-1816 |
| Spring-K PI: Welfare and Other Public Transfers | P2 WPQ | Includes: family's utilization of AFDC or food stamps, free/reduced breakfast or lunch | 1817-1830 |
| Spring-K PI: Parents Income and Assets | P2 PAQ | Includes: household income | 1831-1836 |

Table 8-7. Child catalog topical variable groupings (continued)

| Topic | Variable Identifier | Description | FieldID |
|--|---------------------|--|-------------------|
| Teacher Questionnaire: Classroom Characteristics | A1 Q1 – A1 Q19 | Fall: type of kindergarten program, class age and race-ethnic composition, gender composition, percent LEP, languages in classroom | 1839-1904 3993 |
| | A2 Q1 – A2 Q7 | Spring: G&T, attendance, special needs children | 1908-1945 |
| Teacher | B1 Q1 – B1 Q6 | Fall: instructional approach, | 2180-2207 |
| Questionnaire: | | centers/learning areas | |
| Class Organization and Resources | A2 Q8 – A2 Q27 | Spring: instructional approach, curriculum content, teacher's aide, physical resources (e.g., texts, equipment, materials for art and music) | 1946-2032 |
| Teacher Questionnaire: Instructional Activities and Curricular Focus | A2 Q28 – A2 Q34 | Spring: instructional time spent on specific aspects of reading and language arts, math, computers, science and social studies | 2033-2152 |
| Teacher Questionnaire: Parent Involvement | A2 Q35 – A2 Q 38 | Spring: conferences, teachers sending home information | 2153-2160 |
| Teacher Questionnaire: School and Staff Activities | A2 Q39 – A2 Q41 | Spring: in-service sessions, training | 2161-2176 |
| Teacher Questionnaire: Teacher Views | B1 Q7 – B1 Q14 | Fall: views on readiness, school climate, environment | 2208-2253 |
| Teacher Questionnaire: Teacher Demographics | B1 Q15 – B1 Q24 | Fall: gender, birth year, race- ethnicity, experience, education | 2254-2285 |
| School Questionnaire: School Characteristics | S2 Q1 – S2 Q22 | Includes: attendance, enrollment, admission requirements, federal programs | 2476-2595 |
| School Questionnaire: School Facilities and Resources | S2 Q23 – S2 Q28 | Includes: funding sources, facilities (e.g., cafeteria, music room, auditorium) | 2596-2630 |

Table 8-7. Child catalog topical variable groupings (continued)

| Topic | Variable Identifier | Description | FieldID |
|--------------------------|---|---|-----------|
| School Questionnaire: | S2 Q29 – S2 Q33 | Includes: community type, community safety, school safety | 2631-2652 |
| Community | | | |
| Characteristics | | | |
| and School Safety | ~ | | |
| School | S2 Q34 – S2 Q40 | Includes: uniform code, testing and | 2653-2690 |
| Questionnaire: | | assessments | |
| School Policies | | | |
| and Practices School | S2 Q41 – S2 Q47 | Includes: programs and services for | 2691-2744 |
| Questionnaire: | 52 Q41 = 52 Q47 | Includes: programs and services for families, parent involvement in | 2091-2744 |
| School-Family- | | school | |
| Community | | School | |
| Connections | | | |
| School | S2 Q48 – S2 Q57 | Includes: limited English proficient, | 2745-2777 |
| Questionnaire: | | special education, gifted and | |
| School Programs | | talented | |
| for Special | | | |
| Populations | | | |
| School | S2 Q58 – S2 Q63 | Includes: school staff list, salary | 2778-2809 |
| Questionnaire: | | information, staff's race-ethnic | |
| Staffing and | | distribution | |
| Teacher | | | |
| Characteristics | | | |
| School | S2 Q64 – S2 Q69 | Includes: professional development, | 2810-2895 |
| Questionnaire: | | process for decision making, | |
| School | | performance evaluation process | |
| Governance and | | | |
| Climate School | S2 Q70 – S2 Q79 | Includes: administrator's gender, | 2896-2935 |
| Questionnaire: | 32 0/0 - 32 0/9 | race-ethnicity, birth year, experience | 3994 |
| Principal | | and education | 3777 |
| Characteristics | | and oddouron | |
| Facility | K2 Q1 – K2 Q6 | Includes: information on school | 2939-3068 |
| Checklist | , <u>(</u> , | facilities (e.g., presence and | |
| | | condition of rooms such as libraries, | |
| | | computer labs, bathrooms, | |
| | | cafeteria), handicap access to | |
| | | facilities, school safety | |

8.6.2 Child Catalog Predefined Taglists

There are three predefined taglists provided with the child catalog that can be used for extracting data. These three taglists, fall-kindergarten, spring-kindergarten, and kindergarten base year, are defined in tables 8-8, 8-9, and 8-10, respectively. The required variables, identified with "YES" appearing in the Required Variable column, are the same as those listed in table 8-5. The limiting variables, identified as "YES" in the Limiting Variable column, are the same as those described in Section 8.6.3.

Table 8-8. Fall-kindergarten predefined taglist - child catalog

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|---------------------------------|------------------|--|----------------------|----------------------|
| | | Basic Demographic Variables | | |
| Child ID | CHILDID | CHILD IDENTIFICATION NUMBER | YES | NO |
| Child sex | GENDER | COMPOSITE CHILD GENDER | YES | NO |
| Child age in the fall of 1998 | R1_KAGE | R1 COMPOSITE CHILD ASSESSMENT AGE(MONTHS) | YES | NO |
| Child ethnicity | RACE | COMPOSITE CHILD RACE | YES | NO |
| Household SES | WKSESQ5 | WK CATEGORICAL SES MEASURE | YES | NO |
| Fall kindergarter type | n F1CLASS | F1 CHILD PROGRAM TYPE FROM FMS(AM/PM/AD) | YES | NO |
| Spring- kindergarten type | F2CLASS | F2 CHILD PROGRAM TYPE FROM FMS(AM/PM/AD) | YES | NO |
| School type | S2KPUPRI | S2 PUBLIC OR PRIVATE SCHOOL | YES | YES |
| First-time kindergartner | P1FIRKDG | P1 FIRST-TIME KINDERGARTNER | YES | YES |

Table 8-8. Fall-kindergarten predefined taglist - child catalog (continued)

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|-----------------------------|------------------|---|----------------------|-------------------|
| | | Round Specific Assessment Scores | | |
| Reading T-scores | C1RTSCOR | C1 READING T-SCORE | NO | NO |
| Reading scale scores | C1RSCALE | C1 READING IRT SCALE SCORE | NO | NO |
| Reading | C1RPROB1 | C1 PROB1 - LETTER RECOGNITION | NO | NO |
| proficiency | C1RPROB2 | C1 PROB2 - BEGINNING SOUNDS | NO | NO |
| probability scores | | C1 PROB3 - ENDING SOUNDS | NO | NO |
| (5) | C1RPROB4 | C1 PROB4 - SIGHT WORDS | NO | NO |
| | C1RPROB5 | C1 PROB5 - WORD IN CONTEXT | NO | NO |
| Reading | C1RPROF1 | C1 PROF1 - LETTER RECOGNITION | NO | NO |
| proficiency | C1RPROF2 | C1 PROF2 - BEGINNING SOUNDS | NO | NO |
| scores (5) | C1RPROF3 | C1 PROF3 - ENDING SOUNDS | NO | NO |
| | C1RPROF4 | C1 PROF4 - SIGHT WORDS | NO | NO |
| | C1RPROF5 | C1 PROF5 - WORD IN CONTEXT | NO | NO |
| Print familiarity score | C1RPRINT | C1 PRINT FAMILIARITY | NO | NO |
| Math T-scores | C1MTSCOR | C1 MATH T-SCORE | NO | NO |
| Math scale scores | C1MSCALE | C1 MATH IRT SCALE SCORE | NO | NO |
| Math proficiency | C1MPROB1 | C1 PROB1 - COUNT, NUMBER, SHAPE | NO | NO |
| probability scores | | C1 PROB2 – RELATIVE SIZE | NO | NO |
| (5) | C1MPROB3 | C1 PROB3 – ORDINALITY, SEQUENCE | NO | NO |
| | C1MPROB4 | C1 PROB4 - ADD/SUBTRACT | NO | NO |
| | C1MPROB5 | C1 PROB5 – MULTIPLY/DIVIDE | NO | NO |
| Math proficiency | C1MPROF1 | C1 PROF1 - COUNT, NUMBER, SHAPE | NO | NO |
| scores (5) | C1MPROF2 | C1 PROF2 – RELATIVE SIZE | NO | NO |
| . , | C1MPROF3 | C1 PROF3 – ORDINALITY, SEQUENCE | NO | NO |
| | C1MPROF4 | C1 PROF4 - ADD/SUBTRACT | NO | NO |
| | C1MPROF5 | C1 PROF5 – MULTIPLY/DIVIDE | NO | NO |
| Math assessment in Spanish | C1SPASMT | C1 CHILD ASSESSMENT IN SPANISH | NO | NO |
| GK T-scores | C1GTSCOR | C1 GENERAL KNOWLEDGE T-SCORE | NO | NO |
| GK scale scores | C1GSCALE | C1 GENERAL KNOWLEDGE IRT SCALE SCORE | NO | NO |
| Composite motor skill score | C1CMOTOR | | NO | NO |

Table 8-8. Fall-kindergarten predefined taglist - child catalog (continued)

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|-----------------------|------------------|---|----------------------|----------------------|
| | | Weights | | |
| Fall child weight | C1CW0 | C1 CHILD WEIGHT FULL SAMPLE | NO | NO |
| Fall parent weight | C1PW0 | C1 PARENT WEIGHT FULL SAMPLE | NO | NO |
| Fall CPT weight | C1CPTW0 | C1 CHILD-PARENT-TEACHER WEIGHT FULL SAMPLE | NO | NO |

Table 8-9. Spring-kindergarten predefined taglist – child catalog

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|---------------------------------|------------------|--|----------------------|----------------------|
| | | Basic Demographic Variables | | |
| Child ID | CHILDID | CHILD IDENTIFICATION NUMBER | YES | NO |
| Child Sex | GENDER | COMPOSITE CHILD GENDER | YES | NO |
| Child Age in the fall of 1998 | R1_KAGE | R1 COMPOSITE CHILD ASSESSMENT AGE(MONTHS) | YES | NO |
| Child Race- Ethnicity | RACE | COMPOSITE CHILD RACE | YES | NO |
| Household SES | WKSESQ5 | WK CATEGORICAL SES MEASURE | YES | NO |
| Fall-Kindergarter Type | n F1CLASS | F1 CHILD PROGRAM TYPE FROM FMS(AM/PM/AD) | YES | NO |
| Spring- Kindergarten Type | F2CLASS | F2 CHILD PROGRAM TYPE FROM FMS(AM/PM/AD) | YES | NO |
| School Type | S2KPUPRI | S2 PUBLIC OR PRIVATE SCHOOL | YES | YES |
| First-time Kindergartner | P1FIRKDG | P1 FIRST-TIME KINDERGARTNER | YES | YES |

Table 8-9. Spring-kindergarten predefined taglist – child catalog (continued)

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|---------------------------------|------------------|---|----------------------|----------------------|
| | | Round Specific Assessment Scores | | |
| Reading T-scores | C2RTSCOR | C2 READING T-SCORE | NO | NO |
| Reading scale scores | C2RSCALE | C2 READING IRT SCALE SCORE | NO | NO |
| Reading | C2RPROB1 | C2 PROB1 - LETTER RECOGNITION | NO | NO |
| proficiency prob- | | C2 PROB2 – BEGINNING SOUNDS | NO | NO |
| ability scores (5) | | C2 PROB3 – ENDING SOUNDS | NO | NO |
| | C2RPROB4 | C2 PROB4 - SIGHT WORDS | NO | NO |
| | C2RPROB5 | C2 PROB5 - WORD IN CONTEXT | NO | NO |
| Reading | C2RPROF1 | C2 PROF1 - LETTER RECOGNITION | NO | NO |
| proficiency | C2RPROF2 | C2 PROF2 – BEGINNING SOUNDS | NO | NO |
| scores (5) | C2RPROF3 | C2 PROF3 - ENDING SOUNDS | NO | NO |
| . , | C2RPROF4 | C2 PROF4 - SIGHT WORDS | NO | NO |
| | C2RPROF5 | C2 PROF5 - WORD IN CONTEXT | NO | NO |
| Print familiarity score | C2RPRINT | C2 PRINT FAMILIARITY | NO | NO |
| Math T-scores | C2MTSCOR | C2 MATH T-SCORE | NO | NO |
| Math scale scores | C2MSCALE | C2 MATH IRT SCALE SCORE | NO | NO |
| Math proficiency | C2MPROB1 | C2 PROB1 - COUNT, NUMBER, SHAPE | NO | NO |
| probability scores | | C2 PROB2 – RELATIVE SIZE | NO | NO |
| (5) | C2MPROB3 | C2 PROB3 – ORDINALITY, SEQUENCE | NO | NO |
| ` ' | C2MPROB4 | C2 PROB4 - ADD/SUBTRACT | NO | NO |
| | C2MPROB5 | C2 PROB5 – MULTIPLY/DIVIDE | NO | NO |
| Math proficiency | C2MPROF1 | C2 PROF1 - COUNT, NUMBER, SHAPE | NO | NO |
| scores (5) | C2MPROF2 | C2 PROF2 – RELATIVE SIZE | NO | NO |
| 300105 (5) | C2MPROF3 | C2 PROF3 – ORDINALITY, SEQUENCE | NO | NO |
| | C2MPROF4 | C2 PROF4 - ADD/SUBTRACT | NO | NO |
| | C2MPROF5 | C2 PROF5 - MULTIPLY/DIVIDE | NO | NO |
| Math assess- ment in Spanish | C2SPASMT | C2 CHILD ASSESSMENT IN SPANISH | NO | NO |
| GK T-scores | C2GTSCOR | C2 GENERAL KNOWLEDGE T-SCORE | NO | NO |
| GK scale scores | C2GSCALE | C2 GENERAL KNOWLEDGE IRT SCALE SCORE | NO | NO |

Table 8-9. Spring-kindergarten predefined taglist – child catalog (continued)

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|----------------------|------------------|--|----------------------|----------------------|
| | | Weights | | |
| Spring child weight | C2CW0 | C2 CHILD WEIGHT FULL SAMPLE | NO | NO |
| Spring parent weight | C2PW0 | C2 PARENT WEIGHT FULL SAMPLE | NO | NO |
| Spring CPT weight | C2CPTW0 | C2 CHILD-PARENT-TEACHER WEIGHT FULL SAMPLE | NO | NO |

Table 8-10. Kindergarten base year predefined taglist – child catalog

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|--------------------------------|------------------|--|----------------------|----------------------|
| | | Basic Demographic Variables | | |
| Child ID | CHILDID | CHILD IDENTIFICATION NUMBER | YES | NO |
| Child Sex | GENDER | COMPOSITE CHILD GENDER | YES | NO |
| Child Age in the fall of 1998 | R1_KAGE | R1 COMPOSITE CHILD ASSESSMENT AGE(MONTHS) | YES | NO |
| Child Race- Ethnicity | RACE | COMPOSITE CHILD RACE | YES | NO |
| Household SES | WKSESQ5 | WK CATEGORICAL SES MEASURE | YES | NO |
| Fall Kindergarter Type | F1CLASS | F1 CHILD PROGRAM TYPE FROM FMS(AM/PM/AD) | YES | NO |
| Spring Kindergarten Type | F2CLASS | F2 CHILD PROGRAM TYPE FROM FMS(AM/PM/AD) | YES | NO |
| School Type | S2KPUPRI | S2 PUBLIC OR PRIVATE SCHOOL | YES | YES |
| First-time Kindergartner | P1FIRKDG | P1 FIRST-TIME KINDERGARTNER | YES | YES |

Table 8-10. Kindergarten base year predefined taglist – child catalog (continued)

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|--------------------------|------------------|----------------------------------|----------------------|----------------------|
| | | Round Specific Assessment Scores | | |
| Fall & spring | C1RSCALE | C1 READING IRT SCALE SCORE | NO | NO |
| scale reading scores | C2RSCALE | C2 READING IRT SCALE SCORE | NO | NO |
| Fall & spring | C1RPROB1 | C1 PROB1 - LETTER RECOGNITION | NO | NO |
| reading | C1RPROB2 | C1 PROB2 – BEGINNING SOUNDS | NO | NO |
| proficiency prob- | C1RPROB3 | C1 PROB3 - ENDING SOUNDS | NO | NO |
| ability scores | C1RPROB4 | C1 PROB4 - SIGHT WORDS | NO | NO |
| (10) | C1RPROB5 | C1 PROB5 - WORD IN CONTEXT | NO | NO |
| | C2RPROB1 | C2 PROB1 - LETTER RECOGNITION | NO | NO |
| | C2RPROB2 | C2 PROB2 - BEGINNING SOUNDS | NO | NO |
| | C2RPROB3 | C2 PROB3 - ENDING SOUNDS | NO | NO |
| | C2RPROB4 | C2 PROB4 - SIGHT WORDS | NO | NO |
| | C2RPROB5 | C2 PROB5 - WORD IN CONTEXT | NO | NO |
| Fall & spring | C1RPRINT | C1 PRINT FAMILIARITY | NO | NO |
| print familiarity scores | C2RPRINT | C2 PRINT FAMILIARITY | NO | NO |
| Fall & spring | C1RPROF1 | C1 PROF1 - LETTER RECOGNITION | NO | NO |
| reading | C1RPROF2 | C1 PROF2 - BEGINNING SOUNDS | NO | NO |
| proficiency | C1RPROF3 | C1 PROF3 - ENDING SOUNDS | NO | NO |
| scores (10) | C1RPROF4 | C1 PROF4 - SIGHT WORDS | NO | NO |
| | C1RPROF5 | C1 PROF5 - WORD IN CONTEXT | NO | NO |
| | C2RPROF1 | C2 PROF1 - LETTER RECOGNITION | NO | NO |
| | C2RPROF2 | C2 PROF2 - BEGINNING SOUNDS | NO | NO |
| | C2RPROF3 | C2 PROF3 - ENDING SOUNDS | NO | NO |
| | C2RPROF4 | C2 PROF4 - SIGHT WORDS | NO | NO |
| | C2RPROF5 | C2 PROF5 - WORD IN CONTEXT | NO | NO |
| Fall & spring | C1MSCALE | C1 MATH IRT SCALE SCORE | NO | NO |
| math scale scores | C2MSCALE | C2 MATH IRT SCALE SCORE | NO | NO |
| Fall & spring | C1MPROB1 | C1 PROB1 - COUNT, NUMBER, SHAPE | NO | NO |
| math proficiency | | C1 PROB2 - RELATIVE SIZE | NO | NO |
| probability scores | | C1 PROB3 - ORDINALITY, SEQUENCE | NO | NO |
| (10) | C1MPROB4 | C1 PROB4 - ADD/SUBTRACT | NO | NO |
| | C1MPROB5 | C1 PROB5 - MULTIPLY/DIVIDE | NO | NO |
| | C2MPROB1 | C2 PROB1 - COUNT, NUMBER, SHAPE | NO | NO |
| | C2MPROB2 | C2 PROB2 - RELATIVE SIZE | NO | NO |
| | C2MPROB3 | C2 PROB3 - ORDINALITY, SEQUENCE | NO | NO |
| | C2MPROB4 | C2 PROB4 - ADD/SUBTRACT | NO | NO |
| | C2MPROB5 | C2 PROB5 - MULTIPLY/DIVIDE | NO | NO |

Table 8-10. Kindergarten base year predefined taglist – child catalog (continued)

| Category | Variable Name | Variable Label | Required Variable | Limiting Variable |
|-------------------------------|------------------|--|----------------------|----------------------|
| Fall & spring | C1MPROF1 | C1 PROF1 - COUNT, NUMBER, SHAPE | NO | NO |
| math proficiency | C1MPROF2 | C1 PROF2 - RELATIVE SIZE | NO | NO |
| scores (10) | C1MPROF3 | C1 PROF3 - ORDINALITY, SEQUENCE | NO | NO |
| | C1MPROF4 | C1 PROF4 - ADD/SUBTRACT | NO | NO |
| | C1MPROF5 | C1 PROF5 - MULTIPLY/DIVIDE | NO | NO |
| | C2MPROF1 | C2 PROF1 - COUNT, NUMBER, SHAPE | NO | NO |
| | C2MPROF2 | C2 PROF2 - RELATIVE SIZE | NO | NO |
| | C2MPROF3 | C2 PROF3 - ORDINALITY, SEQUENCE | NO | NO |
| | C2MPROF4 | C2 PROF4 - ADD/SUBTRACT | NO | NO |
| | C2MPROF5 | C2 PROF5 – MULTIPLY/DIVIDE | NO | NO |
| Fall & spring | C1SPASMT | C1 CHILD ASSESSMENT IN SPANISH | NO | NO |
| math assessment in Spanish | C2SPASMT | C2 CHILD ASSESSMENT IN SPANISH | NO | NO |
| Fall & spring GK scale scores | C1GSCALE | C1 GENERAL KNOWLEDGE IRT SCALE SCORE | NO | NO |
| | C2GSCALE | C2 GENERAL KNOWLEDGE IRT SCALE SCORE | NO | NO |
| | | Weights | | |
| Base year panel weights | BYCW0 | C1C2 CHILD PANEL WEIGHT FULL SAMPLE | NO | NO |
| Base year panel weights | BYPW0 | C1C2 PARENT PANEL WEIGHT FULL SAMPLE | NO | NO |
| Base year panel weights | BYCPTW0 | C1C2 CHLD-PAR-TCHER PANEL WT FULL SAMPLE | NO | NO |
| Base year panel weights | BYCOMW0 | C1C2+P1/P2+T1/T2 PANEL WT FULL SAMPLE | NO | NO |

8.6.3 Child Catalog Limiting Fields

The limiting fields for the child catalog include (a) first-time kindergartner or not and (b) school type (public vs. private) and are shown in figure 8-49. These limiting fields are specific to the child catalog and allow codes within each variable to be included or excluded from the extraction depending on the selection indicator. For example, the user can select "No" for private schools if he or she would like to create a data file that only includes public school kindergartners. The selection indicator will be either a "Yes" or "No" to specify whether the variable code should be included or excluded, respectively.

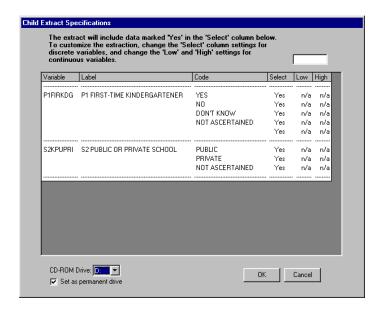


Figure 8-49. Child catalog limiting fields

The limiting fields feature for each catalog allows the user to create a subset of cases based on either "discrete" or "continuous" variables. The discrete variables have nonnumeric codes that have a default setting of "Yes" in the select column meaning that all records will be present in the extract file. To exclude all records with a particular variable, change the "Yes" to "No" by double-clicking on it. At least one of the codes for each limiting variable must be selected as "Yes" or no records will be extracted for analysis. For example, an extract using the specifications above will include kindergarten children in all schools (public, private, and not ascertained). To restrict the extract to records for kindergarten children in private schools, double-click the "Yes" next to "Public" to change it to "No," and double-click the "Yes" next to "No thange it to "No."

The continuous variables are those that contain selectable numeric ranges for upper and lower limits (high and low columns). The upper and lower limits can be modified using the field located in the upper right corner of the screen. The child catalog does not contain any continuous limiting fields; therefore, the box in the upper right-hand corner of the screen is blank.

8.7 The Teacher Catalog

The teacher catalog contains information from teachers selected to participate in the ECLS-K survey and includes data collected at the teacher level from the teachers. Table 8-11 presents the pretagged required variables that will be automatically extracted for all user-created files. The user cannot remove the required variables from the taglist. All user-defined taglists will include the required variables. The last two variables on the list, S2 Public or Private School and Kindergarten Teacher Class Composite, are limiting fields. For more information on limiting fields see section 8.7.3.

Table 8-11. Teacher catalog required variables

| Field Name | Field Label |
|------------|---|
| T_ID | Teacher Identification Number |
| B1TW0 | B1 Teacher Weight Full Sample |
| B2TW0 | B2 Teacher Weight Full Sample |
| S2KSCTYP | S2 School Type from the SCH ADMIN QUEST |
| S2KPUPRI | S2 Public or Private School |
| S2KENRLS | S2 Total School Enrollment |
| KGCLASS | Kindergarten Teacher Class Composite |

The teacher catalog is organized into blocks of data corresponding to specific content areas. The content areas are:

- **Identifiers** are the school and teacher identification numbers.
- School demographic data are from the sampling frame, e.g., Census region.
- Weights are described in detail in chapter 4. Round 1 weights are for fall-kindergarten, and round 2 weights are for spring-kindergarten.
- Flags indicate unit response for the data source, e.g., teacher questionnaire A or teacher questionnaire B.

- **Composite variables** were created to facilitate data analysis. See chapter 7, section 7.4 for a detailed description of the composite variables.
- **Teacher questionnaire data** are the data items from the teacher questionnaires.
- Taylor Series Sampling Strata and PSUs are the stratum and first-stage unit identifiers that are required for estimating standard errors with the Taylor Series linearization method using software such as SUDAAN or STATA.
- Weight replicates are used to estimate standard errors using the paired jackknife replication method (JK2) with WesVar. Each replicate is a subsample of the full sample. The variability of the replicate estimates about the full sample estimate is used to estimate the variance of the full sample estimate.
- New variables for public-use file are variables created for respondent confidentiality.

Table 8-12 presents the order of the data blocks on the teacher data file.

8.7.1 Teacher Catalog Topical Variable Groupings

The variables within the teacher catalog are organized into topical categories to help locate and identify desired variables. These categories are identified in table 8-13. The first column of the table describes the topic, the second column lists the variable identifiers that indicate the source of the data, e.g., teacher questionnaire A or B, as well as when the data was collected, i.e., fall- or spring-kindergarten. The third column is a description of the topic. The last column is the "Field ID," which is how you search the data for the topics. The field ID can be used by the "Go" function in the Variable List.

However, table 8-13 is only for the convenience of searching for variables and includes only variables that belong to certain topics. It does not reflect the contents of the entire teacher catalog.

Table 8-12. Teacher catalog blocks

| Order | Block | | | |
|-------|---|--|--|--|
| 1 | Identifiers | | | |
| 2 | School demographic data | | | |
| | Weights | | | |
| 3 | Round 1 teacher weight full sample | | | |
| 4 | Round 2 teacher weight full sample | | | |
| | Flags | | | |
| 5 | Round 1 teacher questionnaire A data status flags | | | |
| 6 | Round 1 teacher questionnaire B data status flags | | | |
| 7 | Round 2 teacher questionnaire A data status flags | | | |
| 8 | Round 2 teacher questionnaire B data status flags | | | |
| | Composite Variables | | | |
| 9 | School administrator questionnaire composites | | | |
| 10 | Cross-round teacher questionnaire A composites | | | |
| 11 | Round 1 teacher questionnaire A composites | | | |
| 12 | Round 1 teacher questionnaire B composites | | | |
| | Teacher Questionnaire Data | | | |
| 13 | Round 1 teacher questionnaire A data | | | |
| 14 | Round 1 teacher questionnaire B data* | | | |
| 15 | Round 2 teacher questionnaire A data | | | |
| | Taylor Series Sampling Strata, PSU, and Replicate Weights | | | |
| 16 | Round 1 teacher Taylor series sampling strata and PSU | | | |
| 17 | Round 1 teacher replicate weights | | | |
| 18 | Round 2 teacher Taylor series, sampling strata and PSU | | | |
| 19 | Round 2 Teacher replicate weights | | | |
| 20 | New variables for public-use file | | | |

^{*} Background information from teachers was collected in teacher questionnaire B for all teachers. New kindergarten teachers in spring-kindergarten completed this questionnaire. Block 14 contains all the teacher questionnaire B data for both rounds of data collection. The spring-kindergarten teacher questionnaire B variables were merged into the fall-kindergarten teacher questionnaire B variables for the teacher catalog. Flags are set to indicate whether teacher questionnaire B was completed in fall-kindergarten or spring-kindergarten. See chapter 7, table 7.4 for description of flags.

Table 8-13. Teacher catalog topical variable groupings

| Topic | Variable Identifier | Description | Field ID |
|---|---|--|-------------------|
| School Variables | S2KSCTYP - S2KMINOR (Variable Name) | School type, enrollment, instructional level, percent minority in school | 18-22 |
| Teacher Composites | KGCLASS – B1AGE (Variable Name) | Class composite, percent of minority, black, and Hispanic students in class, teacher's age | 23-33 |
| Classroom Characteristics | A1 Q1 – A1 Q19 | Fall: Type of kindergarten program, age and race-ethnic composition, gender composition, number of students repeating kindergarten, exhibiting initial reading skills, attending preschool, classroom behavior, percent LEP, languages in classroom, | 34-231 886-888 |
| | A2 Q1 – A2 Q7 | Spring: G&T, attendance, special needs children, classroom behavior, languages used in instruction | 344-457 |
| Class Organization and Resources | B1 Q1 – B1 Q6 | Fall: Instructional and evaluation approaches, centers/learning areas, preparation time | 235-262 |
| | A2 Q8 – A2 Q27 | Spring: Instructional approach, time spent in curriculum instruction, lunch, recess, achievement grouping, remedial assistance, teacher's aides, physical resources (e.g., texts, equipment, materials for art and music) | 458-552 |
| Instructional Activities and Curricular Focus | A2 Q28 – A2 Q34 | Spring: Frequency of time spent on specific aspects of reading and language arts, math, computers, science and social studies | 553-672 |
| Parent Involvement | A2 Q35 – A2 Q38 | Spring: Conferences, volunteering, attendance at school events, teachers sending home information | 673-682 |
| School and Staff Activities | A2 Q39 – A2 Q41 | Spring: Meetings with staff, in-service sessions, training, working with disabled students | 683-698 |
| Teacher Views | B1 Q7 – B1 Q14 | Fall: Views on readiness, school climate and environment, transitional activities, job satisfaction, | 263-308 |
| Teacher Demographics | B1 Q15 – B1 Q24 | Fall: Gender, birth year, race-ethnicity, experience, education, certification | 309-340 |

8.7.2 Teacher Catalog Predefined Taglists

There is one predefined taglist for the teacher catalog that can be used for extracting data. This predefined taglist is named Key Variables and contains only the required variables listed in table 8-11.

8.7.3 Teacher Catalog Limiting Fields

The limiting fields for the teacher catalog include (a) school type (public vs. private) and (b) a kindergarten teacher class composite (e.g., AM only, AM and PM) and are shown in figure 8-50. These limiting fields are specific to the teacher catalog and allow codes within each variable to be included or excluded from the extraction depending on the selection indicator. For example, the user can select "No" for private schools if he or she would like to create a data file that only includes public school kindergarten teachers. The selection indicator will be either a "Yes" or "No" to specify whether the variable code should be included or excluded, respectively.

eacher Extract Specifications The extract will include data marked 'Yes' in the 'Select' column below. To customize the extraction, change the 'Select' column settings for discrete variables, and change the 'Low' and 'High' settings for continuous variables. Variable Label Code Select Low High S2KPUPRI S2 PUBLIC OR PRIVATE SCHOOL PUBLIC Yes n/a n/a PRIVATE Yes n/a n/a NOT ASCERTAINED Yes n/a n/a KGCLASS KINDERGARTEN TEACHER CLASS CO. AM ONLY Yes n/a n/a PM ONLY Yes n/a n/a AM AND PM Yes n/a ALL DAY ONLY Yes n/a n/a AM AND ALL DAY Yes n/a n/a PM AND ALL DAY n/a Yes n/a AM, PM, AND ALL DAY Yes n/a n/a NOT ASCERTAINED Yes n/a n/a CD-ROM Drive: D: ▼ Cancel OΚ Set as permanent drive

Figure 8-50. Teacher catalog limiting fields

The Limiting Fields feature for each catalog allows the user to create a subset of cases based on either "discrete" or "continuous" variables. The discrete variables have nonnumeric codes that have a default setting of "Yes" in the select column meaning that all records will be present in the extract file. At least one of the codes for each limiting variable must be selected as "Yes" or no records will be extracted for analysis. For example, an extract using the specifications above will include kindergarten teachers in all schools (public, private, and not ascertained). To restrict the extract to records for kindergarten teachers in private schools, double-click the "Yes" next to "Public" to change it to "No," and double-click the "Yes" next to "Not Ascertained" to change it to "No."

The continuous variables are those that contain selectable numeric ranges for upper and lower limits (high and low columns). The upper and lower limits can be modified using the field located in the upper right corner of the screen. The teacher catalog does not contain any continuous limiting fields; therefore the box in the upper right-hand corner of the screen is blank.

8.8 The School Catalog

The school catalog contains information from schools selected to participate in the ECLS-K survey and includes data collected at the school level from school administrators and ECLS-K field staff. Table 8-14 presents the pretagged required variables that will be automatically extracted for all user-created data files. The user cannot remove the required variables from the taglist. All user-defined taglists will include the required variables. The last variable, S2 Public or Private School, is the limiting field. The school catalog is organized into blocks of data corresponding to specific content areas. See section 8.8.3 for more information on limiting fields.

Table 8-14. School catalog required variables

| Field Name | Field Label |
|------------|---|
| S_ID | School Identification Number |
| CREGION | Census Region in Sample Frame |
| KURBAN | Location Type in Sample Frame |
| S2SAQW0 | S2 School Weight Full Sample |
| S2KSCTYP | S2 School Type from the Sch Admin Quest |
| S2KENRLK | S2 Total School K Enrollment |
| S2KENRLS | S2 Total School Enrollment |
| S2KPUPRI | S2 Public or Private School |

The school catalog is organized into blocks of data corresponding to specific content areas. The content areas are:

- **Identifier** is the school identification number.
- School demographic data are from the sampling frame, e.g., Census region.
- School weight full sample is described in detail in chapter 4.
- School administrator data status flag indicates unit response for school administrator questionnaire.
- Facility checklist data status flag indicates unit response facility checklist.
- **School administrator composites** were created to facilitate data analysis. See chapter 7, section 7.4 for a detailed description of the composite variables.
- School administrator data are the data items from the school administrator questionnaire.
- Facility checklist data are the data items from the facility checklist.
- School Taylor series sampling strata and PSUs are the stratum and first-stage unit identifiers that are required for estimating standard errors with the Taylor Series linearization method using software such as SUDAAN or STATA.
- School weight replicates are used to estimate standard errors using the paired jackknife replication method (JK2) with WesVar. Each replicate is a subsample of the full sample. The variability of the replicate estimates about the full sample estimate is used to estimate the variance of the full sample estimate. Table 8-15 presents the order of the data blocks on the school data file.
- New variables for public-use file are variables created for respondent confidentiality.

Table 8-15. School catalog blocks

| Order | Block |
|-------|---|
| 1 | Identifier |
| 2 | School demographic data |
| 3 | School weight full sample |
| 4 | School administrator questionnaire data status flag |
| 5 | Facility checklist data status flag |
| 6 | School administrator questionnaire composites |
| 7 | School administrator data |
| 8 | Facility checklist data |
| 9 | School Taylor series sampling strata and PSU |
| 10 | School replicate weights |
| 11 | New variables for public-use file |

8.8.1 School Catalog Topical Variable Groupings

The variables within the school catalog are organized into topical categories to help locate and identify desired variables. These categories are identified in table 8-16. The first column of the table describes the topic, the second column lists the variable identifiers that indicate the source of the data, e.g., the school administrator questionnaire or the facility checklist, as well as when the data was collected, i.e., spring-kindergarten. The third column is a description of the topic. The last column is the "Field ID," which is how you search the data for the topics. Field ID can be used by the "Go" function in the Variable List.

However, table 8-16 is only for the convenience of searching for variables and includes only variables that belong to certain topics. It does not reflect the contents of the entire school catalog.

Table 8-16. School catalog topical variable groupings

| Topic | Variable Identifier | Description | Field ID |
|---|-------------------------|--|----------------|
| School Composites | S2KSCTYP to S2KPUPRI | School type, enrollment, percent minority, free/reduced lunch eligible, school instructional level, school year length, percent gifted and talented | 8-17 |
| School Characteristics | S2 Q1-S2 Q22 | Attendance, enrollment, grade levels, school type, special programs, student composition, admission requirements, federal programs, kindergarten programs, cutoff dates for kindergarten entry | 18-137 |
| School Facilities and Resources | S2 Q23 – S2 Q28 | Funding sources, facilities (e.g., cafeteria, music room, auditorium), computers | 137-172 |
| | K2 Q1 | Availability and condition of various facilities (e.g., lighting, ventilation, noise, handicap accessible) | 481-581 |
| Community Characteristics and School Safety | S2 Q29 – S2 Q33 | Busing, students attending within/outside neighborhood, community type, community safety, school safety | 173-194 |
| | K2 Q2 – K2 Q4 | Physical security in school building, neighborhood conditions, adequacy of safety measures | 582-599 |
| School Policies and Practices | S2 Q34 – S2Q40 | Uniform code, placement testing and assessments, retention practices | 195–232 |
| School-Family- Community Connections | S2 Q41 – S2Q47 | Programs and services for families, school's communication with parents, parent involvement in schools, school- based management | 233–286 |
| School Programs for Special Populations | S2Q48 – S2Q57 | Limited English Proficient, bilingual programs, special education, gifted and talented | 287–319 |
| Staffing and Teacher Characteristics | S2Q58 – S2Q63 | School staff list, salary information, staff's racial-ethnic distribution | 320–351 |
| School Governance and Climate | S2Q64 – S2Q69 | Teacher observations, professional development, goals for kindergarten teachers, process for decisionmaking, school climate, principal evaluation factors | 352–437 |
| Principal Characteristics | S2 Q70 – S2 Q79 | Administrator's gender, race-ethnicity, birth year, experience, education, time spent in activities, familiarity with students | 438–477 703 |
| School Atmosphere | K2 Q5 – K2 Q6 | Observations of children's expressions, learning environment | 600-610 |

8.8.2 School Catalog Predefined Taglists

There is one predefined taglist for the school catalog that can be used for extracting data. This predefined taglist is named Key Variables and contains only the required variables listed in table 8-14.

8.8.3 School Catalog Limiting Fields

The Limiting Field for the School catalog is the variable "school type" (public vs. private), which is shown in figure 8-51. This limiting field is specific to the school catalog and allows codes within it to be included or excluded from the extraction depending on the selection indicator. For example, the user can select "No" for private schools if he or she would like to create a data file that only includes public schools. The selection indicator will be either a "Yes" or "No" to specify whether the cases that match the variable code should be included or excluded, respectively.

chool Extract Specifications The extract will include data marked 'Yes' in the 'Select' column below. To customize the extraction, change the 'Select' column settings for discrete variables, and change the 'Low' and 'High' settings for continuous variables. Variable Code Low High PUBLIC S2KPUPRI – S2 PUBLIC OR PRIVATE SCHOOL Yes PRIVATE Yes n/a n/a NOT ASCERTAINED Yes n/a n/a CD-ROM Drive: D: OΚ Cancel Set as permanent drive

Figure 8-51. School catalog limiting fields

The Limiting Fields feature for each catalog allows the user to create a subset of cases based on either "discrete" or "continuous" variables. The discrete variables have nonnumeric codes that have a default setting of "Yes" in the select column meaning that all records will be present in the extract file. At least one of the codes for each limiting variable must be selected as "Yes" or no records will be extracted for analysis. For example, an extract using the specifications above will include all schools (public, private, and not ascertained). To restrict the extract to private school records, double-click the "Yes" next to "Public" to change it to "No," and double-click the "Yes" next to "Not Ascertained" to change it to "No."

The continuous variables are those that contain selectable numeric ranges for upper and lower limits (high and low columns). The upper and lower limits can be modified using the field located in the upper right-hand corner of the screen. The school catalog does not contain any continuous limiting fields; therefore, the box in the upper right-hand corner of the screen is blank.

8.9 Switching Catalogs

The ECLS-K Base Year Public-Use ECB provides the capability of closing one catalog and opening another catalog without exiting the ECB program.

How to Change Displayed Catalogs in the ECB:

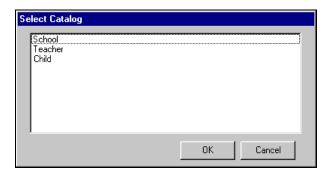
- 1. In the main ECB screen, click on the File pulldown menu and select the Open Catalog option.
- 2. If you have unsaved changes made to the Working Taglist, you will be prompted to save the changes (figure 8-52).

Figure 8-52. Save changes



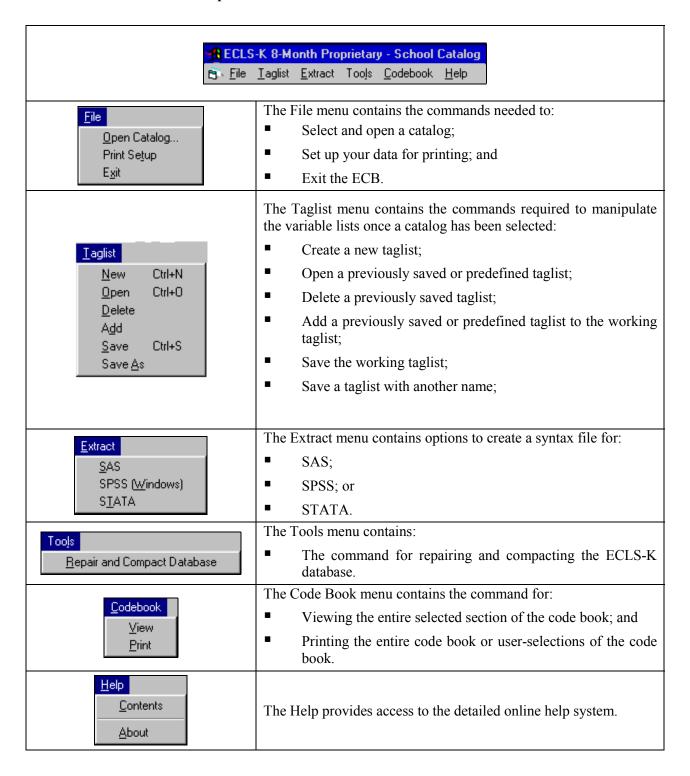
- 3. You can then either choose "Yes" to proceed to save the taglist or "No" to abandon the changes.
- 4. The Select Catalog screen, shown in figure 8-53, appears.

Figure 8-53. Select Catalog screen



5. Highlight the catalog that you wish to open and click on the OK button. Note that the existing catalog will be closed automatically when you open another catalog.

8.10 Menu Bar Descriptions



In addition to the menu items found on the menu bar, the ECB screen contains various command buttons and labels. The command buttons, when pressed, cause an event to occur, such as moving a variable from the Variable List to the Working Taglist. They are explained in details in section 8.3, The Variable List, and section 8.4, Working Taglist.