

# USER'S MANUAL FOR THE ECLS-K THIRD GRADE PUBLIC-USE DATA FILE AND ELECTRONIC CODE BOOK <br> NCES 2004-001 

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## 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) data collection in the springthird grade: computer-assisted and self-administered paper forms (hard copy). The data preparation approach differed with the mode of data collection. The direct child assessments and parent interview were conducted using computer-assisted interviewing (CAI) techniques. Editing specifications were built into the computer programs used by assessors to collect these 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 (upcoding) any "Other, specify" responses that actually fit within the available response categories of the question. There were some items for which 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. The following sections describe the data preparation activities for both modes of data collection in more detail.

### 6.1 Coding and Editing Specifications for Computer-Assisted Interviews (CAI)

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 CAI. Though the child assessments and the parent interviews were both collected using CAI, the child assessments did not contain some of the additional range and edit checks contained in the parent interview. The following sections describe the coding and editing that were conducted on the CAI parent interview.

### 6.1.1 Range Specifications

Within the CAI parent interview instruments, respondent answers were subjected to both "hard" and "soft" range edits during the interviewing process. (The child assessment did not have such hard and soft ranges.) A "soft range" is one that represents the reasonable expected range of values but does not include all possible values. Responses outside the soft range were confirmed with the respondent and entered a second time. For example, the number of hours each week a child attended 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, "0-5 times" for the number of times the child, in the previous 5 days, ate a breakfast that was not school provided. 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 and entered into the data file 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 interviewer 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. Consistency checks were not applicable to the child assessments.

### 6.1.3 Coding

Additional coding was required for some of the items collected in the CAI instruments. These items included "Other, specify" text responses, occupation, and race/ethnicity. Interviewers keyed
verbatim responses to these items. Once the data were keyed, staff were trained to code these data using coding manuals designed by Westat and the National Center for Education Statistics (NCES) to support the coding process. In this section, we describe the coding activities for the CAI instruments.

### 6.1.3.1 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 response categories. During data collection, when a respondent selected an "other" response in the parent interview, the interviewer entered the text into a "specify" overlay that appeared on the screen. The data preparation staff reviewed these text "specify" responses and, where appropriate, coded them into one of the existing response categories. There were no "Other, specify" items in the child assessments.

### 6.1.3.2 Parent Occupation Coding

As in the base year and first grade data collections, occupations were coded using the Manual for Coding Industries and Occupations (U.S. Department of Education, 1999). This coding manual was created for the Adult Education Survey of the National Household Education Surveys Program (AE-NHES: 1999) and used an aggregated version of industry and occupation codes. The industry and occupation codes used by NHES were originally developed for the 1989-90 National Postsecondary Student Aid Study (NPSAS: 90) 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 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 two-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 (U.S. Department of Commerce, 1982) and Standard Occupational Classification Manual-1980 (U.S. Department of Commerce, 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. These manuals were used for reference in cases where the NHES coding scheme did not
adequately cover a particular situation. (See chapter 7, section 7.4.7 for an expanded description of the industry and occupation codes.)

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. A little over half the cases were autocoded ( 50.4 percent).

Cases that could not be coded using the autocoding system were coded manually 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. Almost half the cases ( 49.6 percent) were manually coded.

All of the cases were then verified. Verification of coding is an important tool for ensuring quality control and extending 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 initial code and the verification code. In the early stages, 100 percent of each coder's work was reviewed. Once the coder's error rate had dropped to 1 percent or less, 10 percent of the coder's work was reviewed. Almost 20 percent (19.9 percent) of the cases that were autocoded required adjudication because the verifier disagreed with the autocoding. About the same percent (21.2 percent) of the cases that were manually coded required adjudication because the manual coder and the verifier disagreed.

### 6.1.3.3 Race/Ethnicity Coding

The same coding rules used in the base year were used to code all race/ethnicity variables for children, resident parents, and nonresident parents. See chapter 7, section 7.4 for details on how the race variables were coded and how the race/ethnicity composite was created.

### 6.1.3.4 Partially Complete Parent Interviews

A "completed" parent instrument was defined by whether the section on family structure (FSQ) was completed by the respondent. Only completed interviews were retained in the final data file. A small number of interviews in each wave, approximately 103 (less than 1 percent) in third grade terminated the parent interview after the FSQ section but before the end of the instrument. These interviews were considered 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."

### 6.1.3.5 Household Roster in the Parent Interview

Several tests were run on the household roster to look for missing or inaccurate information. These tests are the same tests run on the first grade files. One flag was used to identify cases that were edited for any of the reasons described below. The flag is P5EDIT; the flag was set to 1 if the case was edited in the given wave. There were 644 cases requiring edits in wave 5 .

There were essentially three general types of roster tests performed to determine which cases required editing. First, the relationship of an individual to the focal child was compared to the individual's listed age and sex. Problems found were corrected on the basis of data from prior data collections wherever possible. 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. Corrections were made whenever clear errors and a clear resolution existed. Lastly, the relationship of an individual to both the focal child and the reference person was examined, as there were cases in which the relationship of an individual to the focal child conflicted 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, the grandmother may be designated the "mother" figure, and the grandfather thus becomes the "father" (for the purposes of some questions in the interview) 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. In the third grade data, there are 164 cases with these types of errors after the roster tests were run; the cases can be identified by the flag "P5ERRFLG."

### 6.2 Coding and Editing Specifications for Hard-Copy Questionnaires

### 6.2.1 Receipt Control

In order to monitor the more than 50,000 documents that were to be received in the third grade year, the project-specific receipt and document control system developed in the base year was used, with some modifications. 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 supervisors completed transmittal forms for each school to indicate which questionnaires were being mailed to the home office.

Once data collection started, receipt control clerks reviewed 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.

When the clerks verified that the correct questionnaires were returned, the questionnaires were scanned for missing critical items. Critical items were identified for each hard-copy questionnaire, except for the facilities checklist. Questionnaires with incomplete or missing data for critical items were not considered complete, and were processed for return to the field. Clerks completed scan edit sheets listing the missing critical items. The questionnaires were receipted in the system as "needs data retrieval" and were forwarded to the data preparation department for coding, data entry, and editing. Using the scan edit sheets, clerks identified the missing or incomplete items on data retrieval forms that were then sent to the appropriate field supervisor. The supervisor was instructed to contact the school to try to obtain the missing information.

Questionnaires that were scanned and deemed complete were logged into the receipt and document control system as "complete, no data retrieval." 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 then keypunched 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 ensure that the questionnaire values were accurate, complete, and 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 1 percent error rate was established. After that point, work was reviewed at a rate of 10 percent.

### 6.2.2.1 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. The small number of specify responses that remained after upcoding did not fit into any preexisting category.

### 6.2.2.2 Coding Teacher Race/Ethnicity

"Other, specify" text responses for race/ethnicity in the teacher questionnaire part B were coded using the base year and first grade procedures. 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 Alaska Native; Asian; Native Hawaiian or other Pacific Islander; and one unspecified multirace-ethnicity category.

### 6.2.2.3 Coding Teacher Language

"Other, specify" text responses for language in the teacher questionnaire part A were coded using the base year and first grade procedures. Languages beyond the options provided were recorded in "Other, specify." Groups of languages were created based on geographic boundaries. Additional languages included 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.

### 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, resulting in an accuracy rate exceeding 99 percent. 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.

### 6.2.4.1 Range Specifications

Hard-copy range specifications set the parameters for high and low acceptable values for a question. Where values were printed on the forms, these were used as the range parameters. For openended questions, such as, "Counting this school year, how many years have you taught in your current school including part-time teaching?," 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 were identified as errors and were printed on hard copy for a data editor to review. Cases identified with range
errors were identified, and the original response was updated. In some cases, range violations were retained in the data because the value was checked and found to be the value reported by the teacher or school. These were marked as "keep as is" cases. Data frequencies were then rerun and reviewed. This iterative process was repeated until no further range errors were found.

### 6.2.4.2 Consistency Checks (Logical Edits)

By programming logical edits between variables, consistency between variables not involved in a skip pattern was confirmed. For example, in the school administrator questionnaire, the number of children eligible for free breakfast could not exceed the total number of children enrolled in the school. 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 corrected (or checked and "kept as is" if the date had been reported, 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.

### 6.2.4.3 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 part A, an item asking about languages other than English spoken in the classroom included a response option of "No language other than English." If a respondent circled that response, but also answered (in subsequent items) that other languages besides English were spoken in the classroom, then the response was left as recorded by the respondent because the discrepancy could not be resolved.

## REFERENCES

U.S. Department of Commence, Bureau of the Census (1982). 1980 Census of Population-Index of Industries and Occupations, Final Edition. Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office.
U.S. Department of Commerce, Office of Federal Statistical Policy and Planning (1980). Standard Occupational Classification Manual. Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office.
U.S. Department of Education, National Center for Education Statistics (1999). Manual for Coding Industries and Occupations. Appendix to Data File User's Manual, Volume IV, of the National Household Education Survey of 1999 (NCES 2000-077). Washington, D.C.: U.S. Department of Education.

## 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) Third Grade Public-Use Data File and focuses largely on the composite variables that have been created. The third grade data file can be used for longitudinal analysis in combination with the files from the base year (kindergarten year) and first grade (see chapter 9 for details about longitudinal analyses). For reference, the Base Year and First Grade User's Manuals are included in appendix C of the third grade Electronic Code Book (ECB).

There is one child-level third grade data file or catalog, as noted in chapter 1. Each child record contains data from the various respondents associated with the child (the child herself/himself, a parent, one or more teachers, and a school administrator), as well as from the facilities checklist, school records, and the Field Management System (FMS).

The third grade child catalog contains one record for each of the 15,305 participating students in spring-third grade. Included in the file are cases with a child assessment, a parent interview, or both. Third grade school- and teacher-level data, including composites, are also stored in the child catalog. The file, named child3p.dat, is stored in the root directory of the CD-ROM as an ASCII file. However, it is strongly recommended that users access the data using the ECB software available on the CD-ROM rather than access the ASCII file directly. Appendix B on the CD-ROM contains the record layout for the child catalog.

This chapter is divided into eight sections. Sections 7.1 through 7.3 focus on the conventions used in the study and describe identification variables, missing values, and variable names. Section 7.4 provides details about the creation of composite variables on the third grade data file. Section 7.5 focuses on the methodological variables. Section 7.6 discusses variables used to identify children who changed schools. Section 7.7 contains a table of the composite variables. Finally, section 7.8 describes masked variables.

### 7.1 Identification Variables

The third grade data file contains a child identification (ID) variable (CHILDID) that uniquely identifies each record. Teachers on the child records are identified with the ID variable T5_ID; schools are identified by the ID variable S5_ID (spring-third grade). The ID variable S5_ID indicates the school the child attended at the end of the spring-third grade data collection. Other identification variables indicate whether the child moved within spring-third grade and the school or teacher from which his/her questionnaire data came. Section 7.6 provides further details on school identifiers.

Each type of respondent (child, parent, regular teacher, special education teacher, and school) has a unique ID number. The original school ID number (S_ID) is the base for all the subsequent ID numbers as children, parents, and teachers were sampled from schools during the base year. The school ID number is a four-digit number assigned sequentially to sampled schools. The number has a series of ranges: 0001-1299 for originally sampled schools; 2000 series for new schools added to the sample during the first grade sample freshening process; 3000 series for substitute schools that replaced nonresponding original sample schools; and 4000 through 6000 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.) There is also a 9000 series of S_ID numbers that refers to children who do not attend regular school because they are schooled at home (S_ID numbers 9101 through 9499). There are also several specific 9000 series codes for children who were not located or not followed at the end of a round. The school ID numbers start with 999 for these cases. These are described in section 7.6.

The child ID number (CHILDID) is a concatenation of the school ID where the child was sampled, a three-digit student number, and the letter "C." For example, 0001010C is the ID number of the tenth child sampled in school 0001. The teacher ID number (T5_ID) is a concatenation of the school ID where the teacher was sampled, the letter "T," and a two-digit teacher number. In previous rounds of the study, the numbering for the two-digit teacher number started with 01 , such that 0001 T 01 was the ID number for the first teacher sampled in school 0001. In spring-third grade, the two-digit teacher numbers started numbering with T 41 so that the teachers from this round of the study could be identified easily. Thus, in spring-third grade 0002T41 is the ID number for the first teacher sampled in school 0002. The parent ID number (PARENTID) is linked to the child ID number and is a concatenation of the four-digit school ID, the three-digit student number, and the letter "P." It is the same number as the child ID with a letter " P " instead of a letter " C " at the end. For example, 0001010P is the ID number of the parent of the tenth child sampled in school 0001. If twins are sampled, the ID of the first child sampled is used to
generate the parent ID. For twins, there are 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.

It should be noted that there is a difference in the variable names between the base year and both the first and third grade special education teacher IDs. In the base year of the study information from special education teachers was included in a separate file and was not part of the child or teacher catalogs. The ID number for special education teachers in the base year special education file was T_ID. In the third grade data file (and the first grade data file), the special education teacher information is included with the rest of the data; thus ID numbers were needed to distinguish special education teachers from regular education teachers. In the third grade file, T5_ID is used to identify regular education teachers and D5T_ID is used to identify special education teachers.

### 7.2 Missing Values

All variables in the ECLS-K data use a standard scheme for missing values. Codes are used to indicate item nonresponse, legitimate skips, and unit nonresponse (see exhibit 7-1).

Exhibit 7-1. Missing values codes, ECLS-K data: School years
1998-99, 1999-2000, and 2001-02

| Value | Description |
| :--- | :--- |
| -1 | Not Applicable, including legitimate skips |
| -7 | Refused (a type of item nonresponse) |
| -8 | Don't Know (a type of item nonresponse) |
| -9 | Not Ascertained (a type of item nonresponse) |
| (blank) | System Missing, including unit nonresponse |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 kindergarten, first, and third grade data collections, school years 1998-99, 1999-2000, and 2001-02.

The "Not Applicable" code ( -1 ) has two purposes. Its primary purpose is to indicate that a respondent did not answer the question due to skip instructions within the instrument or external reasons that led a respondent not to participate. In the parent interview, where the parent or guardian was a respondent, a "Not Applicable" is coded for questions that were not asked of the respondent because of a
previous answer given. For example, a question 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 a disability. For the teacher and school data where the instruments are self-administered, a "Not Applicable" is coded for questions that the respondent left blank because the written directions instructed him or her to skip the question due to a certain response on a previous question.

Another use of the "Not Applicable" code is the circumstance in which it is not known whether a respondent would have answered a question series following a lead question. One example of this use of "Not Applicable" is school administrator questionnaire Question 38. Question 38 asks whether there is a gifted and talented program at the school. If the answer is "yes," the questionnaire skips to question 39 about what grade levels are included in the program. If the answer is "no," the questionnaire skips to question 40. If question 38 was left blank by the respondent, question 39 is coded "Not Applicable."

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. The "Refused" code rarely appears in the school and teacher data 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 did 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 question). For questions 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 question.

The "Not Ascertained" code (-9) indicates that the respondent left a question 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 self-administered questionnaires (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 file. System missing codes (blanks) in the third grade data file indicate that an entire instrument or
assessment is missing due to unit nonresponse. (Note that in the first grade, "system missing" also indicated that some questions were not asked in the school administrator questionnaire for returning schools but were asked in another form of a questionnaire for new schools. This issue does not apply to the third grade file because only one form of the school administrator questionnaire was used.) An example of system missing is a child's parent not participating in the parent interview. In this case, all questions from the parent interview will be blank (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.

Depending on the research question being addressed, cases with missing values may need to be recoded. It is advised that users cross-tabulate all lead questions (e.g., whether the child received child care from a relative) and followup questions (e.g., hours of child care from a relative) before proceeding with any recodes or use of the data.

Missing values for composite variables were coded using the same general coding rules as those used for other variables. If a particular composite was inappropriate for a given household—as the variable P5MOMID was for a household with no resident mother-that variable was given a value of "-1" (Not Applicable). 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 (Not Ascertained). 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 spring-third grade. ${ }^{1}$

The ECLS-K Third Grade Public-Use Data File is provided on a CD-ROM and is 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 file for analysis. The child data file on the ECB is referred to as a "catalog." Instructions for using the CD-ROM and ECB are provided in chapter 8.

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### 7.3 Variable Naming Conventions

Variables were named according to the data source (e.g., parent interview, teacher questionnaire) and the data collection point. (A number is used to indicate in which round of data collection the variable was obtained, as follows: 5 for spring-third grade, 4 for spring-first grade, 3 for fall-first grade, 2 for spring-kindergarten, and 1 for fall-kindergarten. This numbering system is used for all variables except those beginning with "W." For those variables, 3 indicates third grade, 1 first grade, and K kindergarten.) These variable prefixes are used throughout the catalog, with a few exceptions, and are presented in two categories, (1) third grade variables and (2) cross-sectional and cross-round panel weights, in exhibit 7-2.

A few exceptions that do not follow the prefix convention are as follows: ${ }^{2}$

- The identifiers CHILDID, PARENTID, T5_ID, and S5_ID.
- The composite variable R5R4SCHG. This variable indicates change in school between spring-first grade and spring-third grade. Source variables and other details for this and all other composite variables can be found in table 7-12.


### 7.4 Composite Variables

To facilitate analysis of the survey data, composite variables were created and added to the child data file. Most composite variables were created using two or more variables, each of which is named in the text that explains the composite variable. Other composite variables are recodes of single variables. Variables based on the child assessment include height, weight, and BMI. Variables based on the teacher data include class size, percentage of limited-English-proficient children in the class, and student grade level. 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, child care, and child demographics. Certain composites were created using data from the Field Management System (FMS).

[^1]Exhibit 7-2. Prefixes for ECLS-K third grade variables and cross-sectional and cross-round panel weights: School year 2001-02

| Category | Description |
| :--- | :--- |
| Third grade |  |
| variables | Data collected/derived from spring-third grade teacher questionnaire A |
| A5 | Data collected/derived from spring-third grade teacher questionnaire B |
| B5 | Data/scores collected/derived from spring-third grade direct child assessment and spring-third |
| C5 | grade weight variables |
|  | Data collected from spring-third grade special education teacher questionnaire A |
| D5 | Data collected from spring-third grade special education teacher questionnaire B |
| E5 | Data from spring-third grade Field Management System (FMS) |
| F5 | Imputation flags |
| IF | Data collected/derived from spring-third grade school facilities checklist |
| K5 | Data collected/derived from spring-third grade school fact sheet |
| L5 | Data/scores collected/derived from spring-third grade parent interview |
| P5 | Derived child demographic or child status variables for spring-third grade |
| R5 | Data collected/derived from spring-third grade school administrator questionnaire |
| S5 | Data/scores collected/derived from spring-third grade teacher questionnaire C |
| T5 | Data collected/derived from spring-third grade student record abstract |
| U5 | Third grade (cross-round) parent composite variables |
| W3 |  |
| Cross-sectional |  |
| and cross-round |  |
| panel weights | Child-level panel weight variable from spring-third grade |
| C5C | Child-level panel weight for parent data from spring-third grade |
| C5P | Child-level panel weight for combined parent, child, and teacher data from spring-third grade |
| C5CPT | Child-level panel weight variable from spring-first grade and spring-third grade |
| C45C | Child-level panel weight variable from spring-kindergarten, spring-first grade, and spring-third |
| C245C | grade |
| C1_5FC | Child-level panel weight variable from fall-kindergarten, spring-kindergarten, spring-first |
| C1_5SC | grade, and spring-third grade |
| Child-level panel weight variable from fall-kindergarten, spring-kindergarten, fall-first grade, |  |
| C45P | spring-first grade, and spring-third grade |
| C245P | Child-level panel weights for parent data from spring-first grade and spring-third grade |
| C1_5FP | Child-level panel weights for parent data from spring-kindergarten, spring-first grade, and |
|  | spring-third grade |
| C1_5SP | sprild-level panel weight variable for parent data from fall-kindergarten, spring-kindergarten, |
|  | Child-level panel weight variable for parent data from fall-kindergarten, spring-kindergarten, |
|  | fall-first grade, spring-first grade, and spring-third grade |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school years 2001-02.

Table 7-12 lists all the composite variables for the third grade. All basic child demographic variables are presented first. Child care and household composition variables follow the basic child demographic variables. Imputed variables are listed next, followed by demographics for parents (resident father and mother characteristics are 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 exhibit 8-60 for instructions on accessing the variables from the ECB.

### 7.4.1 Child Composite Variables

There are many child-level composite variables on the child catalog. Table 7-12 describes all of the composites. Some of these variables are described in further detail here.

### 7.4.1.1 Child's Age at Assessment (R5AGE)

The child's age was calculated by determining the number of days between the date when the child completed the ECLS-K direct child assessment and the child's date of birth (R5DOBMO, R5DOBDA, R5DOBYR). The total number of days was then divided by 30 to calculate the age in months. The child assessment date was tested for the appropriate range (March to July 2002). If the assessment date fell outside these ranges, the modal assessment date for the child's school was used.

It should be noted that the date of assessment used for R5AGE may be different from the set of assessment dates and times incorporated into methodological variables that are described further in section 7.5. These variables are not edited like those for R5AGE and are text variables that note both date and time.

### 7.4.1.2 Gender (R5GENDER)

The third grade gender composite was derived using the gender indicated in the parent interview (INQ.016), child report (AIQ.050), and the FMS. (The composite variable is on the file for R5GENDER, although the source variables are not.) For most of the cases the data were collected in the
base year. Gender was asked in the third grade parent interview only if the information was missing from previous parent data, and asked in the child assessment only if the information was missing from previous FMS data.

In the kindergarten and first grade files, the variable GENDER was derived from the parent data and, if it were missing, the FMS. However, in examining the third grade data it was noted that there were some discrepancies in reports of a child's sex from different sources. Using the parent report, the child report, and the FMS, the most frequently reported sex was used for the child. If there were an equal number of reports for male and female from these sources, the following hierarchy of rules was used: if the data were from the parent interview in previous rounds, then R5GENDER was equal to gender from that parent data. Otherwise, gender was updated from the third grade parent interview question. If the parent interview data were missing, gender was updated from child report. Otherwise, R5GENDER was equal to the composite GENDER from a previous round (because GENDER in previous rounds incorporated the FMS, this last step meant that the FMS was used as the final source of data).

After R5GENDER was created, all cases for which reports of gender differed by variable source were printed with the child's name and checked against the composite. This check showed that the rules for assigning gender were successful. In three cases in which the name was clearly male or female, the gender was changed.

### 7.4.1.3 Child's Date of Birth (R5DOBYY, R5DOBMM, and R5DOBDD)

In the third grade, the child's date of birth was derived from one of three sources: the parent report (CHILDDOB), the child report (AIQ.040), or the FMS. If the child's date of birth had been reported in a parent interview from a previous round, that value was used. Otherwise, the value from the third grade parent interview was used. If those data were not available or were outside the criteria for inclusion (June 1, 1990 to March 31, 1995), the date of birth from the child interview was used. Finally, if the child report was not available or was outside the criteria for inclusion, the FMS value was used. If the date of birth given was before June 1, 1990, or after March 31, 1995, the data were excluded.

It should be noted that in the kindergarten and first grade files, the child date of birth composites (DOBYY, DOBMM, and DOBDD) were created using two rather than three sources of data. The two sources were parent interview data and, in cases in which the parent interview data did not exist
or were outside reasonable boundaries, FMS data. In spring-third grade, a third source-the child-was added.

### 7.4.1.4 Race/Ethnicity (W3AMERIN, W3ASIAN, W3PACISL, W3BLACK, W3WHITE, W3HISP, W3MT1RAC, W3RACETH, and R5RACE)

The composites for the child's race/ethnicity are presented in the ECLS-K files in three ways: (1) as dichotomous variables for each race/ethnicity category (W3AMERIN, W3ASIAN, W3PACISL W3BLACK, W3WHITE, W3HISP, W3MT1RAC) from the parent interview data; (2) as a single race/ethnicity composite taken from the parent interview data (W3RACETH); and (3) as a race/ethnicity composite taken from either the parent data or the FMS, with FMS data used only if parent data were missing (R5RACE).

Respondents were allowed to indicate that they belonged to more than one of the five race categories (White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander). From these responses, a series of five dichotomous race variables were created that indicated separately whether the respondent belonged to each 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 a race (e.g., biracial). The retention of the dichotomous variables on the file allows users to create different composites as needed.

Data were collected on ethnicity as well. Specifically, respondents were asked whether or not they were Hispanic. Using the six race dichotomous variables and the Hispanic ethnicity variable (P4HSP_1 to P4HSP_25, depending on household size), the race/ethnicity composite variables (W3RACETH and R5RACE) were 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 Alaska Native, and more than one race specified, nonHispanic. The child composites W3RACETH (race/ethnicity) and R5RACE (race/ethnicity) both share these categories; however, FMS data were used to fill in missing parent report data for the variable R5RACE and only parent report data were used for the variable W3RACETH. A child was classified as Hispanic if a respondent indicated the child's ethnicity was Hispanic regardless of whether a race was identified and what that race was.

For W3RACETH, if the child's race/ethnicity information was available from a parent interview in a prior data collection, this value was used and copied forward. ${ }^{3}$ If the data were missing for a child in a previous parent interview, they were collected in third grade (FSQ.190, FSQ.195) and those data were used.

For R5RACE, responses from previous parent interviews were prioritized over the FMS. This is different from the method used to derive the variable RACE in the first grade. In the first grade, the composite RACE was copied forward from previous rounds and FMS data were used if parent reports were not available. Because parent reports were expected to be more accurate than school records, if new information about race was obtained in the third grade parent interview, it was used rather than previous information obtained from the FMS. Therefore, the third grade variable R5RACE is different from RACE in previous rounds for a minority of cases.

### 7.4.1.5 Child's Height (C5HEIGHT)

To obtain good measurements, each child's height was measured twice. For the height composite C5HEIGHT, if the two height values from the instrument (i.e., C5HGT1 and C5HGT2 for spring-third grade) 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 52.5 inches (the median height for 9-year-olds as developed by the National Center for Health Statistics (NCHS) in collaboration with the National Center for Chronic Disease Prevention and Health Prevention (NCCDPHP)) was used as the composite value.

### 7.4.1.6 Child's Weight (C5WEIGHT)

Each child's weight was also measured twice. For the weight composite (C5WEIGHT), if the two weight values from the instrument (i.e., C5WGT1 and C5WGT2 for spring-third grade) were less than 5 pounds apart, the average of the two values was computed and used as the composite value.

[^2]Otherwise, the value that was closest to 64.0 pounds (the median weight for 9-year-olds as developed by NCHS in collaboration with the NCCDPHP) was used as the composite value.

### 7.4.1.7 Child's Body Mass Index (C5BMI)

Composite Body Mass Index (BMI; variable name C5BMI), which is a calculation of the child's body weight adjusted for height, 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.

### 7.4.1.8 Child's Disability Status (P5DISABL)

A composite variable was created to indicate whether a child had a disability that was diagnosed by a professional. Questions in the parent interview about disabilities in spring-third grade asked about the child's ability to pay attention and learn, overall activity level, overall behavior and relations to adults, overall emotional behavior such as anxiety or depression, ability to communicate, difficulty hearing and understanding speech, and eyesight. For each disability or behavior, a question was asked about whether a diagnosis of a problem was obtained by a professional (CHQ.050, CHQ.110, CHQ.170, CHQ.210, CHQ.300, CHQ.335, CHQ.360). A question was also asked about receipt of therapy services or participation in a program for children with disabilities (CHQ.520).

The composite variable P5DISABL was coded 1 (Yes) if any of the source variables (CHQ.050, CHQ.110, CHQ.170, CHQ.210, CHQ.300, CHQ.335, CHQ.360, CHQ.520) about diagnosis or therapy services were coded 1 (Yes). This was done even if data for some of the source variables were missing. If data for all the source variables were missing, the composite was coded -9 (Not Ascertained). Otherwise, P5DISABL was coded 2 to indicate no reported disability.

It should be noted that the spring-third grade composite is somewhat different from the composite in previous rounds of the study because questions were added about both overall behavior and relations to adults and overall emotional behavior such as anxiety or depression. In addition, (like the spring-first grade composite P4DISABL) the spring-third grade composite does not include a question used in the fall-kindergarten questionnaire and composite that asked parents about their children's coordination in using their arms or legs.

### 7.4.1.9 Nonparental Care (P5CARNOW)

There are several composite variables on the file that can be used to describe child care arrangements based on information from the parent interview. One of these (P5CARNOW) describes whether the child had any type of nonparental care at the time of the interview. The creation of P5CARNOW was as follows. If the child was receiving care from a relative (CCQ.010), a nonrelative (CCQ.150), or a day care center or before or after school program at a school or in a center (CCQ.260), P5CARNOW was equal to 1 (Yes). Otherwise, if any of the three variables was unknown, P5CARNOW was coded as -9 (Not Ascertained). If the respondent indicated that the child was not currently receiving any of the three types of care (CCQ.010, CCQ.150, and CCQ. 260 all equaled 2 [No]), P5CARNOW was coded as 2 ( No ).

It should be noted that the nonparental care as defined by P5CARNOW does not have to be received on a regular basis. However, for the composite P5HRSNOW (hours per week in child care) described below, if the nonparental care is not regular, the number of hours in care is coded as zero. This is because the child must have a regular arrangement in order for hours per week in care to be reported. Users should be aware of the differences in definitions when comparing P5CARNOW with P5HRSNOW.

### 7.4.1.10 Hours Per Week in Child Care (P5HRSNOW)

Another set of child care composites indicates the number of hours per week the child spent in child care. P5HRSNOW indicates the total number of hours per week the focal child spent in care at the time of the spring-third grade interview. The variable combines hours in child care arrangements in which the child spent the most time with hours from additional regular child care arrangements. It was coded as follows. If the relevant child care receipt variables for relative, nonrelative, and center-based care (CCQ.010, CCQ.150, or CCQ.260) were equal to 2 (No Receipt), or if the indicator for regular receipt of that type of care (CCQ.080, CCQ.180, and CCQ.340) was equal to 2 (No Regular Receipt), the number of hours for that type of care was coded to 0 . If the receipt variables or regular receipt of care variables were refused or unknown, then the number of hours for that type of care was coded as -9 (Not Ascertained). Also, if the regular receipt variable was coded as 1 (Yes), but the hours given was refused or unknown, then the number of hours for that type of care was coded as -9 (Not Ascertained). Otherwise, if the indicator for regular receipt of care was equal to 1 (Yes), and the hours given were greater than or equal to 0 , then the number of hours for that type of care was coded as the number of hours given.

The composite also includes hours spent with additional regularly scheduled providers of care of the same type. This was done to include child care arrangements such as those in which two different relatives cared for the child on a regular basis or two different child care programs were attended. For each type of care, if the care receipt variables indicated no care of that type, or if the number of providers of that type of care (questions CCQ.060, CCQ.165, and CCQ. 325 indicated number of regular providers of each type) was equal to 1 , then additional hours were coded to 0 . Otherwise, if the number of providers or the number of additional hours (questions CCQ.140, CCQ.250, and CCQ. 403 indicated number of hours spent with additional providers) was refused or unknown, then the number of additional hours was coded as -9 (Not Ascertained). Otherwise the number of additional hours was coded to equal the appropriate number of additional hours variables in the instrument (CCQ.140, CCQ.250, or CCQ.403).

This process was followed three times, once each for relative care, nonrelative care, and center-based care. If any of the three primary caregiver hour variables or the three additional hours variables was missing then the total number of hours was coded as -9 (Not Ascertained). Otherwise the total number of hours in regularly scheduled child care was coded as the sum of the six hour variables.

It should be noted that in earlier rounds, if the primary care arrangement hours were not missing and the additional hours were missing, the primary caregiver hours were used for the composite. In spring-third grade, if any of the primary or additional hours variables were missing, the composite was missing. This change makes the variable represent all types of regular care rather than prioritizing primary arrangements. Because there are slightly more missing data for the composite in spring-third grade than in the previous rounds (the percentage of "not ascertained" answers was 0.8 percent in fall-kindergarten, 0.6 percent in spring-first grade, and 1.5 percent in spring-third grade), users who want to prioritize primary care hours over additional hours may want to calculate their own composite.

Although P5HRSNOW was created almost identically to the same composite variable in kindergarten (P1HRSNOW), with the exception noted above, there was one other difference. In kindergarten, questions were asked about whether the child was ever in a particular type of care. If not, P1HRSNOW was set to 0 . Because questions about the child having ever been in a particular type of care were not included after the kindergarten year, they were not part of the composite variable definition for either the third or first grade variables.

### 7.4.1.11 Number of Child Care Arrangements (P5NUMNOW)

Another composite variable (P5NUMNOW) was used to indicate the total number of all types of care arrangements the focal child had at the time of the spring-third grade parent interview. The variable was created as follows. If any of the child care receipt variables for relative, nonrelative, or center-based care (CCQ.010, CCQ.150, or CCQ.260) was refused, unknown, or missing, then P5NUMNOW was coded as -9 (Not Ascertained). If any of the care receipt variables was equal to 1 (Yes), but its corresponding number of arrangements variable (CCQ.060, CCQ.165, and CCQ.325) was refused, unknown, or missing, then P5NUMNOW was again coded as -9 (Not Ascertained). Otherwise, the number of arrangements indicated in CCQ.060, CCQ.165, and CCQ. 325 were summed to obtain the total number of current child care arrangements.

The differences in how missing data are handled for each of the child care composites are important to note when combining variables. For example, because P5NUMNOW requires that the number of child care arrangements be known, it is possible for a child to have P5CARNOW =1 (child was in nonparental care) and have P5NUMNOW be -9 (Not Ascertained).

### 7.4.1.12 Primary Nonparental Child Care Arrangement (P5PRIMNW)

A composite variable (P5PRIMNW) was created to indicate the primary, nonparental child care arrangement in which the child spent the most hours per week at the time of the spring-third grade interview. This variable is for children in a regular care arrangement. The values for this variable follow:

- $0=$ No nonparental care
- 1=Relative care in child's home
- 2=Relative care in another home
- 3=Nonrelative care in child's home
- $4=$ Nonrelative care in another home
- 5=Center-based program
- 6=Two or more programs
- 7=Location of care varies

To obtain the composite, hours were compared for relative care in the child's home (CCQ.090) or in other home (CCQ.070); nonrelative care in child's home (CCQ.190) or in other home (CCQ.170); and center/program care (CCQ.355). First, the composite P5HRSNOW, described earlier, was used to code individuals missing current hours of care (P5HRSNOW=-9) or with no hours of nonparental care (P5HRSNOW=0). Those with missing hours of care were coded as -9 (Not Ascertained); those with no hours of care or no regularly schedule care were coded as 0 .

For the remaining cases, if the number of hours of either relative or nonrelative care (given in CCQ. 090 and CCQ.190) were higher than all other hours of care, the variable indicating location of care for that type was examined using instrument items CCQ. 070 and CCQ.170. If location of care was missing, then P5PRIMNW was coded as -9 (Not Ascertained); if P5PRIMNW was not missing, then P5PRIMNW was coded 1, 2, 3, or 4, depending on the type (relative/nonrelative) and location (child's home/other home) of care. Otherwise, if the number of hours of care in center-based programs (CCQ.355) was higher than for relative or nonrelative care, then P5PRIMNW was coded as 5 . If the number of hours of care was equal for two or more types of care, P5PRIMNW was coded as 6. P5PRIMNW was coded as 7 if the location of care varied between two homes.

It should be noted that it is possible to have missing data for the primary child care arrangement (P5PRIMNW), but still have information on the number of hours of child care a child has (P5HRSNOW). This is because there must be information about the location of care in order to have a valid value for P5PRIMNW.

### 7.4.2 Family and Household Composite Variables

Many composites were created to capture information about the sampled children's family and household characteristics. Several of these are described below. All of the family and household composites are listed and described in table 7-12.

### 7.4.2.1 Number of Siblings (P5NUMSIB)

The composite P5NUMSIB indicates the total number of siblings (full, step, adoptive, or foster) with whom the child lived in the household (FSQ. 160 and FSQ.170). Siblings were identified
through the respondents' stated relation of the sibling to the focal child. In addition, any child that was reported to be a child of the focal child's parent/guardian was considered a sibling of the focal child.

### 7.4.2.2 Parent and Household Members' Age (P5LESS18, P5OVER18, P5HDAGE, and P5HMAGE)

There are several composite variables on the file that refer to the ages of adults and children in the household. These are P5LESS18 (total number of people in the household under age 18, including focal child, siblings, and other children), P5OVER18 (total number of people in the household age 18 or older, siblings, and other children), P5HDAGE (age of resident father), and P5HMAGE (age of resident mother). The ages of these persons in the household were collected during the fall of kindergarten in the household matrix. However, in subsequent years of the study, questions about age were not asked for household members who were previously in the household. This was done to save interviewing time. In the third grade, ages were collected only for new household members. Otherwise, ages were incremented by adding years based on the round in which the person joined the study. Age changes were made to increase the ages of all household members other than the focal child and twin (the ages of the focal child (and twin, if applicable) were updated based on birthdate).

The ages of all household members who were not new to the study in spring-third grade (other than the focal child and twin) were increased by the numbers shown in table 7-1. The guidelines for creating these were as follows: (1) half years could not be included, and (2) the same number of years was added for those who entered the study during the same school year. The numbers were made to err on the side of making persons older rather than younger because this would cause fewer problems with range checks and displays in the parent interview if there was a discrepancy between actual age and imputed age.

Table 7-1. Incremented ages of previous household members based on round household member entered study, spring-third grade: School year 2001-02

| Round in which household <br> member joined study | Number of years to add <br> for spring-third grade |
| :--- | ---: |
| Fall 1998 | +4 |
| Spring 1999 | +4 |
| Fall 1999 | +3 |
| Spring 2000 | +3 |

NOTE: In order to save interviewing time, questions about age were not asked about household members whose ages were reported in previous rounds of the study. Instead, years were added to the originally reported age. The number of years added was based on when the household member joined the study.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

### 7.4.2.3 Food Security Status

Food security status of the children's families was assessed based on responses to the 18 food security questions (P5WORRFD through P5NOMONY) in the spring-third grade parent interview. The questions measured a wide range of food insecurity and reduced food intake issues. They were combined into a scale using statistical methods based on the Rasch measurement model. The items and the food security scale based on them have been validated using both ethnographic and statistical methods. For spring-third grade, composites were created for Household Food Security scale variables and Children's Food Security scale variables (for spring-kindergarten, composites were created only for Household Food Security scale variables). Calculations of the Household Food Security Scale variables were carried out in accordance with the standard methods described in Guide to Measuring Household Food Security, Revised 2000 (U.S. Department of Agriculture, 2000). Calculations of the Children’s Food Security Scale variables were carried out in accordance with the standard methods described in Measuring Children's Food Security in U.S. Households, 1995-99 (U.S. Department of Agriculture, 2002). Analysis of the ECLS-K data using Rasch methods indicated that use of the standard benchmark household scores was appropriate.

### 7.4.2.4 Food Security Status: Continuous Measures (P5FSSCAL and P5FSCHSC)

P5FSSCAL is the scale score presentation of the Household Food Security items. It is a continuous, interval-level measure of food insecurity and is appropriate for linear models. This scale score is a Rasch transformation of the raw score (P5FSRAW). Valid values range from 1.4 to 13.0, with higher values indicating more severe food insecurity. Under Rasch-model assumptions, the scale score for families that affirm no items (in other words, they did not provide "yes" answers to the questions and the raw score $=0$ ) is indeterminate. It is less than the lowest measured value (1.4), but its precise value is unknown and may vary substantially among families. P5FSSCAL for such cases is assigned a value of -6. If these cases (a substantial majority of all cases) are included in linear models, appropriate methods must be used to take into account this indeterminacy.

P5FSCHSC is similar to P5FSSCAL but is the Children's Food Security scale score. This is a measure of the severity of food insecurity or hunger experienced by children in the household in the previous 12 months. Valid values range from 4.1 to 12.2 , with higher values indicating more severe food deprivation. The scale score is undefined for households that affirmed no child-referenced items (see discussion of P5FSSCAL above).

### 7.4.2.5 Food Security Status: Categorical Measures (P5FSSTAT and P5FSCHST)

P5FSSTAT is a categorical measure of Household Food Security status formed by dividing P5FSSCAL into four ordered categories: food secure, food insecure without hunger, food insecure with hunger (moderate), and food insecure with hunger (severe). P5FSSTAT is appropriate for comparing prevalence rates of food insecurity and hunger across subpopulations and can be used as a categorical variable in associative models. There are few cases in the most severe category, so for most prevalence reporting purposes, the two categories of food insecure with hunger (moderate and severe) should be collapsed and reported as a single category. When interpreting food security statistics, users should remember that food security status is a household-level characteristic. In most households classified as food insecure with hunger, the children in the household were not hungry.

P5FSCHST is a categorical measure of Children's Food Security status that identifies households with hunger among children at some time during the 12 months prior to the survey. This variable is appropriate for comparing prevalence rates of hunger among children across subpopulations.

There were few households ( $\mathrm{n}=27,0.2$ percent) that reported hunger among children, so the analytic utility of this variable is limited. However, for analytic purposes, other categories of children's food insecurity delineated by less severe thresholds (based on children's food security raw scores or scale scores) may be useful. For example, Nord and Bickel (2001) suggested a threshold of 2 or more affirmative responses as representing reduced quality and variety of children's diets. When interpreting children's food security statistics, users should remember that these variables represent conditions among all children in the household and may not reflect experiences of the child in the ECLS-K study if there are other children in the household.

### 7.4.2.6 Food Security Status: Raw Scores (P5FSRAW and P5FSCHRA)

The Household Food Security raw score, P5FSRAW, is a count of affirmative responses to the 18 items. This is an ordinal-level measure of food insecurity and is not recommended for use in analysis. The Children's Food Security raw score, P5FSCHRA, is a count of affirmative responses to child-referenced items. Responses to items skipped because of screening are assumed to be negative. Families with no valid responses are coded as missing (-9). Missing item responses of families with one or more valid responses are imputed as negative responses (only 0.13 percent of the sample).

### 7.4.2.7 Socioeconomic Status (SES) and Poverty (W3DADSCR, W3MOMSCR, W3SESL, W3SESQ5, W3INCCAT, W3POVRTY)

Socioeconomic status (SES) was computed at the household level using data for the set of parents who completed the parent interview in spring-third grade. The SES variable reflects the socioeconomic status of the household at the time of data collection for spring-third grade (spring 2002). The components used to create the SES variable were as follows:

- Father/male guardian's education;
- Mother/female guardian’s education;
- Father/male guardian's occupation;
- Mother/female guardian's occupation; and
- Household income.

Occupation was recoded to reflect the average of the 1989 General Social Survey (GSS) prestige score. This was computed as the average of the corresponding prestige scores for the 1980 Census occupational categories covered by the ECLS-K occupation. Table 7-12 provides details on the prestige score values (W3DADSCR, W3MOMSCR).

The variables were collected as follows:

- Income. The information about income was collected in spring-third grade. Broadrange and detailed-range income questions were asked of all participants. The broad range classifies household income as $\$ 25,000$ and less per year, or as greater than $\$ 25,000$. The detailed range classifies household income as shown in table 7-2.
- Households that were determined to meet the size and income criteria related to poverty shown in table $7-3$ were asked to report income to the nearest $\$ 1,000$. (We call this exact income for simplicity.) Because not all households were asked to report exact income, the midpoint of the detailed income range was used to compute the SES composite variable.
- Parent's education. The information about parent's education was collected or updated in spring-third grade.
- Parent's occupation. The information about parent's occupation was collected or updated in spring-third grade.

Table 7-2. Levels of detailed income range, spring-third grade: School year 2001-02

| Detailed income range | Total household income |
| :--- | ---: |
| 1 | $\$ 5,000$ or less |
| 2 | $\$ 5,001$ to $\$ 10,000$ |
| 3 | $\$ 10,001$ to $\$ 15,000$ |
| 4 | $\$ 15,001$ to $\$ 20,000$ |
| 5 | $\$ 20,001$ to $\$ 25,000$ |
| 6 | $\$ 25,001$ to $\$ 30,000$ |
| 7 | $\$ 30,001$ to $\$ 35,000$ |
| 8 | $\$ 35,001$ to $\$ 40,000$ |
| 9 | $\$ 40,001$ to $\$ 50,000$ |
| 10 | $\$ 50,001$ to $\$ 75,000$ |
| 11 | $\$ 75,001$ to $\$ 100,000$ |
| 12 | $\$ 100,000$ to $\$ 200,000$ |
| 13 | $\$ 200,001$ or more |

[^3]Table 7-3. Households asked to report income to the nearest $\$ 1,000$, spring-third grade: School year 2001-02

| Household size | Total household income |
| :--- | ---: |
| Two or three | $\$ 15,000$ or less |
| Four | $\$ 20,000$ or less |
| Five or six | $\$ 25,000$ or less |
| Seven | $\$ 30,000$ or less |
| Eight | $\$ 35,000$ or less |
| Nine or more | $\$ 40,000$ or less |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

Not all parents completed the parent interview; among those who did, not all responded to every question. Therefore, there were missing values for some of the components of the SES composite variable. Only a small percentage of values for the education and occupation variables were missing; a larger proportion of households had missing values for the detailed income range (see table 7-4).

Table 7-4. Missing data for SES source variables, spring-third grade: School year 2001-02

| Variable | Number missing | Percent |
| :--- | ---: | ---: |
| Mother's education | 256 | 1.92 |
| Father's education | 265 | 1.98 |
| Mother's occupation | 308 | 2.31 |
| Father's occupation | 367 | 2.75 |
| Detailed income range | 1,482 | 11.10 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

A two-stage procedure was used to impute missing values for each component of the SES composite variable. First, if a parent had completed an interview in the kindergarten or first grade year, missing values for the spring-third grade education, occupation, and detailed income range were filled in with values from the previous years. The rationale for this approach was that the best source of data for an individual or a household was the data from a previous year.

This first imputation stage was implemented as follows:

- Education level was brought forward from the most recent previous round. This was done only if the same person was the parent figure both in spring-third grade and in the earlier round.
- Occupation was brought forward only if the individual was in the labor force (i.e., was working at a paid job, on vacation from a paid job, or looking for a job). It was also required that the same person be the parent figure both in spring-third grade and in the earlier round. NOTE: Prestige scores were not assigned to individuals unless they were in the labor force, regardless of whether they reported an occupation.
- Detailed income category was brought forward from the most recent previous round.

Second, data still missing after this initial step were imputed using a hot deck methodology. In hot deck imputation, the value reported by a respondent for a particular item is assigned or "donated" to a "similar" person who failed to respond to that question. Auxiliary information known for both donors and nonrespondents is used to form groups of persons having similar characteristics. These groups of similar respondents and nonrespondents are called "imputation cells." The imputed value for a case with a missing value is taken from a randomly selected donor among the respondents within the cell.

Imputation cells were defined by respondent characteristics that were the best predictors of the variables to be imputed. These relationships had been determined previously by CHAID (Chi-squared Automatic Interaction Detector) analyses of the base year data. Missing values for the education, occupation, and detailed income range variables were imputed by the hot deck method for all households. Hot deck imputation was done in a sequential order, 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. Imputed as well as reported values were used to define imputation cells; missing values for donor characteristics were treated as a separate category. No imputed value was used as a donor. No donor was used more than once. The order of hot deck 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). 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 detailed income range was imputed in two steps: first for cases where the broad income range was known, and second for cases where it was unknown.

For households where both parents were present, the order of hot deck imputation was as follows:

- Mother's education;
- Father's education;
- Mother's labor force status;
- Mother's occupation;
- Father's labor force status;
- Father's occupation;
- Detailed income range, where the broad income range was known; and
- Detailed income range, where the broad income range was unknown.

At this point, all of the missing values had been imputed. However an exact income value was still required to construct the SES composite. The midpoint of the detailed income range was assigned for this purpose to all households.

The log of the detailed income range midpoint was then used to compute the SES composite. This value does not vary widely within the levels of the detailed income range, so the midpoint was a reasonable choice. It was used only for the purpose of computing the SES composite and was not retained in the data file.

All missing values of the SES components were imputed by the process described above. Tables 7-5 through 7-8 summarize the results.

Table 7-5. Selected statistics on imputed education variables, spring-third grade: School year 2001-02

|  | Total <br> missing | Number of values filled <br> from previous rounds | Number of values <br> imputed by hot deck | Number of cases <br> resolved |
| :--- | ---: | ---: | ---: | ---: |
| Mother's education | 256 | 223 | 33 | 256 |
| Father's education | 265 | 220 | 45 | 265 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

Table 7-6. Selected statistics on imputed labor force status, spring-third grade: School year 2001-02

| Labor force status | Number of values filled <br> from previous rounds | Number of values <br> imputed by hot deck | Number of cases <br> resolved |
| :--- | ---: | ---: | ---: |
| Mother |  |  |  |
| Total missing | 148 | 24 | 227 |
| In labor force | 51 | 4 | 172 |
| Not in labor force |  |  | 55 |
| Father | 147 | 27 | 189 |
| Total missing | 11 | 4 | 174 |
| In labor force |  | 15 |  |
| Not in labor force |  |  |  |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

Table 7-7. Selected statistics on imputed occupation variables, spring-third grade: School year 2001-02

| Occupation | Number of values filled <br> from previous rounds | Number of values <br> imputed by hot deck | Number of cases <br> resolved |
| :--- | ---: | ---: | ---: |
| Mother |  |  | 308 |
| $\quad$ Total missing | 41 | 212 |  |
| Occupation | 51 | 4 | 253 |
| Not in labor force ${ }^{1}$ |  |  | 55 |
| Father | 83 | 269 | 367 |
| $\quad$ Total missing | 11 | 4 | 352 |
| Occupation |  |  | 15 |
| Not in labor force ${ }^{1}$ |  |  |  |

[^4]Table 7-8. Selected statistics on imputed detailed income range, spring-third grade: School year 2001-02

| SES component | Totalmissing | Number of values filled from previous round | Number of values imputed by hot deck Broad income range |  | Number of cases resolved |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Known | Unknown |  |
| Detailed income range | 1482 | 1441 | 12 | 29 | 1482 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

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

$$
z_{h i}=\frac{x_{h i}-\bar{x}_{w}}{\operatorname{se}\left(\bar{x}_{w}\right)},
$$

where

$$
\begin{aligned}
x_{h i} & \text { is the value of the } h \text {-th SES component for the } i \text {-th household; } \\
w_{i} & \text { is the base weight for the } i \text {-th record; } \\
\bar{x}_{w} & \text { is the weighted mean of } x_{h i} \text {; and } \\
\operatorname{se}\left(\bar{x}_{w}\right) & \text { is the standard error of } \bar{x}_{w} .
\end{aligned}
$$

Thus, each component was converted to a $z$-score with mean of 0 and a standard deviation of one. For income, the component ${ }^{X_{i}}$ is the logarithm of the income for $i$-th household. The logarithm of income was used because the distribution of the logarithm of income is less skewed than the direct income values. The SES value for the $i$-th household was then computed as

$$
\operatorname{SES}_{i}=\frac{\sum_{h=1}^{m_{i}} z_{h i}}{m_{i}}
$$

where $m_{i}$ is the number of nonmissing SES components for the $i$-th household. W3SESL is the continuous variable for the SES composite that ranges from -2.49 to 2.58 . 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 values. For analyses that require a continuous SES measure, such as multivariate regressions, W3SESL is the variable to use. A categorical SES variable (W3SESQ5) was created that contains the quintile for the value of the composite SES for the child. Quintile 1 represents the lowest SES category and quintile 5 represents the highest SES category. The quintiles were computed at the child level using the spring-third grade parent weights. For categorical analyses, use W3SESQ5 and the parent weight.

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

The imputed detailed income range variable (W3INCCAT) was also used to create a household-level poverty variable (W3POVRTY). Income was compared to Census poverty thresholds for 2001, which vary by household size. Table 7-9 shows the detailed income categories used in the ECLS-K parent interview for determining whether to ask a more detailed question about income to the nearest 1,000. For comparison, the table also shows weighted poverty thresholds from Census data. ${ }^{4}$ Households whose income fell below the appropriate threshold were classified as poor. For example, if a household contained two members, and the household income was lower than $\$ 11,569$, then the household was considered to be below the poverty threshold.

Table 7-9. ECLS-K spring-third grade and Census poverty thresholds for 2001: School year 2001-02

| Household size | ECLS-K income categories | Census weighted average <br> thresholds for 2001 |
| :--- | :--- | ---: |
| Two | Less than or equal to $\$ 15,000$ | $\$ 11,569$ |
| Three | Less than or equal to $\$ 15,000$ | $\$ 14,128$ |
| Four | Less than or equal to $\$ 20,000$ | $\$ 18,104$ |
| Five | Less than or equal to $\$ 25,000$ | $\$ 21,405$ |
| Six | Less than or equal to $\$ 25,000$ | $\$ 24,195$ |
| Seven | Less than or equal to $\$ 30,000$ | $\$ 27,517$ |
| Eight | Less than or equal to $\$ 35,000$ | $\$ 30,627$ |
| Nine or more | Less than or equal to $\$ 40,000$ | $\$ 36,286$ |

SOURCE: U.S. Census Bureau, Current Population Survey. http://www.census.gov/hhes/poverty/threshld/thresh01.html; U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

### 7.4.2.8 Parent Education (W3PARED, W3DADED, and W3MOMED)

There are three parent education composites on the file. These are W3PARED (the highest level of education for the child's parents or nonparent guardians who reside in the household), W3DADED (father's highest level of education), and W3MOMED (mother's highest level of education). The variables include both parent (birth, adoptive, step, and foster) and nonparent guardians. For example, if the child had no parents but had a guardian, the education of the guardian and his or her spouse were used in the creation of the composites if the guardian was specified as such in the relationship variable or if the guardian was the respondent/respondent's spouse and there were no other parent figures in the household.

[^5]In spring-third grade, parent education level was updated from spring-first grade if it was a household that had been part of that round of the study. Respondents were asked if they or their corresponding parent figures, if applicable, completed any additional grades of school or received any diplomas or degrees (PEQ.010). If so, PEQ. 020 asked what grade the parent completed or what degree was received. If there was no education information to update from spring-first grade, respondents were asked for their highest education level in PEQ.020. If this education level was less than the education level reported in a previous round, the higher education level was kept for the composite. ${ }^{5}$

If both parents/guardians resided in the household, W3PARED was the highest value for education level from either the mother/guardian in W3MOMED or the father/guardian in W3DADED. If the household only had one parent or guardian, then W3PARED was equal to either W3MOMED or W3DADED depending on which parent or guardian resided with the child. If the education data for either of the parents were missing ${ }^{6}$ it was imputed, and the composite W3PARED was created based on both the reported and imputed data.

### 7.4.2.9 Parent Race/Ethnicity (P5HDRACE and P5HMRACE)

The composites for race/ethnicity for the parents were calculated in the same way as those for the child, except that there is not a variable that supplements parent reported race/ethnicity with FMS data similar to the variable R5RACE for children. All data on parent race/ethnicity come from the parent interview. Race/ethnicity for parents is presented in the spring-third grade data file as a categorical race/ethnicity composite (for the father/male guardian it is P5HDRACE, and for the mother/female guardian it is P5HMRACE).

[^6]Respondents were allowed to indicate that they belonged to more than one of the five race categories (White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander). From these responses, a series of five dichotomous race variables were coded that indicated separately whether the respondent belonged to each of the five specified race groups. In addition, one more variable was coded for those who had simply indicated that they were multiracial without specifying the race (e.g., biracial). ${ }^{7}$ The dichotomous codes for each of the race variables are not provided on the spring-third grade file, but the composite derived from the responses is provided.

Parent race/ethnicity was obtained for all parents and spouses of respondent parents, but may or may not have been collected for a parent's boyfriend or girlfriend. For example, in a family with a birth mother and stepfather the race/ethnicity of both parents was obtained. However, in a family with a birth mother and the mother's boyfriend, if the mother's boyfriend was not identified as a spouse or partner of the mother, the race/ethnicity of the mother was obtained but that of the boyfriend was not.

### 7.4.3 Teacher Composite Variables

Details about how two of the teacher composites, child grade level and class type, were created are provided here. All of the teacher composites are listed and described in table 7-12.

### 7.4.3.1 Grade-Level Composite (T5GLVL)

To create the grade-level composite (T5GLVL), five possible sources of information were used: (1) teacher questionnaire part C (Q1 T5GRADE for grade level); (2) special education teacher part B (Q2 E5GRADE for grade level); (3) child assessment introductory section (AIQ. 030 C5INGRAD); (4) child assessment closing section (ACQ. 005 C5THIRD and ACQ. 010 C5GRADE, completed by interviewer), and (5) FMS information about grade level.

If conflicts existed among these five sources, the grade level indicated by the majority of the nonmissing sources was used for T5GLVL. When there were five, four, or three sources of information

[^7]and three were in agreement, the grade level indicated by the three sources was taken. When there were four sources of information and only two were in agreement, the grade level indicated by the two sources in agreement was taken. When there were three sources of information and two were in agreement, the grade level indicated by the two sources in agreement was taken. When there were four or five sources of data, and two sources indicated one option and the other two indicated another option, the grade indicated in a particular source was selected, according to the hierarchy presented below.

- Classroom teacher, T5GRADE
- Special education teacher, E5GRADE
- Assessment introduction, C5INGRAD
- Assessment closing, C5THIRD and C5GRADE
- FMS

In establishing this hierarchy, it was assumed that teachers had the best knowledge and that school records (on which the FMS are based) were more apt to be in error. It was also assumed that children were reliable reporters of their own grade level, so their reports were prioritized over the FMS. When equal numbers of sources were in conflict (1 vs. 1) or (2 vs. 2 ) or (1 vs. 1 vs. 1 ), the decision was made by using the information from the source highest on the list above.

One exception to this hierarchy was made. Because the FMS and AIQ grade-level information did not allow for ungraded classrooms, the FMS and AIQ information were not considered in any case in which at least one source indicated an "ungraded" classroom.

It should be noted that in spring-first grade, there was information about grade level from the student record abstract; however, there were no grade-level questions in the child assessment at that time. In spring-third grade, grade level was not asked in the student record abstract, but was included as part of the child assessment instead.

### 7.4.3.2 Class Size (A5CLSZ)

The composite for class size was created from class totals provided in three different questions in the teacher questionnaire, part A . The totals for race/ethnicity (Q4, A5TOTRA), age (Q3,

A5TOTAG), and sex (Q5, A5BOYS+A5GIRLS) were compared. If one of the totals differed, but two totals matched, the total shown by the two matching sources was used. If there were no matches among the totals, the total for the composite was set using, in order of priority, the sex, age, or race/ethnicity total. Otherwise, A5CLSZ was coded as -9 (Not Ascertained).

It should be noted that the class size composite A5CLSZ was used in spring-third grade as the denominator for the composite variables A5PMIN, A5PHIS, A5PBLK, and A5PLEP. In previous years, the total class size used in the calculation of these variables was based on the total number of children in the question about numbers of children by race/ethnicity.

### 7.4.4 School and Class Composite Variables

Variables on school and class characteristics were constructed from the teacher and school data and the sample frame. Details on how some of the variables were created follow.

### 7.4.4.1 School Type (S5SCTYP)

In spring-third grade, S5SCTYP was created as follows. Questions 2 (L5PUBLIC) (whether school is public) and 4 (L5CATHOL, L5OTHREL) (type of private school) from the school fact sheet, along with school sample frame data, were used to create the school type composite variable. If the response to question 2 (Is this a public school?) was "Yes," then S5SCTYP was coded "public." If the response to question 4.a. (L5CATHOL) (Is your school a Catholic school) was "Yes," then the school was coded as "Catholic." Otherwise, if the response to question 4.b. (L5OTHREL) (Is your school private with another religious affiliation?) was "Yes," then S5SCTYP was coded as "private, other religious." Otherwise, because the skip pattern to question 4 was used only if the school was private, if the response to question 4.a. (L5NAISKL, private school accredited by NAIS), question 4.d. (L5OTHPRI, other private), question 4.e. (L5PVTSPD, special education school-primarily serves children with disabilities), or question 4.f. (L5PVTEAR, an early childhood center-school or center includes preschool and/or early elementary grades) was "Yes," then S5SCTYP was coded as "private, non-religious."

If S5SCTYP could not be coded from the school fact sheet, reports of school type from the same school in previous rounds were used (in previous rounds, school type was asked in the school
administrator questionnaire and the variable names were S4SCTYP, S3SCTYP, S2KSCTYP, and CS_TYPE2). If those sources were unavailable, a variable from the school master file (taken from the 1999-2000 PSS/2000-01 CCD frame) was used to code S5SCTYP. If S5SCTYP could not be coded, S5SCTYP was coded as -9 (Not Ascertained). If the child was schooled at home, the composite was coded as -1 (Not Applicable).

### 7.4.4.2 Public or Private School (S5PUPRI)

This variable is a less detailed version of school type (with only two categories-public and private) and is derived from the school type composite S5SCTYP described above. In spring-third grade, it was created as follows. If S5SCTYP was 4 (public), then S5PUPRI was coded as public (1). If S5SCTYP was 1-3 (Catholic, other religious, other private) then S5PUPRI was coded as private (2). If S5SCTYP was coded as Not Ascertained (-9), then S5PUPRI was -9 (Not Ascertained). If S5SCTYP was coded "Not Applicable," then S5PUPRI was coded "Not Applicable."

### 7.4.4.3 School and Grade-Level Enrollment (S5ENRLS, S5ENRLT)

There are two composite enrollment variables on the third grade file: total school enrollment (S5ENRLS) and third grade enrollment (S5ENRLT). Total school enrollment was created using the school enrollment variable from the school administrator questionnaire (S5ANUMCH). If this variable was missing, data for private schools were taken from the 1999-2000 Private School Survey (PSS) and data for public schools were taken from the 2000-01 Common Core of Data (CCD) public school universe. If these were also missing, the variable was coded -9 (Not Ascertained). If the child was schooled at home, the composites were coded -1 (Not Applicable).

Third grade enrollment was not obtained during data collection. The third grade enrollment data for private schools came from the 1999-2000 PSS data. The enrollment data for public schools came from the 2000-01 CCD public school universe data.

### 7.4.4.4 Percent Minority Students in the School (S5MINOR)

The composite variable S5MINOR indicates the percentage of minority students in a school in spring-third grade. The composite is based on a question in the school administrator questionnaire (Q3) that was used to ask about the number or percentage of students in the following categories: Hispanic, regardless of race; Black, not of Hispanic origin; White, not of Hispanic origin; Asian or Pacific Islander; American Indian or Native Alaskan; and other. The composite was based on the sum of percentages for all categories except White, not of Hispanic origin. In some cases, the composite could not be obtained from the data because of missing data or errors. If the composite could not be derived from the data, percent minority was obtained from the CCD (for public schools) or the PSS (for private schools). If these data were missing, the composite was coded -9 (Not Ascertained). If the child was schooled at home, the composite was coded as -1 (Not Applicable).

In spring-third grade, school administrators were allowed to report their answers to the student racial composition questions as either numbers or percents, whereas in spring-kindergarten they were asked to report those answers as percents. All answers recorded as numbers in spring-third grade were converted to percentages for the composite variable. The sum of the answers across all categories was allowed to add within +/- 5 percent of the reported total. In a few cases, this produced answers slightly over 100 percent. These were topcoded to 100 percent.

A flag for each race/ethnicity variable indicates whether the answer was reported as a number or a percent. ${ }^{8}$ Because the composite is calculated as a percent, these flags will not be needed by users unless the analyst is interested in examining how answers were reported. If the flags (S5ASNFL, S5HSPFL, S5BLKFL, S5WHTFL, S5INDFL, and S5OTHFL) were equal to 1 for each of the race variables S5ASNPCT, S5HISPPCT, S5BLKPCT, S5WHTPCT, S5INDPCT, S5OTHPCT, these 6 race/ethnicity variables were reported by the respondent as percentages.

It should be noted that the spring-third grade composite was created in the same way as the composite for spring-first grade. However, both the spring-third grade and first grade composites are

[^8]slightly different from the one used in spring-kindergarten (S2MINOR) because the school administrator questionnaire item that asked about the percent of minority students in the school had different response options. In spring-kindergarten, the percent of minority students was derived from answers to the school administrator questionnaire by determining the percentage of children who were of either Hispanic or Latino origin (question 14) and the percentage of children who were American Indian or Alaska Native, Asian, black or African American, or Native Hawaiian or Other Pacific Islander (question 15) to create the percent minority composite. In spring-third grade, Hispanic or Latino origin and race were included in the same question.

### 7.4.4.5 School Instructional Level (S5SCLVL)

The purpose of this composite is to classify schools based on the highest grade taught in the school. This composite is taken in spring-third grade from the school fact sheet (Q1, L5PRKNDR, L5KINDER, L5GRADE1, L5SECOND, L5THIRD, L5FOURTH, L5FIFTH, L5SIXTH, L57TH, L58TH, L5NINTH, L5TENTH, L511TH, L512TH). The highest grade level circled on the form was determined, and the grade level was classified accordingly. If data were missing, data were used from the school master file (based on the 1999-2000 PSS and the 2000-01 CCD) to fill in instructional level. If school master file data were unavailable for a particular school, data from previous school administrator questionnaires from spring-first grade or spring-kindergarten schools (S4SCLVL and S2KSCLVL) were used to determine instructional level. If those sources were also not available, S5SCLVL was coded as -9 (Not Ascertained). If the child was schooled at home, the composite was coded as -1 (Not Applicable).

In previous rounds of the study, this composite was taken from the school administrator questionnaire rather than the school fact sheet. Also, in previous rounds, if the question about grade levels in the school was left blank, another question from the school administrator questionnaire about grade levels that participated in special programs was used. If the respondent did not answer either of these questions, then school sample frame data were used to determine the value for the composite in previous rounds.

### 7.4.4.6 School Year Start and End Dates (L5SCHBDD, L5SCHBMM, L5SCHBYY, L5SCHEDD, L5SCHEMM, L5SCHEYY)

The composite for school year start and end dates was taken from the school fact sheet (Q5, L5SYRSMM, L5SYRSDD, L5SYRSYY, L5SYREMM, L5SYREDD, L5SYREYY). If those data were missing, the values were taken from the FMS.

| - | L5SCHBDD | L5 School Year Starting Date, Day |
| :--- | :--- | :--- |
| - | L5SCHBMM | L5 School Year Starting Date, Month |
| - | L5SCHBYY | L5 School Year Starting Date, Year |
| - | L5SCHEDD | L5 School Year Ending Date, Day |
| - | L5SCHEMM | L5 School Year Ending Date, Month |
| - | L5SCHEYY | L5 School Year Ending Date, Year |

It should be noted that in past rounds, the composites for school year start and end dates were created differently because they were based on different questions. In past rounds, the question was in the student record abstract rather than the school fact sheet and was based on responses to multiple questions about start and end dates for school terms (e.g., semesters, trimesters). Composite variable names in past rounds started with a "U" prefix (rather than an "L" prefix as in spring-third grade) because they were taken from the student record abstract (variables for spring-first grade were U4SCHBDD, U4SCHBMM, U4SCHBYY, U4SCHEDD, U4SCHEMM, U4SCHEYY). If the start and end dates varied for children in the same school, the composite was created by using the school start and end dates reported for the majority of children in a school. Because school start and end dates were collected only once in the spring-third grade school fact sheet, discrepancies in questionnaire reports for children in the same school were not an issue.

### 7.4.5 Student Record Abstract and Field Management System Composite Variables

The composite variables created from the student record abstract and FMS data follow.

### 7.4.5.1 $\quad$ Year-Round Schools (F5YRRND)

This composite was created using data from the FMS. The FMS flag was " 1 " if the child was in year-round school. The values for the year-round school composite variable are 1 (Yes) and 2 (No). If the child was schooled at home, the composite was coded as -1 (Not Applicable).

### 7.4.5.2 Indicator of Whether Child Received Special Education Services (F5SPECS)

The composite variable F5SPECS indicates whether or not the child received special education services in the spring of third grade, based on the presence or absence of a link to a special education teacher in the FMS in spring-kindergarten. The values are 1 if the child received special education services, 2 if the child did not receive special education services, and -9 if the link was missing between the child and his or her teacher in the FMS.

### 7.4.5.3 Indicator of Whether Child Had an Individualized Education Plan (IEP) on Record at School (U5RIEP)

The variable U5RIEP indicates whether or not the child had an IEP or Individualized Family Service Plan (IFSP) on record at his/her school or another school in the spring of third grade. The values for the variable are 1 (child has an IEP/IFSP on record at his or her school, or at another school) and 2 (child does not have an IEP/IFSP on record at his or her school). If the information was missing, U5RIEP was coded as -9 (Not Ascertained).

### 7.4.6 Parent Identifiers and Household Composition (P5DADID, P5MOMID, P5HPARNT, P5HDAD, P5HMOM, P5HFAMIL, P5MOMTYP, P5DADTYP)

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 the type of their relationship to the child (biological, adoptive, foster, step, partner of parent, 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 gender. 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 assigned to the adoptive, step, foster/guardian, partner, or "unknown-type" parent. If there were more than one father or mother of the same type, the one with the lower person number on the household roster was selected. Person number refers to the number each household member has on the roster list. Household members are listed in the order they are reported by the respondent. Information about parents in the household, along with household size and presence or absence of grandparents, siblings, and other relatives was used to construct the household composition variables P5HPARNT, P5HDAD, P5HMOM, and P5HFAMIL and parent-type variables P5MOMTYP, and P5DADTYP.

After the residential parents were identified and the composite variables were constructed, in any household without a parent, the household respondent (and his or her spouse/partner, 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 defined as parents (meaning biological, step-, adoptive, or foster) in the construction of the household composition composite variables described earlier. For example, for P5HFAMIL, composite values are as follows:

- 1=two parents and sibling(s)
- 2=two parents, no siblings
- 3=one parent and sibling(s)
- 4=one parent, no siblings
- $\quad$ =other

Parent figures were placed in the "other" category for this composite. Likewise, for the composite P5HPARNT, parent figures were placed in categories 8 or 9 for related and unrelated guardians, respectively. Similarly, parent figures were included in the category 'no resident mother' for P5HMOM and "no resident father" for P5HDAD. Thus, although persons reported as children's parents/guardians and the spouses/partners of the parents/guardians were included in the definitions of all the household composites, individuals later identified as parent figures in households in which no parents were present were not considered to be parents in the coding of the household composites.

Some parent-specific variables do include persons who were later identified as parent figures. These are as follows (variables for fathers are listed below but those for mothers are created in the same way):

- P5DADID (Household roster number of resident father, male guardian, or father figure);
- P5HDAGE (Age of resident father, male guardian, or father figure);
- P5HDRACE (Race and ethnicity of the father, male guardian, or father figure in the household);
- P5HDEMP (The work status of the father, male guardian, or father figure in the household);
- P5DADOCC (Father, male guardian, or father figure's occupation);
- W3DADED (The father, male guardian, or father figure's highest level of education); and
- W3DADSCR (Father, male guardian, or father figure's occupation prestige score)

It should be noted that because the composite construction identifies only one resident mother 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 (P5REL_1, etc.) to identify households in which more than one person is identified as a father/mother to the focal child. Second, 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 P5PER_1, etc.) is the child's parent and the respondent's spouse/partner (identified from P5SPOUSE) is the same sex as the respondent.

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

- PEQ Parent education
- EMQ Employment

Each of these sections was completed during the parent interview for up to two parents or parent figures. To indicate which household member or members were the subject of each section, "pointer" variables that hold the original number of the household member on the household roster were used. To illustrate how the pointer variables work, suppose there is a household with both a mother and a
father who were listed third and fourth in the household roster. If household member \#3, the mother, was the first person to receive the PEQ education section, then the pointer variable P5EDUP1 will equal "3." The answers to the education questions for the mother will be contained in interview items in this section that end with the suffix "_1" (e.g., P5NDEG_1, P5DEGT_1, P5ENR_1, etc.). The suffix "_1" indicates that the data are for the first subject of the questions. Similarly, if household member \#4, the father, was the second person to receive the PEQ education section, then the pointer variable P5EDUP2 will equal "4." The answers to the education questions for the father will be contained in interview items in this section that end with the suffix "_2" (e.g., P5NDEG_2, P5DEGT_2, P5ENR_2, etc.). The suffix "_2" indicates that the data are for the second subject of the questions. Table 7-10 identifies the pointer variables.

### 7.4.7 Industry and Occupation Codes Used in ECLS-K

This section describes the aggregated categories that were used for coding occupation in the

## ECLS-K.

## 1. Executive, Administrative, and Managerial Occupations

This category includes senior-level and middle management occupations and occupations that directly support management. Senior-level managers are persons concerned with policymaking, planning, staffing, directing, and/or controlling activities. Middle managers include persons who plan, organize, or direct and/or control activities at the operational level. 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, custom house builders, and location managers. Legislators are also included in this category.

## 2. Engineers, Surveyors, and Architects

The category includes occupations concerned with applying principles of architecture and engineering in the design and construction of buildings, equipment and processing systems, highways and roads, and land utilization.

## 3. 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.

Table 7-10. Pointers to parent figure questions, spring-third grade: School year 2001-02

| Person pointer ${ }^{1}$ |  | Interview item |  |
| :---: | :---: | :---: | :---: |
| P5EDUP1 | P5 PEQ010-060 | P5NDEG_1 | P5 PEQ010 PERS 1 COMPLETED NEW DEGREE |
|  | HH PERSON | P5DEGT_1 | P5 PEQ020 PERS 1 DEGREE TYPE COMPLETED |
|  | POINTER 1 | P5ENR_1 | P5 PEQ030 IF PERS 1 ENROLLED IN COURSES |
|  |  | P5FPT_1 | P5 PEQ040 PERS 1 COURSE FULL/PART TIME |
|  |  | P5TRN_1 | P5 PEQ050 IF PERS 1 GETS JOB TRAINING |
|  |  | P5HRTR_1 | P5 PEQ060 PERS 1 HR/WK SPEND ON TRAINING |
| P5EDUP2 | P5 PEQ010-060 HH PERSON POINTER 2 | P5NDEG_2 | P5 PEQ010 PERS 2 COMPLETED NEW DEGREE |
|  |  | P5DEGT_2 | P5 PEQ020 PERS 2 DEGREE TYPE COMPLETED |
|  |  | P5ENR_2 | P5 PEQ030 PERS 2 ENROLLED IN COURSES |
|  |  | P5FPT_2 | P5 PEQ040 PERS 2 COURSE FULL/PART TIME |
|  |  | P5TRN_2 | PR PEQ050 IF PERS 2 GETS JOB TRAINING |
|  |  | P5HTR_2 | PR PEQ060 PERS 2 HR/WK SPEND ON TRAINING |
| P5EMPP1 | P5 EMQ010-150 HH PERSON POINTER 1 | P5CHJB_1 | P5 EMQ010 PERS 1 CHNGD JOB SNC SPR 2000 |
|  |  | P5PAY_1 | P5 EMQ020 PERS 1 HAD PAID JOB LAST WEEK |
|  |  | P5VAC_1 | P5 EMQ030 IF PERS 1 ON LEAVE PAST WEEK |
|  |  | P5JOB_1 | P5 EMQ040 PERSON 1 NUMBER OF ALL JOBS |
|  |  | P5HRS_1 | P5 EMQ050 PERSON 1 HOURS/WK AT ALL JOBS |
|  |  | P5LOK_1 | P5 EMQ060 PERS 1 SOUGHT JOB LAST 4 WEEKS |
|  |  | P5DO1_1 | P5 EMQ070 PERS 1 CHKD W/PUB EMPL AGENCY |
|  |  | P5DO2_1 | P5 EMQ070 PERS 1 CHKD W/PRIV EMP AGENCY |
|  |  | P5DO3_1 | P5 EMQ070 PERS 1 CHKD W/EMPLOYER DIRECTLY |
|  |  | P5DO4_1 | P5 EMQ070 PERS 1 CHKD W/FRIENDS \& REL |
|  |  | P5DO5_1 | P5 EMQ070 PERS 1 PLACED OR ANSWERED ADS |
|  |  | P5DO6_1 | P5 EMQ070 PERS 1 READ WANT ADS |
|  |  | P5DO7_1 | P5 EMQ070 PERS 1 DID SOMETHING ELSE |
|  |  | P5DOW_1 | P5 EMQ080 WHAT PERSON 1 DOING LAST WEEK |
|  |  | P5TAK_1 | P5 EMQ100 PERS 1 JOB AVAILABLE LAST WEEK |
|  |  | P50CC_1 | P5 EMQ130-50 1ST PERSON OCCUPATION CODE |
| P5EMPP2 | P5EMQ010-150 HH PERSON POINTER 2 | P5CHJB_2 | P5 EMQ010 PERS2 CHNGD JOB SNC SPRING 2000 |
|  |  | P5PAY_2 | P5 EMQ020 PERS 2 HAD PAID JOB LAST WEEK |
|  |  | P5VAC_2 | P5 EMQ030 IF PERS 2 ON LEAVE PAST WEEK |
|  |  | P5JOB_2 | P5 EMQ040 PERSON 2 NUMBER OF ALL JOBS |
|  |  | P5HRS_2 | P5 EMQ050 PERSON 2 HOURS/WK AT ALL JOBS |
|  |  | P5LOK_2 | P5 EMQ060 PERS 2 SOUGHT JOB LAST 4 WEEKS |
|  |  | P5DO1_2 | P5 EMQ070 PERS 2 CHKD W/PUB EMPL AGENCY |
|  |  | P5DO2_2 | P5 EMQ070 PERS 2 CHKD W/PRIV EMP AGENCY |
|  |  | P5DO3_2 | P5 EMQ070 PERS 2 CHKD W/EMPLOYER DIRECTLY |
|  |  | P5DO4_2 | P5 EMQ070 PERS 2 CHKD W/FRIENDS \& REL |
|  |  | P5DO5_2 | P5 EMQ070 PERS 2 PLACED OR ANSWERED ADS |
|  |  | P5DO6_2 | P5 EMQ070 PERS 2 READ WANT ADS |
|  |  | P5DO7_2 | P5 EMQ070 PERS 2 DID SOMETHING ELSE |
|  |  | P5DOW_2 | P5 EMQ080 WHAT PERSON 2 DOING LAST WEEK |
|  |  | P5TAK_2 | P5 EMQ100 PERS 2 JOB AVAILABLE LAST WEEK |
|  |  | P5OCC_2 | P5 EMQ130-50 2ND PERSON OCCUPATION CODE | 1998-99 third grade data collection, school year 2001-02.

## 4. Social Scientists, Social Workers, Religious Workers, and Lawyers

This category includes occupations concerned with the social needs of people and in basic and applied research in the social sciences.
5. Teachers: College, University, and Other Postsecondary Institution; Counselors, Librarians, and Archivists

This 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.

## 6. 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).

## 7. Physicians, Dentists, and Veterinarians

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 chiropractors, hypnotherapists, and acupuncturists.
8. 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.

## 9. Writers, Artists, Entertainers, and Athletes

This 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 a competitor or player and administering and directing athletic programs.

## 10. 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 (LPNs), and other health technologists are included here.

## 11. Technologists and Technicians, except Health

This category 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.

## 12. 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.

## 13. Administrative Support Occupations, including Clerks

This category includes 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.

## 14. 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.

## 15. 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, animal products, plants, and products (crops and ornamental).

## 16. 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.

## 17. 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,
brick masons, stonemasons, carpenters, electricians, drywall installers, paperhangers and painters, etc. Extractive occupations include oil well drillers, mining machine operators, and so on.

## 18. 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.

## 19. 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.

## 20. 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.

## 21. 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 vehicle washers and equipment cleaners.

## 22. Unemployed, Retired, Disabled, or Unclassified Workers

This category includes persons who are unemployed, have retired from the work force, or are disabled. It also includes unclassified occupations that do not fit into the categories above (e.g., occupations that are strictly military, such as "tank crew member" and "infantryman").

### 7.5 Methodological Variables

To facilitate methodological research, eleven new variables were added to the third grade file. The identifiers for parent interview work area (F5PWKARE), parent interviewer (F5PINTVR), child
assessment work area (F5CWKARE), and child assessor (F5CASSOR) were extracted from the field management system.

Start and end times for both the child assessment (C5ASMSTM, C5ASMETM) and the parent interview (P5INTSTM, P5INTETM) were created from keystroke-by-keystroke records of each parent interview and child assessment. All four are text variables in the form $M M / D D / Y Y$ hour:minute:second AM/PM. It should be noted that there may be more than one attempt to complete an interview or assessment, and those attempts could span several days. For example, an interviewer could begin a parent interview on one evening and complete the remainder of the interview several days later. For this reason, variables to indicate the number of attempts necessary to complete the parent interview (P5ATTMPT) and the number of attempts necessary to complete the child assessment (C5APPMPT) have also been included on the file.

Finally, an indicator variable (F5PREFCV, Parent Interview Refusal Conversion) was created to flag cases that had, at any time, refused to respond to the parent interview but then agreed to participate. The values for F5PREFCV are 1=YES (refused but were converted to be a participant) and 2=NO (did not refuse).

### 7.6 Children Who Changed Schools

There are several variables in the file that can be used to determine if a child moved to a different school between rounds or moved to a different school during the third grade data collection period.

### 7.6.1 Children Who Changed Schools During Third Grade Data Collection

The variable S5_ID is a school identification number that indicates which school the child was in at the end of the third grade data collection. There is another school ID variable, S5_ST_ID, that indicates where the child was at the beginning of the round. By comparing school ID variables, users can determine whether the child physically moved from one school to another during round 5 . For the vast majority of the children these two variables will be identical, but for those who moved during the data collection period they will be different. If it was not known where the child was at the beginning or the
end of the round, the scheme shown in table 7-11 for assigning ID numbers was used. ${ }^{9}$ In previous rounds of the study, the code " 9994 " was used to indicate that the student was deceased. This code was not needed in third grade and thus does not appear on the spring-third grade file.

Table 7-11. Case status and school ID numbers for children not followed or located, spring-third grade: School year 2001-02

| Case status | School <br> identification <br> variables |
| :--- | ---: |
| Not in the United States. The student now lives outside the U.S. | 95 _ID/S5_ST_ID |
| Unlocatable. Field staff were unable to locate a transfer student in his/her new |  |
| school. |  |
| End of field period. Information on the transfer student's new school was identified |  |
| too late in the field period for the case to be re-fielded for the assessment. |  |
| Moved to nonsampled PSU. The transfer student enrolled in a school that was |  |
| outside of ECLS-K's sampled PSUs-field staff did not attempt to collect the |  |
| assessment but did attempt to collect the parent interview. |  |
| Do not follow. The transfer student was flagged by the statisticians as "do not |  |
| follow" because of subsampling of transfer students due to cost constraints. If the |  |
| child moved from his/her original school, field staff did not "follow" him or her to |  |
| the new school and did not collect a child assessment or parent interview. |  |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

In addition, there are other variables on the file that identify the origin of data for children who moved within the current round. These are helpful, for example, if a child changed schools within the 2001-02 school year and there are data from the first school the child attended (the starting school for the round, S5_ST_ID) but not the second school (the ending school for the round, S5_ID). The procedures for locating children within schools were as follows: Children's schools were identified at the beginning of the 2001-02 school year. If data collectors went to a school in the spring and found that a child was no longer there, the child was followed to his/her transfer school and data collection was attempted at the new school. If data were obtained from the new school, they were used. If data were not obtained and teacher or school data from the first school were available, those data were used.

[^9]The names and labels for the variables that can be used to determine whether data came from starting or ending schools are as follows:

| - | A5_T_ID | A5 TQA RESPONDING TEACHER ID |
| :--- | :--- | :--- |
| - | B5_T_ID | B5 TQB RESPONDING TEACHER ID |
| - | T5_T_ID | T5 TQC RESPONDING TEACHER ID |
| - | L5_S_ID | L5 SFS RESPONDING SCHOOL ID |
| - | S5_S_ID | S5 SAQ RESPONDING SCHOOL ID |
| - | K5_S_ID | K5 FACILITY CHECKLIST RESPONDING SCHL ID |
| - | D5_T_ID | D5 SPECIAL ED A RESPONDING TEACHER ID |
| - | E5_T_ID | E5 SPECIAL ED B RESPONDING TEACHER ID |
| - | U5_S_ID | U5 SRA RESPONDING SCHOOL ID |
| - | F5NOTEND | F5 SOME DATA FR OTHER THAN ENDING SOURCE |

The first 9 variables are instrument-specific ID numbers that indicate the school or teacher identification number from which the child or school data were obtained. For users interested in the source of the data for children who moved within the round, they should match the original school or teacher IDs with the first 9 instrument-specific IDs above to determine if the data for a given instrument were collected from the starting school or the ending school. The flag F5NOTEND can also be used to identify children for whom some data were from a school or teacher other than the ending school or ending teacher. There are 147 children with "F5NOTEND=TRUE" flags.

The following scenarios illustrate how these variables may appear in the files:

- Child has same starting and ending school. In this case, the data from the school and teachers are all from the same location and the 9 instrument-specific IDs above will match the appropriate ending school and teacher IDs. The "overall" IDs containing the correct end-of-round data are S5_ID (school), T5_ID (regular teacher), and D5T_ID (special education teacher). Thus, if the child had the same starting and ending school, S5_S_ID would match S5_ID; A5_T_ID, B5_T_ID, and T5_T_ID would match T5_ID, etc.
- Child has same starting and ending school, no data from either source. In this case, the school/teacher IDs will be from the ending school. The 9 instrument-specific IDs above will be system missing, as will the rest of the data from those instruments. For
instance, most children do not have a special education teacher. The special education data are all missing, including the Special Education A ID (D5_T_ID ) and the Special Education B ID (E5_T_ID). The same is true if there are no data from other sources, such as the teacher questionnaire A. If there were no hard-copy data (but there was a child assessment or parent interview), then all the hard-copy instrument data including the instrument IDs would be system missing.
- Child has different starting and ending schools, all data from ending school. The 9 instrument-specific school/teacher IDs above will be from the ending school.
- Child has different starting and ending schools, some data from ending school, some data from starting school. The school ID (S5_ID) or teacher ID will be from the ending school, and each of the 9 instrument-specific flags will indicate the ending school or the starting school depending on which school was the source of the instrument.
- Child has different starting and ending schools, ending school is unknown, child has a few instruments from starting school. If there is nonresponse from the ending school, S5_ID will be coded with a "999n" number described in table 7-11 to appropriately reflect the type of nonresponse. If there are instrument-specific data, the instrument IDs will be filled. If not, the instrument-specific IDs will be blank.
- Child has same starting and ending school. User is interested in whether there are special education data for the child. If there is no special education teacher, D5T_ID will be missing. If there is a special education teacher, D5T_ID will be filled. In either case, it should be noted that there could be missing data for special education data in the part B questionnaire. It is left to users to determine how they would like to set "Not Applicable" versus "Not Ascertained" codes for such combinations. For users interested in links to special education services, regardless of whether the source of the information was the starting or ending school, the composite variable F5SPECS that is based on information from the FMS system rather than the receipt of particular special education questionnaires can be used.


### 7.6.2 Children Who Changed Schools Between Rounds (R5DEST, R5R4SCHG)

Children moved between schools for a variety of reasons, but one factor was that a school terminated before the third grade and most of the students went to third grade at another particular school. This is known as a "destination school" and the move is known as a "destination move." Destination schools were schools for which it was determined (during a fall data collection conducted to locate children prior to the spring data collection) that at least four ECLS-K children would move into them from a school that ended before the third grade or a school that had closed. The variable on the file that indicates destination moves is R5DEST (moved to a spring-third grade destination school).

It should be noted that the destination school may also have been an originally sampled school; in this case, the school was a destination school only for the new students, not for the originally sampled students. The variable R5DEST was set to 1 (True) if a child made a school change and destination move to a spring-third grade destination school. If a child did not move to a spring-third grade destination school or did not move between schools at all, the composite is coded 0 (False). If the data are missing about whether the move was a destination move, the composite was coded -9 (Not Ascertained). If the child was schooled at home, the composite was coded as -1 (Not Applicable).

Another variable on the file that will be of interest to users examining school change is R5R4SCHG (school type change between spring-first grade and spring-third grade). It is used in the creation of R5DEST (R5R4SCHG must indicate a school change for R5DEST to be set to "1"). It indicates whether the child changed schools and, if so, what the school type was in the previous and new school (e.g., whether the change was from public to private school, private to private school, etc.). R5R4SCHG is created by comparing the school IDs from spring-first grade and spring-third grade for children who were in the spring-first grade data collection. A difference in IDs indicated a change. If there was no difference in ID's, R5R4SCHG was coded 1 (child did not change schools). For children who changed schools, the spring-first grade school type variable S4SCTYP was compared to the springthird grade school type variable S5SCTYP. Categories were assigned as appropriate ( $2=$ child transferred from public to public; 3 = child transferred from private to private; $4=$ child transferred from public to private; 5 = child transferred from private to public; and $6=$ child transferred, other). Category six was used for those children who transferred schools, but school type was unknown. Children who were not in the spring-first grade data collection were coded "Not Ascertained" on R5R4SCHG. Children who were home-schooled in spring-first grade or spring-third grade were coded "Not Applicable" for R5R4SCHG.

### 7.7 Composite Table

Table 7-12 describes the composite and derived variables that are on the ECLS-K child catalog. Please note that a few of the variables specified in the "derived from" column are intermediary variables that were not included in the final data sets. An example of an intermediary variable is the child gender variable from the parent questionnaire, CHILDGEN. If this variable was missing, or had conflicting information across rounds of the study, information about gender was used from the Field Management System (FMS) or child report. The variable CHILDGEN is not included in the final data set,
but the composite R5GENDER is included. Other intermediary variables are taken from either the FMS or the school master file and are not included on the data file.

The "derived from" column also contains the item numbers from the questionnaire, which help in identifying the items that were used in the creation of these composites. This information allows a user to decide if he or she would like to use the composite based on how it was defined.

Some variables in table 7-12 have been recoded or suppressed. Reasons for these data changes are discussed in section 7.8. The new recoded categories are noted for applicable variables in table 7-12.

### 7.8 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. For some of the variables, certain categories were modified. The value 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.

- Outliers are top- or bottom- coded to prevent identification of unique schools, teachers, parents, and children without affecting overall data quality.
- 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.
- Variables with too few cases and a sparse distribution are suppressed in the public-use files. The values for these variables were set to -2 and labeled "suppressed" in the ECB.
- For one group of variables, values were modified by "data swapping." This process removes a reported value and replaces it with a reported value from a different respondent for a subset of the records.

Table 7-12. Spring-third grade composite variables: School year 2001-02

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| R5AGE | Child | Child's age in months at the time the direct child assessment occurred | R5DOBMM, R5DOBDD, R5DOBYY (composites), assessment date (taken from assessment audit trails, variables not on file) | Recoded from a continuous variable to the following: <br> 1=Less than 105 <br> $2=105$ to less than 108 <br> $3=108$ to less than 111 <br> $4=111$ to less than 114 <br> $5=114$ to less than 117 <br> $6=117$ or more |
| R5GENDER | Child | Child's gender | CHILDGEN (INQ.016, not on file), FMS (variable not on file), INGENDER from child report (variable not on file), GENDER (composite from previous rounds) | 1=Male; 2=Female |
| R5DOBMM | Child | Child's date of birth month | DOBMM, CHILDDOB (not on file) from first data collection in which reported in parent interview, INDOB from child report (variable not on file), FMS date of birth variable (not on file) | 1-12 |
| R5DOBDD | Child | Child's date of birth day | DOBDD, CHILDDOB (not on file) from first data collection in which reported in parent interview, INDOB from child report (variable not on file), FMS date of birth variable (not on file) | 1-31 |
| R5DOBYY | Child | Child's date of birth year | DOBYY, CHILDDOB (not on file) from first data collection in which reported in parent interview, INDOB from child report (variable not on file), FMS date of birth variable (not on file) | Recoded from values of 1990-1995 to a minimum value of 1992 and a maximum value of 1993 |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| W3RACETH | Child | Race and ethnicity of the focal child | W1RACETH, WKRACETH (composites), RACE1, RACE2, RACE3, RACE4, RACE5, RACE6 (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) | 1=White, 2=Black or African American, 3=Hispanic, race specified, 4=Hispanic, no race specified, 5=Asian, 6=Native Hawaiian or other Pacific Islander, $7=$ American Indian or Alaska Native, $8=$ More than 1 race, nonHispanic |
| R5RACE | Child | Child race and ethnicity | W3RACETH, W1RACETH, WKRACETH, RACE from previous round (composites), C_RACE (FMS, not on file), HI_PSU (FMS, not on file) | 1=White, 2=Black or African American, 3=Hispanic, race specified, 4=Hispanic, no race specified, 5=Asian, 6=Native Hawaiian or other Pacific Islander, $7=$ American Indian or Alaska Native, $8=$ More than 1 race, nonHispanic |
| W3AMERIN | Child | Child is American Indian or Alaska Native | W1AMERIN, WKAMERIN (composites), RACE1, RACE2, RACE3, RACE4, RACE5, RACE6 (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) | $1=Y e s, 2=$ No |
| W3ASIAN | Child | Child is Asian | W1ASIAN, WKASIAN (composites), RACE1, RACE2, RACE3, RACE4, RACE5, RACE6 (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) | $1=$ Yes, 2=No |

[^10]Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from Values |
| :---: | :---: | :---: | :---: |
| W3BLACK | Child | Child is African American | W1BLACK, WKBLACK (composites), RACE1, 1=Yes, 2=No RACE2, RACE3, RACE4, RACE5, RACE6 <br> (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) |
| W3PACISL | Child | Child is Native Hawaiian or other Pacific Islander | W1PACISL, WKPACISL (composites), RACE1, $1=$ Yes, $2=$ No RACE2, RACE3, RACE4, RACE5, RACE6 <br> (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) |
| W3WHITE | Child | Child is White | W1WHITE, WKWHITE (composites), RACE1, $1=Y e s, 2=$ No RACE2, RACE3, RACE4, RACE5, RACE6 <br> (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) |
| W3MT1RAC | Child | Child is more than one race | W1MT1RAC, WKMT1RAC (composites), $1=\text { Yes, } 2=\mathrm{No}$ RACE1, RACE2, RACE3, RACE4, RACE5, RACE6 (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) |
| W3HISP | Child | Child is Hispanic | W1HISP, WKHISP (composites), RACE1, $1=\mathrm{Yes}, 2=\mathrm{No}$ RACE2, RACE3, RACE4, RACE5, RACE6 (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) |

[^11]Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| C5BMI | Child | Child’s spring-third grade body mass index | C5HEIGHT, C5WEIGHT (composites) | Continuous |
| C5HEIGHT | Child | Child's spring-third grade composite height | HEIGHTIN, HEIGHTI2 (not on file) | Continuous |
| C5WEIGHT | Child | Child's spring-third grade composite weight | CHILDWEI, CHILDWE2 (not on file) | Continuous |
| P5DISABL | Child | Child currently has a disability | P5DIAGNO (CHQ.050), P5PROFFD (CHQ.110), P5COMMU2 (CHQ.170), P5DIFFH3 (CHQ.210), P5VISIO2 (CHQ.300), P5RSVTSY (CHQ520), P5DIABEH (CHQ.335), P5DIAEMP (CHQ.360) | $1=Y e s, 2=$ No |
| P5CARNOW | Child | Focal child is currently receiving any nonparental care | P5RELNOW (CCQ.010), P5NRNOW (CCQ.150), P5CTRNOW (CCQ.260) | $1=Y e s, 2=$ No |
| P5HRSNOW | Child | Total number of hours per week the focal child currently spends in all nonparental child care | P5RHRS (CCQ.090), P5NHRS (CCQ.190), P5CHRS (CCQ.355), P5RELNOW (CCQ.010), P5RELNUM (CCQ.060), P5RHROTH (CCQ.140), P5NRNOW (CCQ.150), P5NRNUM (CCQ.165), P5NHROTH (CCQ.250), P5CTRNOW (CCQ.260), P5CTRNUM (CCQ.325), P5CHROTH (CCQ403), P5RWEEK (CCQ.080), P5NWEEK (CCQ.180), P5CWEEK (CCQ.340) | Continuous |
| P5NUMNOW | Child | Total number of all types of care arrangements the focal child currently has on a regular basis | P5RELNUM (CCQ.060), P5NRNUM (CCQ.165), P5CTRNUM (CCQ.325), P5RELNOW (CCQ.010), P5NRNOW (CCQ.150), P5CTRNOW (CCQ.260) | Continuous |

[^12]Table 7-12. Spring-third grade composite variables-Continued

|  | Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | P5PRIMNW | Child | Primary, regular, nonparental child care arrangement in which the child currently spends the most hours per week | P5HRSNOW (composite), P5RHRS (CCQ.090), P5NHRS (CCQ.190), P5RPLACE (CCQ.070), P5NPLACE (CCQ.170), P5CHRS (CCQ.355) | $0=$ No nonparental care, $1=$ Relative care in child's home, $2=$ Relative care in another home 3=Nonrelative care in child's home, $4=$ Nonrelative care in another home, $5=$ Center-based program, 6=2 or more programs, $7=$ Location of care varies |
| $\begin{aligned} & \text { V} \\ & \underset{\sim}{\prime} \end{aligned}$ | F5SPECS | Child | This variable indicates whether or not the child received special education services based on the presence or absence of a link to a special education teacher in the FMS. | T_ID and TYPE (FMS variables not on file) | 1 = Child got special education services <br> 2 = Child did not get special education services |
|  | U5RIEP | Child | This variable indicates whether or not the child has an Individualized Education Program (IEP) or Individualized Family Service Plan (IFSP) on record at his/her school or at another school according to information from the student record abstract. | U5IEP (Student Record Abstract item 8) | 1=Child has IEP/IFSP on record at his/her school or another school 2=Child does not have an IEP/IFSP |
|  | R5DEST | Child | Moved to spring-third grade destination school | DESTSCH (School Master file variable not on file), R5R4SCHG | $\begin{aligned} & 1=\text { Yes } \\ & 2=\text { No } \end{aligned}$ |
|  | R5R4SCHG | Child | School type change between spring-first grade and springthird grade | School ID, S5SCTYP, S4SCTYP, S3SCTYP, S2KSCTYP | 1=Child did not change schools <br> $2=$ Child transferred from public to public <br> $3=$ Child transferred from private to private <br> 4=Child transferred from public to private <br> 5=Child transferred from private to public <br> 6=Child transferred, other |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| R5ELIG | Child | Eligibility status of child | Child raw assessment status, ASSESSME (not on file) | 1=Eligible, 2=Ineligible, out of scope, $3=$ Ineligible, moved out of the country, 4=Ineligible, deceased, 5=Ineligible, mover not followed |
| C5ASMTST | Child | Child assessment status | C5RDGFLG, C5MTHFLG, C5SCIFLG, statistical flag SCORE_FG (not on file) | 1=Completely scorable assessment data, 2=Partially completed scorable assessment data, 3=Category not in use in round 5; 4=Child with disability, not assessed, 5=Nonrespondent |
| P5MOMID | Family/HH | Household roster number of resident mother, female guardian, or mother figure | P5REL_1 to P5REL_25 (FSQ.130), P5UNR_1 to P5UNR_25 (FSQ.180), P5SPOUSE <br> (FSQ.120), P5MOM_1 through P5MOM_25 (FSQ.140) | 1-25 |
| P5DADID | Family/HH | Household roster number of resident father, male guardian, or father figure | P5REL_1 to P5REL_25 (FSQ.130), P5UNR_1 to P5UNR_25 (FSQ.180), P5SPOUSE (FSQ.120), P5DAD_1 through P5DAD_25 (FSQ.150) | 1-25 |
| P5HPARNT | Family/HH | Classification of the focal child's parents who reside in the household | P5REL_1 through P5REL_25 (FSQ.130), P5UNR_1 through P5UNR_25 (FSQ.180), P5HMOM, P5HDAD (composites) | 1=Biological mother and biological father, 2=Biological mother and other 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) |

[^13]Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| P5HFAMIL | Family/HH | Family type categories using both parent and sibling information | P5REL_1 through P5REL_25 (FSQ.130), P5UNR_1 through P5UNR_25 (FSQ.180), P5HMOM, P5HDAD, P5NUMSIB (composites) | 1=Two parents and sibling(s), 2=Two parents, no siblings, $3=$ One parent and sibling(s), 4=One parent, no siblings, 5=Other |
| P5NUMSIB | Family/HH | Total number of siblings with whom the focal child lives, including anyone reporting him/herself as the child of the focal child's foster parent/guardian | P5REL_1 to P5REL_25 (FSQ.130) | Continuous |
| P5LESS18 | Family/HH | Total number of household members younger than 18 years old | HHNUMBER and HH18ANDOVER (parent interview flags not on file) | Continuous |
| P5OVER18 | Family/HH | Total number of household members age 18 or older | HH18ANDOVER (parent interview flags not on file) | Continuous |
| P5HTOTAL | Family/HH | Total number of household members | HHNUMBER (parent interview flag not on file) | Continuous |
| P5TWIN | Family/HH | Household has sampled twins | P5PER_1 to P5PER_25 (person type in FSQ roster) | $0=$ No twin in $\mathrm{HH}, 1=$ Twin in HH |
| W3POVRTY | Family/HH | Poverty indicator | P5HILOW (PAQ.100), P5INCCAT(PAQ.110), W3INCCAT, P5HTOTAL (composites), and Census-defined thresholds | 1=Below poverty threshold, 2=At or above poverty threshold |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| W3INCCAT | Family/HH | Household income | P5INCCAT(PAQ.110) | $\begin{aligned} & 1=\$ 5,000 \text { or less } \\ & 2=\$ 5,001 \text { to } \$ 10,000 \\ & 3=\$ 10,001 \text { to } \$ 15,000 \\ & 4=\$ 15,001 \text { to } \$ 20,000 \\ & 5=\$ 20,001 \text { to } \$ 25,000 \\ & 6=\$ 25,001 \text { to } \$ 30,000 \\ & 7=\$ 30,001 \text { to } \$ 35,000 \\ & 8=\$ 35,001 \text { to } \$ 40,000 \\ & 9=\$ 40,001 \text { to } \$ 50,000 \\ & 10=\$ 50,001 \text { to } \$ 75,000 \\ & 11=\$ 75,001 \text { to } \$ 100,000 \\ & 12=\$ 100,001 \text { to } \$ 200,000 \\ & 13=\$ 200,001 \text { or more } \end{aligned}$ |
| W3SESL | Family/HH | Socioeconomic scale | W3INCCAT, W3MOMED, W3DADED, W3MOMSCR, W3DADSCR (all composites) | Continuous |
| W3SESQ5 | Family/HH | Quintile indicator for W3SESL | W3SESL | $1=$ First quintile (lowest), $2=$ Second quintile, $3=$ Third quintile, $4=$ Fourth quintile, $5=$ Fifth quintile (highest) |
| W3PARED | Family/HH | Highest level of education for the child's parents or nonparental guardians who reside in the household. If only one parent or guardian resides in the household, W3PARED reflects that parent's education level. | W3MOMED, W3DADED (composites) | $1=8$ th grade or below, $2=9$ th to 12 th grades, <br> 3=High school diploma/equivalent, <br> $4=$ Voc/Tech program, 5=Some college, <br> 6=Bachelor's Degree, <br> 7=Graduate/professional school/no degree, <br> 8=Master's degree, 9=Doctorate or professional degree |

[^14]Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| W3MOMSCR | Family/HH | Mother, female guardian, or mother figure's occupation GSS prestige score | 1989 GSS prestige scores, EMQ. 120 (not on file), EMQ. 130 (not on file), and EMQ. 140 (not on file). | 29.6 Handler, Equip, Cleaner, Helpers, Labor; <br> 33.42 Production Working Occupation; 34.95 <br> Service Occupations; 35.63 Agriculture, <br> Forestry, Fishing Occupations; 35.78 <br> Marketing \& Sales Occupation; 35.92 <br> Transportation, Material Moving; 37.67 <br> Precision Production Occupation; 38.18 <br> Administrative Support, Including Clerk; <br> 39.18 Mechanics \& Repairs; 39.2 <br> Construction \& Extractive Occupations; <br> 48.69 Technologists, Except Health; 52.54 <br> Writers, Artists, Entertainers, Athletes; 53.5 <br> Executive, Admin, Managerial Occupation; <br> 57.83 Health Technologists \& Technicians; <br> 59 Social Scientist/Workers, Lawyers; 61.56 <br> Registered Nurses, Pharmacists; 62.87 <br> Natural Scientists \& Mathematicians; 63.43. <br> Teacher, Except Postsecondary; 64.89 <br> Engineers, Surveyors, \& Architects; 72.1 <br> Teachers; College, Postsecondary <br> Counselors, Librarians; 77.5 Physicians, <br> Dentists, Veterinarians |
| P5HDAD | Family/HH | Indicates whether the birth, adoptive, step-, or foster father of the focal child resides in the household with the focal child | P5REL_1 through P5REL_25(FSQ.130), P5DAD_1 through P5DAD_25 (FSQ.150), P5UNR_1 through P5UNR_25 (FSQ.180), P5PARTNR (FSQ.110), P5SPOUSE (FSQ.120) | 1=Biological, 2=Adoptive, 3=Step, 4=Foster, 5=Partner, 6=Don't know type, 7= No resident father |
| P5HDAGE | Family/HH | Age of resident father, male guardian, or father figure | P5AGE_1 through P5AGE_25 (FSQ.030), P5DADID | Continuous |

[^15]Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| P5HDRACE | Family/HH | Race and ethnicity of the father, male guardian, or father figure in the household | RACE1, RACE2, RACE3, RACE4, RACE5, RACE6 (variables coded in parent interview based on P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)) | 1=White, 2=Black or African American, 3=Hispanic, race specified, 4=Hispanic, no race specified, 5=Asian, 6=Native Hawaiian or other Pacific Islander, 7=American Indian or Alaska Native, $8=$ More than one race, nonHispanic |
| W3DADSCR | Family/HH | Father, male guardian, or father figure's occupation GSS prestige score | 1989 GSS prestige scores, EMQ.120, EMQ.130, and EMQ. 140 (not on file) | 29.6 Handler, Equip, Cleaner, Helpers, Labor; 33.42 Production Working Occupation; 34.95 Service Occupations; 35.63 Agriculture, Forestry, Fishing 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 <br> 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 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| W3DADED | Family/HH | The father, male guardian, or father figure's highest level of education | P5HIG_1 through P5HIG_2 (PEQ.020), P5HIS_1 through P5HIS_2 (PEQ.030), P5NDEG_1 through P5NDEG_2 (PEQ.010) | $1=8$ th grade or below, $2=9$ th to 12th grades, <br> 3=High school diploma/equivalent, <br> $4=$ Voc/Tech program, 5=Some college, <br> 6=Bachelor's Degree, <br> 7=Graduate/professional school/no degree, 8=Master's degree, 9=Doctorate or professional degree |
| P5HDEMP | Family/HH | The work status of the father, male guardian, or father figure in the household. | P5HRS_1,_2 (EMQ.050), P5PAY_1,_2 (EMQ.020), P5VAC_1, _2 (EMQ 030), P5LOK_1, _2 (EMQ.060), P5DO1_1,_2 (EMQ.070), P5DO2_1, _2 (EMQ.070), P5DO3_1,_2 (EMQ.070), P5DO4_1,_2 (EMQ.070), P5DO5_1, _2 (EMQ.070), P5DO61, _2 (EMQ.070), P5D07_1, _2 (EMQ.070), P5CHJB_1, _2 (EMQ.010) | $1=35$ hours or more per week, $2=$ Less than 35 hours per week, $3=$ Looking for work, $4=$ Not in the labor force |
| P5DADOCC | Family/HH | Father, male guardian, or father figure's occupation | Combination of P5CHJB_1, _2 (EMQ.010), EMQ.120, EMQ.130, and EMQ. 140 (not on file) | 01 Executive, Admin, Managerial Occupation 02 Engineers, Surveyors, \& Architects 03 Natural Scientists \& Mathematicians 04 Social Scientists/Workers, Lawyers 05 University Teachers, Postsecondary Counselors, Librarians <br> 06 Teachers, except postsecondary 07 Physicians, Dentists, Veterinarians 08 Registered Nurses, Pharmacists 09 Writers, Artists, Entertainers, Athletes 10 Health Technologists \& Technicians <br> 11 Technologists, except Health <br> 12 Marketing \& Sales Occupation <br> 13 Administrative Support, incl. Clerk <br> 14 Service Occupations <br> 15 Agriculture, Forestry, Fishing |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| P5DADOCC <br> (continued) | Family/ HH | Father, male guardian, or father figure's occupation | Combination of P5CHJB_1, _2 (EMQ.010), EMQ.120, EMQ.130, and EMQ. 140 (not on file) | 16 Mechanics \& Repairs <br> 17 Construction \& Extractive Occupations <br> 18 Precision Production Occupation <br> 19 Production Working Occupation <br> 20 Transportation, Material Moving <br> 21 Handler, Equip, Cleaner, Helpers, Labor <br> 22 Unemployed or Retired |
| P5HMOM | Family/HH | Indicates whether the birth, adoptive, step-, or foster mother of the focal child resides in the household with the focal child | P5REL_1 through P5REL_25(FSQ.130), P5MOM_1 through P5MOM_25 (FSQ.140), P5UNR_1 through P5UNR_25 (FSQ.180), P5PARTNR (FSQ.110), P5SPOUSE (FSQ.120) | 1=Biological, 2=Adoptive, 3=Step, 4=Foster, 5=Partner, 6=Don't know type, 7=No resident mother |
| P5HMAGE | Family/HH | Age of resident mother, female guardian, or mother figure | P5AGE_1 through P5AGE_25 (FSQ.030), P5MOMID | Continuous |
| P5HMRACE | Family/HH | Race and ethnicity of the mother, female guardian, or mother figure in the household | RACE1, RACE2, RACE3, RACE4, RACE5, RACE6 (These variables are coded in parent interview-see W3RACETH specs for details. The original race variables are P5RC1_1 through P5RC6_1 up to P5RC1_25 through P5RC6_25 (FSQ.195), and P5HSP_1 through P5HSP_25 (FSQ.190)). | 1=White, 2=Black or African American, 3=Hispanic, race specified, 4=Hispanic, no race specified, 5=Asian, 6=Native Hawaiian or other Pacific Islander, 7=American Indian or Alaska Native, $8=$ More than one race, nonHispanic |
| W3MOMED | Family/HH | Mother, female guardian, or mother figure's highest level of education | P5HIG_1 through P5HIG_2 (PEQ.020), P5HIS_1 through P5HIS_2 (PEQ.030), P5NDEG_1 through P5NDEG_2 (PEQ.010) | $1=8$ th grade or below, $2=9$ th to 12 th grades, <br> 3=High school diploma/equivalent, <br> 4=Voc/Tech program, 5=Some college, <br> 6=Bachelor's Degree, <br> 7=Graduate/professional school/no degree, 8=Master's degree, 9=Doctorate or professional degree |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| P5HMEMP | Family/HH | The work status of the mother, female guardian, or mother figure in the household | P5HRS_1, _2 (EMQ.050), P5PAY_1,_2 (EMQ.020), P5VAC_1, _2 (EMQ 030), P5LOK_1, _2 (EMQ.060), P5DO1_1,_2 (EMQ.070), P5DO2_1, _2 (EMQ.070), P5DO3_1, _2 (EMQ.070), P5DO4_1,_2 (EMQ.070), P5DO5_1, _2 (EMQ.070), P5DO61, _2 (EMQ.070), P5D07_1, _2 (EMQ.070), P5CHJB_1, _2 (EMQ.010) | 1=35 hours or more per week, 2=Less than 35 hours per week, $3=$ Looking for work, $4=$ Not in the labor force |
| P5MOMOCC | Family/HH | Mother, female guardian, or mother figure's occupation | Combination of P5CHJB_1, _2, EMQ.010, EMQ.120, EMQ.130, and EMQ. 140 (not on file) | 01 Executive, Admin, Managerial Occupation 02 Engineers, Surveyors, \& Architects 03 Natural Scientists \& Mathematicians 04 Social Scientists/Workers, Lawyers 05 University Teachers, Postsecondary Counselors, Librarians <br> 06 Teachers, except postsecondary 07 Physicians, Dentists, Veterinarians; 08 Registered Nurses, Pharmacists 09 Writers, Artists, Entertainers, Athletes 10 Health Technologists \& Technicians <br> 11 Technologists, except Health <br> 12 Marketing \& Sales Occupation <br> 13 Administrative Support, including Clerk <br> 14 Service Occupations <br> 15 Agriculture, Forestry, Fishing Occupations <br> 16 Mechanics \& Repairs <br> 17 Construction \& Extractive Occupations <br> 18 Precision Production Occupation <br> 19 Production Working Occupation <br> 20 Transportation, Material Moving <br> 21 Handler, Equip, Cleaner, Helpers, Labor <br> 22 Unemployed or Retired |

[^16]Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| P5ABSDAD | Family/ HH | Type of nonresident father | P5REL_1 through P5REL_25 (FSQ.130), P5CTP_N1, P5CTP_N2, P5CTP_N3, P5CTP_N4 (all from item NRQ.100) | 1=Biological only, 2=Both biological and adoptive |
| P5ABSMOM | Family/HH | Type of nonresident mother | P5REL_1 through P5REL_25 (FSQ.130), P5CTP_N1, P5CTP_N2, P5CTP_N3, P5CTP_N4 (all from item NRQ.100) | 1=Biological only, 2=Both biological and adoptive |
| P5FSRAW | Family/HH | Household food security raw score, a simple count of the number of food security items affirmed by the parent | P5WORRFD (FDQ.130A), P5FDLAST (FDQ.130B), P5BLMEAL (FDQ.130C), P5LOWCST (FDQ.130D), P5NOBAL (FDQ.130E), P5CANTAF (FDQ.130F), P5EVCUT2 (FDQ.140), P5EVCUT (FDQ.150), P5EATLES (FDQ.160), P5HUNGRY (FDQ.170), P5LOSEWT (FDQ.180), P5NOTEAT (FDQ.190), P5NOTEA2 (FDQ.200), P5CUTML (FDQ.210), P5CHSKIP (FDQ.220), P5OFTCUT (FDQ.230), P5CHIEVR (FDQ.240), P5NOMONY (FDQ.250) | Continuous |
| P5FSSCAL | Family/HH | Household food security scale score. This is a measure of the severity of food insecurity or hunger experienced in the household in the previous 12 months. | P5WORRFD (FDQ.130A), P5FDLAST (FDQ.130B), P5BLMEAL (FDQ.130C), P5LOWCST (FDQ.130D), P5NOBAL (FDQ.130E), P5CANTAF (FDQ.130F), P5EVCUT2 (FDQ.140), P5EVCUT (FDQ.150), P5EATLES (FDQ.160), P5HUNGRY (FDQ.170), P5LOSEWT (FDQ.180), P5NOTEAT (FDQ.190), P5NOTEA2 (FDQ.200), P5CUTML (FDQ.210), P5CHSKIP (FDQ.220), P5OFTCUT (FDQ.230), P5CHIEVR (FDQ.240), P5NOMONY (FDQ.250) | Continuous |

[^17]Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| P5FSSTAT | Family/HH | A categorical measure of household food security status that identifies households as food secure, food insecure without hunger, food insecure with hunger (moderate), and food insecure with hunger (severe) | P5WORRFD (FDQ.130A), P5FDLAST (FDQ.130B), P5BLMEAL (FDQ.130C), P5LOWCST (FDQ.130D), P5NOBAL (FDQ.130E), P5CANTAF (FDQ.130F), P5EVCUT2 (FDQ.140), P5EVCUT (FDQ.150), P5EATLES (FDQ.160), P5HUNGRY (FDQ.170), P5LOSEWT (FDQ.180), P5NOTEAT (FDQ.190), P5NOTEA2 (FDQ.200), P5CUTML (FDQ.210), P5CHSKIP (FDQ.220), P5OFTCUT (FDQ.230), P5CHIEVR (FDQ.240), P5NOMONY (FDQ.250) | 1=Food secure; 2=Food insecure without hunger; 3=Food insecure with hunger (moderate); 4=Food insecure with hunger (severe) |
| P5FSCHRA | Family/HH | Children's food security raw score, a simple count of the number of child-referenced food security items affirmed by the parent | P5LOWCST (FDQ.130D), P5NOBAL (FDQ.130E), P5CANTAF (FDQ.130F), P5CUTML (FDQ.210), P5CHSKIP (FDQ.220), P5OFTCUT (FDQ.230), P5CHIEVR (FDQ.240), P5NOMONY (FDQ.250) | Continuous |
| P5FSCHSC | Family/HH | Children's food security scale score. This is a measure of the severity of food insecurity or hunger experienced by children in the household in the previous 12 months. | P5LOWCST (FDQ.130D), P5NOBAL (FDQ.130E), P5CANTAF (FDQ.130F), P5CUTML (FDQ.210), P5CHSKIP (FDQ.220), P5OFTCUT (FDQ.230), P5CHIEVR (FDQ.240), P5NOMONY (FDQ.250) | Continuous |
| P5FSCHST | Family/HH | A categorical measure of children's food security status that identifies households with hunger among children at some time during the 12 months prior to the survey | P5LOWCST (FDQ.130D), P5NOBAL (FDQ.130E), P5CANTAF (FDQ.130F), P5CUTML (FDQ.210), P5CHSKIP (FDQ.220), P5OFTCUT (FDQ.230), P5CHIEVR (FDQ.240), P5NOMONY (FDQ.250) | 1=Food secure or food insecure without hunger among children; 2=Food insecure with hunger among children |
| P5RESID | Family/HH | Household roster number of respondent | P5PER_1 to P5PER_25 (parent interview household roster person type) | 1-25 |

See note at end of table.

Table 7-12. Spring-third grade composite variables-Continued


Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| A5CLSZ | Teacher | Number of students in class | A5TOTRA(TQA Q4), A5TOTAG(TQA Q3), A5BOYS, A5GIRLS (TQA Q5) | Recoded from a continuous variable to a minimum value of 10 and a maximum value of 31 |
| A5PLEP | Teacher | Percentage of limited English proficient children in the class | A5TOTLA (TQA Q14), A5LEP (TQA Q16), A5NUMLE (TQA Q17), A5CLSZ (composite) | Recoded from values of 0-100 to the following: <br> $1=$ Less than $1 \%$ <br> $2=1 \%$ to less than $5 \%$ <br> $3=5 \%$ to less than $10 \%$ <br> $4=10 \%$ to less than $25 \%$ <br> $5=25 \%$ or more |
| A5PBLK | Teacher | Percent of Blacks in class-child-level data | A5BLACK (TQA item Q4c), A5CLSZ (composite) | Recoded from values of 0-100 to the following: <br> 1=Less than 1\% <br> $2=1 \%$ to less than $5 \%$ <br> $3=5 \%$ to less than $10 \%$ <br> $4=10 \%$ to less than $25 \%$ <br> $5=25 \%$ or more |
| A5PHIS | Teacher | Percent of Hispanics in class-child-level data | A5HISP (TQA item Q4b), A5CLSZ (composite) | Recoded from values of 0-100 to the following: <br> $1=$ Less than $1 \%$ <br> $2=1 \%$ to less than $5 \%$ <br> $3=5 \%$ to less than $10 \%$ <br> $4=10 \%$ to less than $25 \%$ <br> $5=25 \%$ or more |
| A5PMIN | Teacher | Percent of minorities in class-child-level data | A5ASIAN, A5HISP, A5BLACK, A5AMRIN, A5RACEO (TQA items Q4a, b, c, e, f), A5CLSZ (composite) | Recoded from values of 0-100 to the following: $1=$ Less than $10 \%$ <br> $2=10 \%$ to less than $25 \%$ <br> $3=25 \%$ to less than $50 \%$ <br> $4=50 \%$ to less than $75 \%$ <br> $5=75 \%$ or more |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| A5TQUEX | Teacher flag | Presence of spring-third grade TQA data | Receipted TQAs in the FTS | $0=$ False, 1=True |
| B5TQUEX | Teacher flag | Presence of spring-third grade TQB data | Receipted TQBs in the FTS | $0=$ False, $1=$ True |
| T5TQCDAT | Teacher flag | Presence of spring-third grade TQC data | Receipted TQCs in the FTS | $0=$ False, $1=$ True |
| D5SETQA | Teacher flag | Presence or Absence of Special Ed A data | Receipted special education instrument A's in the FTS | Changed from values of $0=$ False, $1=$ True to a suppressed variable |
| E5SETQB | Teacher flag | Presence or Absence of Special Ed B data | Receipted special education instrument B's in the FTS | Changed from values of $0=$ False, $1=$ True to a suppressed variable |
| R5REGION | School | Indicates the geographic region of the child's school | CREGION, R3REGION, R4REGION (composites), CCP and PSS files | 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 |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| R5URBAN | School | Location type for school-7 category version | KURBAN, R3URBAN, R4URBAN (composites), CCD and PSS files | 1=Large city - a central city of Consolidated Metropolitan Statistical Area (CMSA) with a pop. greater than or equal to 250,000; 2=Midsize city - a central city of a CMSA or Metropolitan Statistical Area (MSA) with a pop. Less than 250,000; 3= Large suburb; 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 U.S. Census Bureau; 4 = Mid-size suburb; urban fringe of mid-size city - any incorporated place, Census Designated Place, or nonplace territory within a CMSA or MSA of a midsize city and defined as urban by the U.S. Census Bureau; 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 U.S. Census Bureau |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| R5LOCALE | School | Location type for school-8 category version | R3LOCALE, R4LOCALE (composites), PSS and CCD files | 1=Large city - a central city of Consolidated Metropolitan Statistical Area (CMSA) with a pop. greater than or equal to 250,000; 2=Midsize city - a central city of a CMSA or Metropolitan Statistical Area (MSA) with a pop. Less than 250,000; 3= Large suburb; 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 U.S. Census Bureau; 4 = Mid-size suburb; urban fringe of mid-size city - any incorporated place, Census Designated Place, or nonplace territory within a CMSA or MSA of a midsize city and defined as urban by the U.S. Census Bureau; 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; $7=$ non-MSA Rural - any incorporated place, Census Designated Place, or nonplace territory designated as rural by the U.S. Census Bureau that is not within a MSA; $8=$ MSA Rural - any incorporated place, Census Designated Place, or nonplace territory designated as rural by the U.S. Census Bureau that is within a MSA |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| S5SCTYP | School | School type from the school fact sheet | L5PUBLIC (SFS Q2), L5CATHOL, L5OTHREL, L5NAISKL, L5OTHPRI, L5PVTSPD, L5PVTEAR (all SFS Q4), CS_TYPE2, S4SCTYP, S3SCTYP, S2KSCTYP (composites), SCHL_TYP (School Master file variable derived from PSS/CCD, not on file) | 1=Catholic, 2=Other Religious, 3=Other Private, 4=Public |
| S5PUPRI | School | Public or private school | S5SCTYP (composite) | 1=Public, 2=Private |
| S5ENRLT | School | Total school third grade enrollment | PSS and CCD data | Recoded from a continuous variable to the following: $1=0-20$ $2=21-40$ $3=41-60$ $4=61-80$ $5=81-100$ $6=101-120$ $7=121-140$ $8=141-160$ $9=161-180$ <br> $10=$ More than 180 |
| S5ENRLS | School | Total school enrollment | S5ANUMCH (SAQ Q1), PSS and CCD data | $1=0-149$ students; $2=150-299$ students; $3=300-499$ students; 4=500-749 students; 5= 750 and above students |
| S5MINOR | School | Percentage of minority students in school | PMINOR (School Master File variable derived from PSS/CCD, not on file), S5ASNPCT, S5HISPPCT, S5BLKPCT, S5INDPCT, S5OTHPCT (all from SAQ Q3) | Recoded from values of 0-100 to the following: <br> 1=Less than 10\% <br> $2=10 \%$ to less than $25 \%$ <br> $3=25 \%$ to less than $50 \%$ <br> 4=50\% to less than 75\% <br> $5=75 \%$ or more |

Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| S5FLNCH | School | Percentage of students eligible for free lunch in school | S5ELILNC (SAQ Q13), S5ANUMCH(SAQ Q1), CCD data | Recoded from values of $0-100$ to values of 0 to 95 |
| S5RLNCH | School | Percent of students eligible for reduced price lunch in school | S5ELIRED (SAQ Q13), S5ANUMCH (SAQ Q1), CCD data | Recoded from values of 0-100 to the following: <br> $1=$ Less than $1 \%$ <br> $2=1 \%$ to less than $5 \%$ <br> 3=5\% to less than 10\% <br> $4=10 \%$ to less than $25 \%$ <br> $5=25 \%$ or more |
| S5SCLVL | School | School instructional level from school fact sheet | L5PRKNDR, L5KINDER, L5GRADE1, L5SECOND, L5THIRD, L5FOURTH, L5FIFTH, L5SIXTH, L57TH, L58TH, L5NINTH, L5TENTH, L511TH, L512TH (all from SFS Q1); S4SCLVL, S2SCLVL, GRSPAN (School Master file variable derived from PSS/CCD, not on file) | 1=Less than first grade; 2=Primary school, 3=Elementary school, 4=Combined school |
| S5SCINC | School | Poverty level of school-50\% or more students eligible for free or reduced-price lunch | S5PUPRI, S5FLNCH, S5RLNCH (composites), S5TT1SW (SAQ Q15), CCD data for free/reduced price lunch and school-wide Title 1 Status | $1=50 \%$ or more low-income children $2=$ Less than $50 \%$ low-income children |
| L5SCHBDD | School | L5 School Year Starting Date, Day | L5SYRSDD (SFS Q5), FMS (variable not on file) | Changed from values of 1-31 to a suppressed variable |
| L5SCHBMM | School | L5 School Year Starting Date, Month | L5SYRSMM (SFS Q5), FMS (variable not on file) | Changed from values of 1-12 to a suppressed variable |
| L5SCHBYY | School | L5 School Year Starting Date, Year | L5SYRSYY (SFS Q5), FMS (variable not on file) | Changed from values of 2001-02 to a suppressed variable |

[^18]Table 7-12. Spring-third grade composite variables-Continued

| Variable name | Category | Description | Derived from | Values |
| :---: | :---: | :---: | :---: | :---: |
| L5SCHEDD | School | L5 School Year Ending Date, Day | L5SYREDD (SFS Q5), FMS (variable not on file) | Changed from values of 1-31 to a suppressed variable |
| L5SCHEMM | School | L5 School Year Ending Date, Month | L5SYREMM (SFS Q5), FMS (variable not on file) | Changed from values of 1-12 to a suppressed variable |
| L5SCHEYY | School | L5 School Year Ending Date, Year | L5SYREYY (SFS Q5), FMS (variable not on file) | Changed from values of 2001-02 to a suppressed variable |
| F5YRRND | School | Year round school | S_YRRNDFLG (FMS variable not on file) | $1=$ Year round school, $2=$ Not year round school |
| K5INFAC | School flag | Presence or absence of facilities checklist data | Receipted facilities checklists in the FTS | 0=False, 1=True |
| S5INSAQ | School flag | Presence or absence of SAQ data | Receipted SAQs in the FTS | $0=$ False, 1=True |
| L5INSFS | School flag | Presence of School Fact Sheet data | Receipted school facts sheets in the FTS | $0=$ False, $1=$ True |
| U5SRABS | School flag | Presence of spring-third grade SRA data | Receipted student record abstracts in the FTS | Changed from values of $0=$ False, $1=$ True to a suppressed variable |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

- 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, "These 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, "These data suppressed for respondent confidentiality" and all values for the variable are set to equal -2 for that variable.

Table 7-13 presents the list of the masked variables. The table displays the variable name, variable label, and the comment displayed in the electronic code book indicating if the variable was recoded or suppressed. The table is sorted sequentially by the variable Field ID (see section 8.3.1.1 for how to use the variable Field ID.)

All variables from the special education teacher questionnaire part A (i.e., all variables with the prefix D5), from the special education teacher questionnaire part B (i.e., all variables with the prefix E5), and from the student record abstract (i.e., all variables with the prefix U5) have been suppressed in the third grade public-use file. Included in this group of suppressed variables are all teacher and school identifiers, which have last two characters "ID" and prefix D5, E5, or U5. For brevity, these variables are not included in table 7-13.

Table 7-13. Recoded and suppressed data on the ECLS-K Third-Grade Public-Use Data Fill: School year 2001-02

| Field ID | Variable | Field Label | Comment |
| :---: | :---: | :---: | :---: |
| 26 | CS_TYPE2 | TYPE OF SCHOOL IN BASE YEAR SAMPLE FRAME | These data recoded for respondent confidentiality. |
| 28 | R5URBAN | R5 LOCATION TYPE - 7 CATEGORIES | These data recoded for respondent confidentiality. |
| 29 | R5LOCALE | R5 LOCATION TYPE - 8 CATEGORIES | These data suppressed for respondent confidentiality. |
| 31 | R5FIPSST | R5 SCHOOL FIPS STATE CODE | These data suppressed for respondent confidentiality. |
| 32 | R5FIPSCT | R5 SCHOOL FIPS COUNTY CODE | These data suppressed for respondent confidentiality. |
| 33 | R5CCDLEA | R5 CCD LEA\SCHOOL DIST ID (PUBLIC) | These data suppressed for respondent confidentiality. |
| 34 | R5CCDSID | R5 CCD SCHOOL ID (PUBLIC) | These data suppressed for respondent confidentiality. |
| 35 | R5STSID | R5 STATE SCHOOL ID (PUBLIC) | These data suppressed for respondent confidentiality. |
| 36 | R5SCHZIP | R5 SCHOOL ZIP CODE | These data suppressed for respondent confidentiality. |
| 37 | R5SCHPIN | R5 SCHOOL PIN (PRIVATE) | These data suppressed for respondent confidentiality. |
| 40 | R5DOBYY | R5 CHILD COMPOSITE DOB YEAR | These data recoded for respondent confidentiality. |
| 43 | R5AGE | R5 COMPOSITE CHILD ASSESSMENT AGE(MNTHS) | These data recoded for respondent confidentiality. |
| 278 | A5CLSZ | A5 NUMBER OF STUDENTS IN CLASS | These data recoded for respondent confidentiality. |
| 279 | A5PBLK | A5 PERCENT OF BLACKS IN CLASS | These data recoded for respondent confidentiality. |
| 280 | A5PHIS | A5 PERCENT OF HISPANICS IN CLASS | These data recoded for respondent confidentiality. |
| 281 | A5PMIN | A5 PERCENT OF MINORITIES IN CLASS | These data recoded for respondent confidentiality. |
| 282 | A5PLEP | A5 PERCENT OF LEP STUDENTS IN CLASS | These data recoded for respondent confidentiality. |
| 284 | L5SCHBMM | L5 SCHOOL YEAR BEGINNING DATE MONTH | These data suppressed for respondent confidentiality. |
| 285 | L5SCHBDD | L5 SCHOOL YEAR BEGINNING DATE DAY | These data suppressed for respondent confidentiality. |
| 286 | L5SCHBYY | L5 SCHOOL YEAR BEGINNING DATE YEAR | These data suppressed for respondent confidentiality. |
| 287 | L5SCHEMM | L5 SCHOOL YEAR ENDING DATE MONTH | These data suppressed for respondent confidentiality. |
| 288 | L5SCHEDD | L5 SCHOOL YEAR ENDING DATE DAY | These data suppressed for respondent confidentiality. |
| 291 | S5ENRLT | S5 TOTAL SCHOOL THIRD GRADE ENROLLMENT | These data recoded for respondent confidentiality. |
| 292 | S5ENRLS | S5 TOTAL SCHOOL ENROLLMENT | These data recoded for respondent confidentiality. |
| 293 | S5MINOR | S5 PERCENT MINORITY STUDENTS | These data recoded for respondent confidentiality. |
| 294 | S5FLNCH | S5 PCT FREE LUNCH ELIGIBLE STUDENTS | These data recoded for respondent confidentiality. |
| 295 | S5RLNCH | S5 PCT REDUCED LUNCH ELIGIBLE STUDENTS | These data recoded for respondent confidentiality. |
| 301 | C5INGRAD | C5 AIQ030 GRADE CHILD REPORTED | These data recoded for respondent confidentiality. |
| 302 | C5THIRD | C5 ACQ005 CHILD IN THIRD GRADE | These data suppressed for respondent confidentiality. |
| 313 | C5SPECAC | C5 ACQ270 SPECIAL ACCOMMODATION LISTED | These data suppressed for respondent confidentiality. |
| 329 | C5ATTMPT | C5 CHILD ASSESSMENT NUMBER OF ATTEMPTS | These data recoded for respondent confidentiality. |
| 330 | P5HOMZIP | P5 HOME ZIP CODE | These data suppressed for respondent confidentiality. |
| 741 | P5DIVSEP | P5 FSQ310A DIVORCE/SEPARATION IN FAMILY | These data suppressed for respondent confidentiality. |
| 742 | P5MARREM | P5 FSQ310B MARRIAGE/REMARRIAGE IN FAMILY | These data suppressed for respondent confidentiality. |
| 743 | P5PARDIE | P5 FSQ310C PARENT IN FAMILY DIED | These data suppressed for respondent confidentiality. |
| 745 | P5HOMELS | P5 FSQ310E FAMILY HOMELESS FOR A TIME | These data suppressed for respondent confidentiality. |
| 1089 | P5DGNATT | P5 CHQ060 1ST DIAGNOSIS-LEARNING ABILITY | These data suppressed for respondent confidentiality. |
| 1091 | P5YYDIAG | P5 CHQ075 YR AT 1ST DIAGNOSIS-LRN ABLTY | These data suppressed for respondent confidentiality. |
| 1095 | P5PROFFD | P5 CHQ110 IF ACTIVITY PROBLEM DIAGNOSED | These data suppressed for respondent confidentiality. |
| 1096 | P5DGNACT | P5 CHQ120 WHAT 1ST DIAGNOSIS - ACTIVITY | These data suppressed for respondent confidentiality. |
| 1098 | P5YYDIA2 | P5 CHQ135 YR AT 1ST DIAGNOSIS-ACTIVITY | These data suppressed for respondent confidentiality. |
| 1103 | P5YYDIA4 | P5 CHQ185 YEAR AT 1ST DIAGNOSIS-SPEECH | These data suppressed for respondent confidentiality. |
| 1108 | P5YYDIA5 | P5 CHQ225 YR AT 1ST DIAGNOSIS-HEARING | These data suppressed for respondent confidentiality. |
| 1109 | P5HEARS | P5 CHQ230 DEGREE OF CHILD'S DEAFNESS | These data suppressed for respondent confidentiality. |
| 1110 | P5HEARAI | P5 CHQ240 IF CHILD WEARS HEARING AID | These data suppressed for respondent confidentiality. |

See note at end of table.

Table 7-13. Recoded and suppressed data on the ECLS-K Third-Grade Public-Use Data File—Continued

| Field ID | Variable | Field Label | Comment |
| :---: | :---: | :---: | :---: |
| 1111 | P5COCHLE | P5 CHQ250 IF CHILD HAS COCHLEAR IMPLANTS | These data suppressed for respondent confidentiality. |
| 1112 | P5HEARS2 | P5 CHQ260 DEVICE EFFECT ON CHD'S HEARING | These data suppressed for respondent confidentiality. |
| 1117 | P5DIA6YY | P5 CHQ313 YR AT 1ST DIAGNOSIS-VISION | These data suppressed for respondent confidentiality. |
| 1118 | P5CORREC | P5 CHQ315 IF CHD'S VISION IS CORRECTABLE | These data suppressed for respondent confidentiality. |
| 1119 | P5BESTEY | P5 CHQ320 WHAT CAN CHILD BEST SEE | These data suppressed for respondent confidentiality. |
| 1123 | P5DIABEH | P5 CHQ335 BEHAVIOR PROBLEM DIAGNOSED | These data suppressed for respondent confidentiality. |
| 1124 | P5DGNBEH | P5 CHQ337 1ST DIAGNOSIS-BEHAVIOR | These data suppressed for respondent confidentiality. |
| 1126 | P5DGBEYY | P5 CHQ345 YR AT 1ST DIAGNOSIS-BEHAVIOR | These data suppressed for respondent confidentiality. |
| 1134 | P5SPECIL | P5 CHQ510 IF CHD USES SPECIAL EQUIPMENT | These data suppressed for respondent confidentiality. |
| 1140 | P5SPECND | P5 CHQ545 CHILD SPECIAL NEEDS/EDUCATION | These data suppressed for respondent confidentiality. |
| 1150 | P5HOSINJ | P5 CHQ692 HOSPITALIZED FOR INJURY | These data suppressed for respondent confidentiality. |
| 1280 | P5RECFRE | P5 WPQ215 DOES CHILD REC FREE REDUCED BF | These data suppressed for respondent confidentiality. |
| 1281 | P5FRERED | P5 WPQ216 FREE OR REDUCED BREAKFAST | These data suppressed for respondent confidentiality. |
| 1287 | P5HOWPAY | P5 PAQ137 HOW MUCH PAID IN TUITION (\$) | These data recoded for respondent confidentiality. |
| 1306 | A5UNGRAD | A5 Q1A TCH UNGRADED CLASS | These data suppressed for respondent confidentiality. |
| 1307 | A5T1ST | A5 Q1B TCH 1ST GRADE LEVEL | These data suppressed for respondent confidentiality. |
| 1308 | A5T2ND | A5 Q1C TCH 2ND GRADE LEVEL | These data suppressed for respondent confidentiality. |
| 1309 | A5T3RD | A5 Q1D INCLUDES 3RD GRADE | These data suppressed for respondent confidentiality. |
| 1310 | A5T4TH | A5 Q1E INCLUDES 4TH GRADE | These data suppressed for respondent confidentiality. |
| 1311 | A5T5TH | A5 Q1F INCLUDES 5TH GRADE | These data suppressed for respondent confidentiality. |
| 1312 | A5CLSORG | A5 Q2 CLASS ORGANIZED | These data recoded for respondent confidentiality. |
| 1313 | A57YRSLS | A5 Q3A \# 7 YEARS OLD OR LESS IN CLASS | These data recoded for respondent confidentiality. |
| 1314 | A58YROL | A5 Q3B HOW MANY 8-YEAR-OLDS IN CLASS | These data recoded for respondent confidentiality. |
| 1315 | A59YROL | A5 Q3C HOW MANY 9-YEAR-OLDS IN CLASS | These data recoded for respondent confidentiality. |
| 1316 | A510YROL | A5 Q3D How Many 10-YEAR-OLDS IN CLASS | These data recoded for respondent confidentiality. |
| 1317 | A511YRMO | A5 Q3E \# 11-YEAR OLDS \& OLDER IN CLASS | These data recoded for respondent confidentiality. |
| 1318 | A5totag | A5 Q3F TOTAL CLASS ENROLLMENT (AGE) | These data recoded for respondent confidentiality. |
| 1319 | A5ASIAN | A5 Q4A \# ASIAN/PACIFIC ISLANDERS | These data recoded for respondent confidentiality. |
| 1320 | A5HISP | A5 Q4B \# HISPANICS (ALL RACES) | These data recoded for respondent confidentiality. |
| 1321 | A5BLACK | A5 Q4C \# NON-HISPANIC BLACKS | These data recoded for respondent confidentiality. |
| 1322 | A5WHITE | A5 Q4D \# NON-HISPANIC WHITES | These data recoded for respondent confidentiality. |
| 1323 | A5AMRIN | A5 Q4E \# AMERICAN INDIANS | These data recoded for respondent confidentiality. |
| 1324 | A5RACEO | A5 Q4F \# OF STUDENTS OF OTHER RACES | These data recoded for respondent confidentiality. |
| 1325 | A5TOTRA | A5 Q4G TOTAL CLASS ENROLLMENT (RACES) | These data recoded for respondent confidentiality. |
| 1326 | A5BOYS | A5 Q5A NUMBER OF BOYS IN CLASS | These data recoded for respondent confidentiality. |
| 1327 | A5GIRLS | A5 Q5B NUMBER OF GIRLS IN CLASS | These data recoded for respondent confidentiality. |
| 1328 | A5ELFSBR | A5 Q6A ELIGIBLE FREE SCHOOL BREAKFAST | These data recoded for respondent confidentiality. |
| 1329 | A5ELRPBR | A5 Q6B ELIGIBLE REDUCED-PRICE BREAKFAST | These data recoded for respondent confidentiality. |
| 1330 | A5ELFSLU | A5 Q6C ELIGIBLE FREE SCHOOL LUNCH | These data recoded for respondent confidentiality. |
| 1331 | A5ELRPLU | A5 Q6D ELIGIBLE REDUCED-PRICE LUNCH | These data recoded for respondent confidentiality. |
| 1337 | A5GIFT | A5 Q9A \# CLASSIFIED AS GIFTED/TALENTED | These data recoded for respondent confidentiality. |
| 1338 | A5PRTGF | A5 Q9B \# TAKE PART IN GIFTED/TALENTED | These data recoded for respondent confidentiality. |
| 1339 | A5REPEAT | A5 Q9C \# REPEATING THIS GRADE | These data recoded for respondent confidentiality. |
| 1347 | A5DISAB | A5 Q11 NUMBER WITH DISABILITIES | These data recoded for respondent confidentiality. |
| 1348 | A5IMPAI | A5 Q12A COMMUNICATION IMPAIRMENTS | These data recoded for respondent confidentiality. |
| 1349 | A5LRNDI | A5 Q12B LEARNING DISABILITIES | These data recoded for respondent confidentiality. |
| 1350 | A5EMPRB | A5 Q12C SERIOUS EMOTIONAL PROBLEMS | These data recoded for respondent confidentiality. |
| 1351 | A5RETAR | A5 Q12D MENTAL RETARDATION | These data suppressed for respondent confidentiality. |

See note at end of table.

Table 7-13. Recoded and suppressed data on the ECLS-K Third-Grade Public-Use Data File—Continued

| Field ID | Variable | Field Label | Comment |
| :---: | :---: | :---: | :---: |
| 1352 | A5DELAY | A5 Q12E DEVELOPMENTAL DELAY | These data recoded for respondent confidentiality. |
| 1353 | A5VIS | A5 Q12F VISION IMPAIRMENTS | These data recoded for respondent confidentiality. |
| 1354 | A5HEAR | A5 Q12G HEARING IMPAIRMENTS | These data recoded for respondent confidentiality. |
| 1355 | A5ORTHO | A5 Q12H ORTHOPEDIC IMPAIRMENTS | These data recoded for respondent confidentiality. |
| 1356 | A5OTHER | A5 Q12I OTHER HEALTH IMPAIRMENTS | These data recoded for respondent confidentiality. |
| 1357 | A5MULTI | A5 Q12J MULTIPLE DISABILTIES | These data suppressed for respondent confidentiality. |
| 1358 | A5AUTSM | A5 Q12K AUTISM | These data suppressed for respondent confidentiality. |
| 1359 | A5TRAUM | A5 Q12L TRAUMATIC BRAIN INJURIES | These data recoded for respondent confidentiality. |
| 1360 | A5DEAF | A5 Q12M DEAFNESS AND BLINDNESS | These data suppressed for respondent confidentiality. |
| 1361 | A5OTDIS | A5 Q12N OTHER SPECIFY DISABILITIES | These data suppressed for respondent confidentiality. |
| 1362 | A5NCDIS | A5 Q12O NOT CLASSIFIED DISABILITIES | These data suppressed for respondent confidentiality. |
| 1363 | A5SPCIA | A5 Q13A SPECIAL DISABILITY SERVICES | These data recoded for respondent confidentiality. |
| 1364 | A5IEP | A5 Q13B IEP FOR CHILDREN W/ DISABILITY | These data recoded for respondent confidentiality. |
| 1365 | A5SC504 | A5 Q13C CHILDREN W/ SECTION 504 PLAN | These data recoded for respondent confidentiality. |
| 1369 | A5CASN | A5 Q15B STUDENTS SPEAK AN ASIAN LANGUAGE | These data suppressed for respondent confidentiality. |
| 1370 | A50TLNG | A5 Q15C STUDENTS SPEAK ANOTHER LNG | These data suppressed for respondent confidentiality. |
| 1371 | A5LANOS | A5 Q15C SPECIFY STUDENTS' OTHER LANG | These data suppressed for respondent confidentiality. |
| 1373 | A5NUMLE | A5 Q17 NUMBER LEP STUDENTS IN CLASS | These data recoded for respondent confidentiality. |
| 1374 | A5NOESL | A5 Q18A LEP STUDENTS GET NO ESL | These data recoded for respondent confidentiality. |
| 1375 | A5ESLRE | A5 Q18B LEP STUDENTS IN-CLASS ESL | These data recoded for respondent confidentiality. |
| 1376 | A5ESLOU | A5 Q18C LEP STUDENTS OUTSIDE ESL | These data recoded for respondent confidentiality. |
| 1377 | A5TENG | A5 Q19A TCHRS SPEAK ENGLISH | These data suppressed for respondent confidentiality. |
| 1379 | A5TASN | A5 Q19C TCHRS SPEAK AN ASIAN LANGUAGE | These data suppressed for respondent confidentiality. |
| 1380 | A5TOTLG | A5 Q19D TCHRS SPEAK ANOTHER LANGUAGE | These data suppressed for respondent confidentiality. |
| 1381 | A5LEPOS | A5 Q19D SPECIFY TCHRS OTHER LANGUAGE | These data suppressed for respondent confidentiality. |
| 1382 | A5IENG | A5 Q20A INSTRUCTION- ENGLISH | These data suppressed for respondent confidentiality. |
| 1383 | A5ISPNH | A5 Q20B INSTRUCTION - SPANISH | These data suppressed for respondent confidentiality. |
| 1384 | A5IASN | A5 Q20C INSTRUCTION - ASIAN LNG | These data suppressed for respondent confidentiality. |
| 1385 | A5IOTLN | A5 Q20D INSTRUCTION - OTHER LNG | These data suppressed for respondent confidentiality. |
| 1386 | A5LNGOS | A5 Q20D LANGUAGE OF INSTRUCTION-OTHER | These data suppressed for respondent confidentiality. |
| 1396 | A5COMPUT | A5 Q23A \# OF COMPUTERS IN CLASS | These data recoded for respondent confidentiality. |
| 1397 | A5INET | A5 Q23B \# OF COMPUTERS WITH INTERNET | These data recoded for respondent confidentiality. |
| 1398 | A5COMUSE | A5 Q23C \# OF COMPUTERS CHILDREN USE | These data recoded for respondent confidentiality. |
| 1670 | B5TGEND | B5 Q10 TEACHER'S GENDER | These data suppressed for respondent confidentiality. |
| 1671 | B5YRBORN | B5 Q11 TEACHER'S YEAR OF BIRTH | These data recoded for respondent confidentiality. |
| 1672 | B5HISP | B5 Q12 HISPANIC OR LATINO | These data suppressed for respondent confidentiality. |
| 1673 | B5RACE1 | B5 Q13A AMERICAN INDIAN OR ALASKA NATIVE | These data suppressed for respondent confidentiality. |
| 1674 | B5RACE2 | B5 Q13B ASIAN | These data suppressed for respondent confidentiality. |
| 1675 | B5RACE3 | B5 Q13C BLACK OR AFRICAN AMERICAN | These data suppressed for respondent confidentiality. |
| 1676 | B5RACE4 | B5 Q13D NATIVE HAWAIIAN OR OTHER PAC IS | These data suppressed for respondent confidentiality. |
| 1678 | B5YRSTC | B5 Q14 NUMBER YEARS BEEN SCHOOL TEACHER | These data recoded for respondent confidentiality. |
| 1679 | B5YRSGRA | B5 Q15 YEARS TAUGHT THIS GRADE | These data recoded for respondent confidentiality. |
| 1680 | B5YRSCH | B5 Q16 YRS TCHR TAUGHT AT THIS SCHOOL | These data recoded for respondent confidentiality. |
| 1681 | B5ASSIGN | B5 Q17 MAIN ASSIGNMENT AT SCHOOL | These data recoded for respondent confidentiality. |
| 1682 | B5HGHSTD | B5 Q18 HIGHEST ED LEVEL TEACHER ACHIEVED | These data recoded for respondent confidentiality. |
| 1714 | T5RLATCH | T5 Q1 READING/LANGUAGE ARTS TEACHER | These data suppressed for respondent confidentiality. |
| 1725 | T5MATCH | T5 Q1 MATHEMATICS TEACHER | These data suppressed for respondent confidentiality. |
| 1745 | T5SSTCH | T5 Q1 SOCIAL STUDIES TEACHER | These data suppressed for respondent confidentiality. |
| 1753 | T5GRADE | T5 Q1 GRADE CHILD ENROLLED | These data suppressed for respondent confidentiality. |

See note at end of table.

Table 7-13. Recoded and suppressed data on the ECLS-K Third-Grade Public-Use Data File-Continued

| Field ID | Variable | Field Label | Comment |
| :---: | :---: | :---: | :---: |
| 1759 | T5PLLESL | T5 Q3E PULL-OUT ESL PROGRAM | These data suppressed for respondent confidentiality. |
| 1760 | T5INCESL | T5 Q3F IN-CLASS ESL | These data suppressed for respondent confidentiality. |
| 1762 | T5GFTRD | T5 Q3H GIFTED PROGRAM IN READING | These data suppressed for respondent confidentiality. |
| 1763 | T5GFTMTH | T5 Q3I GIFTED PROGRAM IN MATHEMATICS | These data suppressed for respondent confidentiality. |
| 1766 | T5MENTOR | T5 Q3L MEET W/MENTOR NOT PROF PSYCH | These data suppressed for respondent confidentiality. |
| 1767 | T5BEFORE | T5 Q4A INSTR SERVICES BEFORE SCHOOL | These data suppressed for respondent confidentiality. |
| 1769 | T5WKEND | T5 Q4C INSTR SERVICES WEEKENDS | These data suppressed for respondent confidentiality. |
| 1773 | T5TT1ENG | T5 Q5C TITLE 1 ENGLISH/LANGUAGE ARTS | These data suppressed for respondent confidentiality. |
| 1774 | T5TT1CMB | T5 Q5D TITLE 1 COMBINED SUBJECTS | These data suppressed for respondent confidentiality. |
| 1775 | T5TT1ES | T5 Q5E TITLE 1 ESL/BILINGUAL | These data suppressed for respondent confidentiality. |
| 1776 | T5TT1SP | T5 Q5F TITLE 1 HANDICAPPED/SPECIAL ED | These data suppressed for respondent confidentiality. |
| 1783 | T5ACCOM | T5 Q10 SPECIAL TEST ACCOMMODATIONS | These data suppressed for respondent confidentiality. |
| 1785 | T5FLBHND | T5 Q12 FELL BEHIND DUE TO HEALTH | These data suppressed for respondent confidentiality. |
| 1787 | T5CHRDGP | T5 Q14 CHILDS PLACEMENT IN READING GRP | These data recoded for respondent confidentiality. |
| 1797 | T5LNGTM | T5 Q20 LENGTH OF TIME IN CLASSROOM | These data suppressed for respondent confidentiality. |
| 1798 | T5PROMOT | T5 Q21 RECOMMEND PROMOTION/YR END | These data suppressed for respondent confidentiality. |
| 1799 | T5SUMPRG | T5 Q22 IF RETAINED ELIG FOR SUMMER PROG | These data suppressed for respondent confidentiality. |
| 1803 | L5UNGRAD | L5 Q1A GRADE LEVEL-UNGRADED | These data suppressed for respondent confidentiality. |
| 1806 | L5KINDER | L5 Q1D GRADE LEVEL-KINDERGARTEN | These data suppressed for respondent confidentiality. |
| 1807 | L5GRADE1 | L5 Q1E GRADE LEVEL-FIRST GRADE | These data suppressed for respondent confidentiality. |
| 1808 | L5SECOND | L5 Q1F GRADE LEVEL-SECOND GRADE | These data suppressed for respondent confidentiality. |
| 1809 | L5THIRD | L5 Q1G GRADE LEVEL-THIRD GRADE | These data suppressed for respondent confidentiality. |
| 1810 | L5FOURTH | L5 Q1H GRADE LEVEL-FOURTH GRADE | These data suppressed for respondent confidentiality. |
| 1815 | L5NINTH | L5 Q1M GRADE LEVEL-NINTH GRADE | These data suppressed for respondent confidentiality. |
| 1816 | L5TENTH | L5 Q1N GRADE LEVEL-TENTH GRADE | These data suppressed for respondent confidentiality. |
| 1817 | L511TH | L5 Q1O GRADE LEVEL-ELEVENTH GRADE | These data suppressed for respondent confidentiality. |
| 1818 | L512TH | L5 Q1P GRADE LEVEL-TWELFTH GRADE | These data suppressed for respondent confidentiality. |
| 1820 | L5REGSKL | L5 Q3A IS IT REGULAR PUBLIC SCHOOL | These data suppressed for respondent confidentiality. |
| 1821 | L5MAGSKL | L5 Q3B IS IT A MAGNET SCHOOL | These data suppressed for respondent confidentiality. |
| 1823 | L5BIASKL | L5 Q3D IS IT A TRIBAL SCHOOL | These data suppressed for respondent confidentiality. |
| 1824 | L5SPEDSK | L5 Q3E IS IT A SPECIAL ED SCHOOL | These data suppressed for respondent confidentiality. |
| 1829 | L5PRIVRD | L5 Q4A4 IS IT A PRIVATE ORDER | These data suppressed for respondent confidentiality. |
| 1831 | L5NAISKL | L5 Q4C PRIVATE-ACCREDITED BY NAIS | These data suppressed for respondent confidentiality. |
| 1832 | L5OTHPRI | L5 Q4D IS IT OTHER PRIVATE | These data suppressed for respondent confidentiality. |
| 1833 | L5PVTSPD | L5 Q4E IS IT SPECIAL EDUCATION | These data suppressed for respondent confidentiality. |
| 1835 | L5SYRSMM | L5 Q5A SCH START MONTH | These data suppressed for respondent confidentiality. |
| 1836 | L5SYRSDD | L5 Q5B SCH START DAY | These data suppressed for respondent confidentiality. |
| 1837 | L5SYRSYY | L5 Q5C SCH START YEAR | These data suppressed for respondent confidentiality. |
| 1838 | L5SYREMM | L5 Q5D SCH END MONTH | These data suppressed for respondent confidentiality. |
| 1839 | L5SYREDD | L5 Q5E SCH END DAY | These data suppressed for respondent confidentiality. |
| 1841 | L5DAYSYR | L5 Q6 DAYS IN SCH YR | These data recoded for respondent confidentiality. |
| 1842 | L5ATNREC | L5 Q7 SCH KEEPS ATTENDANCE RECORDS | These data suppressed for respondent confidentiality. |
| 1845 | L5MM02 | L5 Q10A MONTH COMPLETED | These data suppressed for respondent confidentiality. |
| 1848 | S5ANUMCH | S5 Q1A \# ENROLLED AROUND 10/1/2001 | These data recoded for respondent confidentiality. |
| 1849 | S5BNUMCH | S5 Q1B \# ENROLLED SINCE 10/1/2001 | These data recoded for respondent confidentiality. |
| 1850 | S5CNUMCH | S5 Q1C \# WHO LEFT - DIDN'T RETURN | These data recoded for respondent confidentiality. |
| 1851 | S5ADA | S5 Q2 \% AVERAGE DAILY ATTENDANCE FOR YR | These data recoded for respondent confidentiality. |
| 1853 | S5ASNPCT | S5 Q3A PERCENT OF ASIAN STUDENTS | These data suppressed for respondent confidentiality. |
| 1855 | S5HSPPCT | S5 Q3B PERCENT OF HISPANIC STUDENTS | These data recoded for respondent confidentiality. |

See note at end of table.

Table 7-13. Recoded and suppressed data on the ECLS-K Third-Grade Public-Use Data File—Continued

| Field ID | Variable | Field Label | Comment |
| :---: | :---: | :---: | :---: |
| 1857 | S5BLKPCT | S5 Q3C PERCENT OF BLACK STUDENTS | These data recoded for respondent confidentiality. |
| 1859 | S5WHTPCT | S5 Q3D PERCENT OF WHITE STUDENTS | These data suppressed for respondent confidentiality. |
| 1861 | S5INDPCT | S5 Q3E PERCENT OF AMERICAN INDIANS | These data suppressed for respondent confidentiality. |
| 1863 | S50THPCT | S5 Q3F PERCENT OF OTHER STUDENTS | These data recoded for respondent confidentiality. |
| 1865 | S5AMBUSF | S5 Q4 TIME FIRST BUS AM | These data recoded for respondent confidentiality. |
| 1866 | S5AMBUSL | S5 Q5 TIME LAST BUS AM | These data recoded for respondent confidentiality. |
| 1867 | S5STRTAM | S5 Q6 OFFICIAL SCHOOL START TIME AM | These data recoded for respondent confidentiality. |
| 1875 | S5BRKSTR | S5 Q9A TIME BREAKFAST START | These data recoded for respondent confidentiality. |
| 1876 | S5BRKEND | S5 Q9B TIME BREAKFAST END | These data recoded for respondent confidentiality. |
| 1879 | S5PRABRK | S5 Q12A2 PARTICIPATE ANY SCH BREAKFAST | These data suppressed for respondent confidentiality. |
| 1880 | S5ELIBRK | S5 Q12B1 ELIGIBLE FOR FREE BREAKFAST | These data suppressed for respondent confidentiality. |
| 1881 | S5PARBRK | S5 Q12B2 PARTICIPATES IN BREAKFAST | These data suppressed for respondent confidentiality. |
| 1882 | S5ELRPBK | S5 Q12C1 ELIGIBLE RED-PRICE BREAKFAST | These data suppressed for respondent confidentiality. |
| 1883 | S5PARPBK | S5 Q12C2 PARTICIPATE RED-PRICE BREAKFAST | These data suppressed for respondent confidentiality. |
| 1884 | S5PAALUN | S5 Q13A2 PARTICIPATE ANY SCH LUNCH | These data suppressed for respondent confidentiality. |
| 1885 | S5ELILNC | S5 Q13B1 ELIGIBLE FOR FREE LUNCH | These data suppressed for respondent confidentiality. |
| 1886 | S5PARLNC | S5 Q13B2 PARTICIPATES IN FREE LUNCH | These data suppressed for respondent confidentiality. |
| 1887 | S5ELIRED | S5 Q13C1 ELIGIBLE IN REDUCED-PRICE LUNCH | These data suppressed for respondent confidentiality. |
| 1888 | S5PARRED | S5 Q13C2 PARTICIPATES IN RED-PRICE LUNCH | These data suppressed for respondent confidentiality. |
| 1899 | S5CHLDNM | S5 Q17 \# OF CHILDREN SITE ACCOMMODATES | These data recoded for respondent confidentiality. |
| 1900 | S5PORTBL | S5 Q18 \# PORTABLE CLASSROOMS | These data recoded for respondent confidentiality. |
| 1903 | S5LbRYOK | S5 Q19C DOES LIBRARY MEET NEEDS | These data suppressed for respondent confidentiality. |
| 1907 | S5PLAYOK | S5 Q19G DOES PLAYGROUND MEET NEEDS | These data suppressed for respondent confidentiality. |
| 1911 | SSINSTCM | S5 Q20A \# INSTRUCTIONAL COMPUTERS | These data recoded for respondent confidentiality. |
| 1912 | S5ADMNCM | S5 Q20B \# INSTRUCT/ADMIN COMPUTERS | These data recoded for respondent confidentiality. |
| 1913 | S5TOTCM | S5 Q20C TOTAL NUMBER OF COMPUTERS | These data recoded for respondent confidentiality. |
| 1916 | S5CDRSCH | S5 Q21B1 COMPUTERS W/ CD-ROM ACCESS | These data suppressed for respondent confidentiality. |
| 1917 | S5CDRSTU | S5 Q21B2 CD-ROM FOR STUDENT USE | These data suppressed for respondent confidentiality. |
| 1918 | S5NETSCH | S5 Q21C1 COMPUTERS W/INTERNET ACCESS | These data suppressed for respondent confidentiality. |
| 1919 | S5NETSTU | S5 Q21C2 INTERNET FOR STUDENT USE | These data suppressed for respondent confidentiality. |
| 1941 | S5NOTEST | S5 Q26 NO GRADE TESTED | These data suppressed for respondent confidentiality. |
| 1957 | S5RETAIN | S5 Q28 CAN CHILD BE RETAINED IN GRADE | These data suppressed for respondent confidentiality. |
| 1961 | S5ACADEM | S5 Q29D RETAINED- BELOW GRADE LEVEL | These data suppressed for respondent confidentiality. |
| 1984 | S5LEPSCH | S5 Q34A PERCENT OF LEP CHILDREN | These data recoded for respondent confidentiality. |
| 1985 | S5LEPTHR | S5 Q34B \% LEP IN THIRD GRADE | These data recoded for respondent confidentiality. |
| 1986 | S5BILING | S5 Q35A BILINGUAL SERVICES PERCENT -3RD | These data suppressed for respondent confidentiality. |
| 1987 | S5ESLONL | S5 Q35B ESL SERVICES PERCENT -3RD | These data suppressed for respondent confidentiality. |
| 1988 | S5ESLBIL | S5 Q35C ESL AND BILINGUAL PERCENT -3RD | These data suppressed for respondent confidentiality. |
| 2003 | S5RTCHFL | S5 Q40A1 \# REG CLASSROOM TCHR-FULL | These data recoded for respondent confidentiality. |
| 2004 | S5RTCHPT | S5 Q40A2 \# REG CLASSROOM TCHR-PART | These data recoded for respondent confidentiality. |
| 2005 | S5MSARFL | S5 Q40B1 \# GYM DRAMA MUSIC ART TCHR-FULL | These data recoded for respondent confidentiality. |
| 2006 | S5MSARPT | S5 Q40B2 \# GYM DRAMA MUSIC ART TCHR-PART | These data recoded for respondent confidentiality. |
| 2007 | S5SPEDFL | S5 Q40C1 \# SPECIAL ED TCHR-FULL | These data recoded for respondent confidentiality. |
| 2008 | S5SPEDPT | S5 Q40C2 \# SPECIAL ED TCHR-PART | These data recoded for respondent confidentiality. |
| 2009 | S5ESLFL | S5 Q40D1 \# ESL/BILINGUAL TCHR-FULL | These data recoded for respondent confidentiality. |
| 2010 | S5ESLPT | S5 Q40D2 \# ESL/BILINGUAL TCHR-PART | These data recoded for respondent confidentiality. |
| 2011 | S5READFL | S5 Q40E1 \# READING TCHR/SPECIALIST-FULL | These data recoded for respondent confidentiality. |
| 2012 | S5READPT | S5 Q40E2 \# READING TCHR/SPECIALIST-PART | These data recoded for respondent confidentiality. |
| 2013 | S5GIFTFL | S5 Q40F1 \# GIFTED/TALENTED TCHR-FULL | These data recoded for respondent confidentiality. |

See note at end of table.

Table 7-13. Recoded and suppressed data on the ECLS-K Third-Grade Public-Use Data File—Continued

| Field ID | Variable | Field Label | Comment |
| :---: | :---: | :---: | :---: |
| 2014 | S5GIFTPT | S5 Q40F2 \# GIFTED/TALENTED TCHR-PART | These data recoded for respondent confidentiality. |
| 2015 | S5NURSFL | S5 Q40G1 \# SCH NURSE HEALTH PROF-FULL | These data recoded for respondent confidentiality. |
| 2016 | S5NURSPT | S5 Q40G2 \# SCH NURSE HEALTH PROF-PART | These data recoded for respondent confidentiality. |
| 2017 | S5PSYCFL | S5 Q40H1 SCH PSYCH/ SOCIAL WORKER-FULL | These data recoded for respondent confidentiality. |
| 2018 | S5PSYCPT | S5 Q40H2 SCH PSYCH/SOCIAL WORKER-PART | These data recoded for respondent confidentiality. |
| 2019 | S5PARAFL | S5 Q40I1 \# PARAPROFESSIONALS-FULL | These data recoded for respondent confidentiality. |
| 2020 | S5PARAPT | S5 Q40I2 \# PARAPROFESSIONALS-PART | These data recoded for respondent confidentiality. |
| 2021 | S5LIBRFL | S5 Q40J1 \# LIBRARIANS-FULL | These data recoded for respondent confidentiality. |
| 2022 | S5LIBRPT | S5 Q40J2 \# LIBRARIANS-PART | These data recoded for respondent confidentiality. |
| 2023 | S5TEAASN | S5 Q41A \% ASIAN TEACHERS | These data suppressed for respondent confidentiality. |
| 2025 | S5ETHNIC | S5 Q41B \% HISPANIC/LATINO TEACHERS | These data recoded for respondent confidentiality. |
| 2027 | S5TEABLK | S5 Q41C \% BLACK TEACHERS | These data recoded for respondent confidentiality. |
| 2029 | S5TEAWHT | S5 Q41D \% WHITE TEACHERS | These data recoded for respondent confidentiality. |
| 2031 | S5TEAIND | S5 Q41E \% AMERICAN INDIAN TEACHERS | These data suppressed for respondent confidentiality. |
| 2033 | S5TEAOTH | S5 Q41F \% OTHER TEACHERS | These data suppressed for respondent confidentiality. |
| 2036 | S5HWLONG | S5 Q42E RESP (NOT PRINCIPAL) YR AT SCH | These data recoded for respondent confidentiality. |
| 2056 | S5BRTHYR | S5 Q46 YEAR PRINCIPAL WAS BORN | These data recoded for respondent confidentiality. |
| 2057 | S5ORIGIN | S5 Q47 PRINCIPAL IS HISPANIC/LATINO | These data suppressed for respondent confidentiality. |
| 2058 | S5RACE1 | S5 Q48A PRINCIPAL IS AMERICAN INDIAN | These data suppressed for respondent confidentiality. |
| 2059 | S5RACE2 | S5 Q48B PRINCIPAL IS ASIAN | These data suppressed for respondent confidentiality. |
| 2060 | S5RACE3 | S5 Q48C PRINCIPAL IS BLACK | These data suppressed for respondent confidentiality. |
| 2061 | S5RACE4 | S5 Q48D PRINCIPAL IS HAWAIIAN OR PAC IS | These data suppressed for respondent confidentiality. |
| 2062 | S5RACE5 | S5 Q48E PRINCIPAL IS WHITE | These data suppressed for respondent confidentiality. |
| 2063 | S5YSTCH | S5 Q49A NUMBER OF YRS TEACHING | These data recoded for respondent confidentiality. |
| 2064 | S5TOTPRI | S5 Q49B NUMBER OF YRS AS PRINCIPAL | These data recoded for respondent confidentiality. |
| 2065 | S5PRINHR | S5 Q49C NUMBER YRS A PRINCIPAL HERE | These data recoded for respondent confidentiality. |
| 2066 | S5EDLVL | S5 Q50 HIGHEST LEVEL OF EDUCATION | These data recoded for respondent confidentiality. |
| 2067 | S5MAJOR | S5 Q51 MAJOR FIELD HIGHEST ED LEVEL | These data recoded for respondent confidentiality. |
| 2071 | K5PRTCLS | K5 Q1 NUMBER OF PORTABLE CLASSROOMS | These data recoded for respondent confidentiality. |
| 2072 | K5GUARDO | K5 Q2A1 OBSERVED SECURITY GUARD | These data suppressed for respondent confidentiality. |
| 2073 | K5GUARDS | K5 Q2A2 SCH CNFRM SECURITY GUARD | These data suppressed for respondent confidentiality. |
| 2074 | K5METDTO | K5 Q2B1 OBSERVED METAL DETECTORS | These data suppressed for respondent confidentiality. |
| 2075 | K5METDTS | K5 Q2B2 SCH CNFRM METAL DETECTORS | These data suppressed for respondent confidentiality. |
| 2077 | K5SCAMS | K5 Q2C2 SCH CNFRM SECURITY CAMERAS | These data suppressed for respondent confidentiality. |
| 2079 | K5BARSS | K5 Q2D2 SCH CNFRM WINDOW AND DOOR BARS | These data suppressed for respondent confidentiality. |
| 2083 | K5FENCES | K5 Q2F2 SCH CNFRM FENCING AROUND SCHOOL | These data suppressed for respondent confidentiality. |
| 2088 | K5INTCMO | K5 Q2I1 OBSERVED INTERCOMS | These data suppressed for respondent confidentiality. |
| 2090 | K5ALARMO | K5 Q2J1 OBSERVED FIRE ALARMS | These data suppressed for respondent confidentiality. |
| 2091 | K5ALARMS | K5 Q2J2 SCH CNFRM FIRE ALARMS | These data suppressed for respondent confidentiality. |
| 2092 | K5FREXTO | K5 Q2K1 OBSERVED FIRE EXTINGUISHERS | These data suppressed for respondent confidentiality. |
| 2102 | K5CLDOBS | K5 Q4OBS NUMBER OF CHILDREN OBSERVED | These data recoded for respondent confidentiality. |

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

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U.S. Department of Agriculture, Food and Nutrition Service (2000). Guide to Measuring Household Food Security, Revised 2000. Alexandria, VA: U.S. Department of Agriculture.
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## 8. ELECTRONIC CODE BOOK

### 8.1 Introduction

The purpose of this chapter is to provide users of the Early Childhood Longitudinal Study, both Kindergarten Class of 1998-99 (ECLS-K) and Birth Cohort (ECLS-B), with specific directions for using the Electronic Code Book (ECB) CD-ROM. The information in this chapter provides a comprehensive tour through the ECB that addresses all of the functions and capabilities of the program. These functions allow users to access the accompanying catalog 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 catalog, and performing user-specified data extractions.

Sections 8.1 through 8.6 contain general instructions on using the ECB and apply to both the ECLS-K ECB and the ECLS-B ECB, including descriptions of the menu bars (exhibit 8-57). The exhibits and examples given in these sections are generic and will not exactly match what the users see on their own screens. The last section, 8.7, is file-specific and reflects the actual data on the file.

The ECB CD-ROM contains an ECB that allows users to easily examine the variables in the ECB data set. The data user can create SAS, SPSS for Windows, and Stata programs that will generate an extract data file from the text (ASCII) data file on the CD-ROM. For more information about the data file, see section 8.7.

Additionally, the CD-ROM contains Portable Document Format (PDF) files of the associated questionnaires in appendix A and the record layout for the data file in appendix B . When needed, additional user's guides and additional supplementary files may also be included in additional appendices.

### 8.1.1 Hardware/Software Requirements

The ECB program is designed to run under Windows $95^{\circledR}$, Windows $98^{\circledR}$, Windows $2000^{\circledR}$, Windows $\mathrm{XP}^{\circledR}$, or Windows $\mathrm{NT}^{\circledR} 4.0$ on a Pentium-class or higher PC. The PC should also have a minimum of 20 megabytes (MB) of available disk space. The program will visually fit best on screens set to a desktop area of $800 \times 600$ 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/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 $800 \times 600$ 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 ECB Features

The ECB allows a user to do the following:

- Search the names and labels of variables in the database (called the catalog) to select variables for analysis (see section 8.3, Variable List).
- Examine the question wording, response categories, and response frequencies for variables the user selects (see section 8.4.9, 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, 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 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, SPSS for Windows, or Stata software to create your file. As noted earlier, the CD-ROM contains an ASCII data set that the ECB uses to extract specific subdata files. The CD-ROM must be in the drive for the data to be extracted.

### 8.2 Installing, Starting, and Exiting the ECB

The ECB is provided on a CD-ROM and is intended to be installed and run from within the Windows 95 (or any later version of Windows) environment. The sections in this chapter provide you with step-by-step instructions for installing the program on your personal computer (PC), starting the program, and exiting the program once you have completed your tasks.

If you installed the ECB on your PC before, you have to uninstall the old program before installing this version. For details on how to remove the ECB program from your PC, please see section 8.2.4.

### 8.2.1 Installing the ECB Program on Your Personal Computer

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 desktop Start menu, select Run.
4. Type "D:\Setup.exe" into the "Open" field of the Run screen, shown in exhibit 8-1. If your CD-ROM drive is assigned a different drive letter, substitute it for the "D."

Exhibit 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 violations that occur during file copying.

If you are installing multiple ECBs (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 opt to continue the installation although the default is to cancel the setup. When you get a followup message to confirm whether the installation should be continued, press "Yes" to continue although the default is "No."
6. The screen shown in exhibit 8-2 indicates that the setup is being prepared.

Exhibit 8-2. InstallShield Wizard

7. You will be prompted to continue with the installation in the Welcome window shown in exhibit 8-3. Click on the Next button to continue.

Exhibit 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 exhibit 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.

Exhibit 8-4. Choose Destination Location

9. Setup will then start installing files. Exhibit 8-5 shows the setup status.

Exhibit 8-5. Setup Status

10. Once the installation is completed, the InstallShield Wizard Complete window shown in exhibit 8-6 will appear. Click on the Finish button to finish the process and return to your PC's desktop.

Exhibit 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.

Another option for installing the ECB software is 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 the directions. Make sure the ECB CD-ROM is in the CD-ROM drive before starting. The program will automatically find the file Setup.exe in the CD-ROM and begin installation. The process will begin at point 5 in the section above.

### 8.2.2 Starting the ECB

Now that you have installed the ECB on your PC, you can start the program by simply selecting it from the Windows Start, Programs Menu, ECB.

## How to Start the ECB:

1. On the desktop screen (exhibit 8-7b), click on the Start button and then point to Programs. Click on the ECB title to invoke the program. Alternatively, click on the ECB desktop icon (exhibit 8-7a) shown below to invoke the program.

Exhibit 8-7a. Desktop icon

Exhibit 8-7b. Desktop screen—click start

2. If you are a first-time user of the ECB, exhibit 8-8 will display and ask if you are a new ECB user.

Exhibit 8-8. First-time user dialog box

3. Click "Yes" if you are a first-time user. The ECB splash-screen shown in exhibit 8-9 will display.

Exhibit 8-9. ECB splash screen

4. On the Select Catalog screen (exhibit 8-10), highlight the name of the catalog. (The ECB has only one catalog.)

Exhibit 8-10. Select Catalog screen

5. Click OK to open the Main ECB screen, shown in exhibit 8-11.

Exhibit 8－11．Main ECB screen

| 敛 ECLS ECB－Catalog Name－［Create Taglist］ |  |  |  |  |  |  |  | －回 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 㮯 File Iaglist | Extract Tools Codebook |  |  |  |  |  |  | －$\square_{\text {可 }}$ |
| VARJABLE LIST |  |  |  |  | WORKIING TAGLIST－－Hew |  |  |  |
| Narrow | Expand Reset |  | Field ID： 1 |  | Save |  | Save As |  |
| Variable Name | Variable Description |  | $\bullet$ |  | Variable Name | Variable Description |  |  |
| VAR1 | VARIABLE LABEL 1 |  |  |  | VAR1 | VARIABLE LABEL 1 |  |  |
| VAR2 | VARIABLE LABEL 2 |  |  | ＞ | VAR2 | VARIABLE LABEL 2 |  |  |
| VAR3 | VARIABLE LABEL 3 |  |  |  | VAR3 | VARIABLE LABEL 3 |  |  |
| VAR4 | VARIABLE LABEL 4 |  |  | ＞＞ |  |  |  |  |
| VAR5 | VARIABLE LABEL 5 |  |  | ＞＞ |  |  |  |  |
| VAR6 | VARIABLE LABEL 6 |  |  |  |  |  |  |  |
| VAR7 | VARIABLE LABEL 7 |  |  | ＜＜ |  |  |  |  |
| VAR8 | VARIABLE LABEL 8 |  |  |  |  |  |  |  |
| VAR9 | VARIABLE LABEL 9 |  |  |  |  |  |  |  |
| VAR10 | VARIABBLE LABEL 10 |  |  | ＜ |  |  |  |  |
| VAR11 | VARIABLE LABEL 11 |  |  |  |  |  |  |  |
| VAR12 | VARIABLE LABEL 12 |  |  |  |  |  |  |  |
| VAR13 | VARIABBLE LABEL 13 |  |  |  |  |  |  |  |
| VAR14 | VARIABLE LABEL 14 |  |  |  |  |  |  |  |
| VAR15 | VARIABBLE LABEL 15 |  |  |  |  |  |  |  |
| VAR16 | VARIABLE LABEL 16 |  |  |  |  |  |  |  |
| VAR17 | VARIABLE LABEL 17 |  |  |  |  |  |  |  |
| VAR18 | VARIABLE LABEL 18 |  |  |  |  |  |  |  |
| VAR19 | VARIABELE LABEL 19 |  |  |  |  |  |  |  |
| VAR20 | VARIABLE LABEL 20 |  |  |  |  |  |  |  |
| VAR21 | VARIABLE LABEL 21 |  |  |  |  |  |  |  |
| VAR22 | VARIABBLE LABEL 22 |  |  |  |  |  |  |  |
| VAR23 | VARIABCLE LABEL 23 |  |  |  |  |  |  |  |
| VAR24 | VARIABLE LABEL 24 |  |  |  |  |  |  |  |
| VAR25 | VARIABLE LABEL 25 |  |  |  |  |  |  |  |
| VAR26 | VARIABLE LABEL 26 |  |  |  |  |  |  |  |
| VAR27 | VARIABBLE LABEL 27 |  |  |  |  |  |  |  |
| VAR28 | VARIABBLE LABEL 28 |  |  |  |  |  |  |  |
| VAR29 | VARIABCLE LABEL 29 |  |  |  |  |  |  |  |
| VAR30 | VARIABLE LABEL 30 |  |  |  |  |  |  |  |
| VAR31 | VARIABBLE LABEL 31 |  |  |  |  |  |  |  |
| VAR32 | VARIABLE LABEL 32 |  | $\checkmark$ |  |  |  |  |  |
| $\square$ |  |  | $\stackrel{\rightharpoonup}{*}$ |  | 4 |  |  | － |

6．You are now ready to use the functions of the ECB as described in the following sections．

## 8．2．3 Exiting the ECB

The 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 exhibit 8-12.

Exhibit 8-12. Exit screen

2. If you have not saved your Working Taglist, you will be prompted with the dialog box shown in exhibit 8-13.

Exhibit 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 the "Yes" button. For more information, refer to section 8.4.4, Saving Taglists.

### 8.2.4 Removing the ECB Program From Your Personal Computer

## 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 "ECB" 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. The program is designed so 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 located.

### 8.2.5 Title Bar

The Title Bar, shown below in exhibit 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.

Exhibit 8-14. Title Bar

## ECLS ECB - Catalog Name - [Create Taglist]

### 8.2.6 Menu Bar

Selecting items from the pulldown menus listed on the Menu Bar (exhibit 8-15) provides access to the available action commands. Section 8.6 shows the choices and functions available within each menu.

Exhibit 8-15. Menu Bar
感 ECLS ECB-Catalog Name-[Create Taglist]
W. File Iaglist Extract Tools Codebook Help

## 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 dropdown 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 underscore 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 underscored letter. An example of this is the activation of the Taglist Menu by selecting the key combination of $\langle\mathrm{ALT}\rangle-\langle\mathrm{T}\rangle$. 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 Variable List

The ECB main screen, shown in exhibit 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.

The Variable List, shown in exhibit 8-17, is a list of all variables associated with the current catalog. 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 $<\mathrm{PgUp}>$ and $<\mathrm{PgDn}>$ 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.

The "Field ID" at the upper right corner of the Variable List shows the field ID of the selected variable on the Variable List.

Exhibit 8-16. ECB main screen


Exhibit 8-17. Variable List

| VARNABLE LIST |  |  |
| :---: | :---: | :---: |
| Narrow | Expand Reset | Go Field ID: 1 |
| Variable Name | Variable Description | $\triangle$ |
| VAR11 | VARIABLE LABEL 1 |  |
| VAR2 | VARIABLE LABEL 2 |  |
| VAR3 | VARIABLE LABEL 3 |  |
| VAR4 | VARIABLE LABEL 4 |  |
| VAR5 | VARIABLE LABEL 5 |  |
| VAR6 | VARIABLE LABEL 6 |  |
| VAR7 | VARIABLE LABEL 7 |  |
| VAR8 | VARIABLE LABEL 8 |  |
| VAR9 | VARIABLE LABEL 9 |  |
| VAR10 | VARIABLE LABEL 10 |  |
| VAR11 | VARIABLE LABEL 11 |  |
| VAR12 | VARIABLE LABEL 12 |  |
| VAR13 | VARIABLE LABEL 13 |  |
| VAR14 | VARIABLE LABEL 14 |  |
| VAR15 | VARIABLE LABEL 15 |  |
| VAR16 | VARIABLE LABEL 16 |  |
| VAR17 | VARIABLE LABEL 17 |  |
| VAR18 | VARIABLE LABEL 18 |  |
| VAR19 | VARIABLE LABEL 19 |  |
| VAR20 | VARIABLE LABEL 20 |  |
| VAR21 | VARIABLE LABEL 21 |  |
| VAR22 | VARIABLE LABEL 22 |  |
| VAR23 | VARIABLE LABEL 23 |  |
| V/R24 | VARIABLE LABEL 24 |  |
| V/RR25 | VARIABLE LABEL 25 |  |
| VAR26 | VARIABLE LABEL 26 |  |
| VAR27 | VARIABLE LABEL 27 |  |
| VAR28 | VARIABLE LABEL 28 |  |
| VAR29 | VARIABLE LABEL 29 |  |
| VAR30 | VARIABLE LABEL 30 |  |
| VAR31 | VARIABLE LABEL 31 |  |
| VAR32 | VARIABLE LABEL 32 | $\checkmark$ |
| $\square$ |  | - |

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 8.4.9); and
- $\quad$ Move selected variables to a Working Taglist (see section 8.4.2).


### 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 with topical variable groupings were designed for each catalog to expedite searching. The catalog-specific topical variable groupings can be found in exhibit 8-60 at the end of this chapter.

### 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 earlier.

## 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 shown on the right of the Go button (exhibit 8-18).
6. Click the Reset button to return to the top of the original Variable List (Field ID 1) or enter another field ID to scroll to another variable.

For field IDs that identify different groups of variables, please refer to exhibit 8-60 for the catalog-specific topical variable groupings.

The Go button will not be available in a narrowed or expanded list. After a Narrow Search or an Expand Search, you must reset the Variable List (see section 8.3.1.4) before you can use the Go button.

The "Field ID" remains active in a narrowed or expanded list. However, the field IDs indicate the order of the variables in the catalog rather than that in the Variable List. As a result, the field IDs would not change in a narrowed or expanded list.

Exhibit 8-18. 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 exhibit 8-60 to search the catalog variables 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 narrow down 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 exhibit 8-19.

Exhibit 8-19. Narrow Search Text 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 exhibit 8 -20 will appear.

Exhibit 8-20. No Matches Found message

## No Matches Found

No variables in the Variable List matched your search criteria. You can press the Reset button to start over with the complete list of variables for the current catalog, Catalog Name.

Note: After you Narrow/Search the Variable List, your next Narrow/Search applies ONLY to the results of your previous search: the remaining variables in the Variable List. Expand/Search always searches the entire current active catalog, and adds matching variables to the Variable List.

7. Repeat the Narrow Search procedure if necessary.

Please note that the field ID at the upper right corner of the Variable List reflects the order of the variables in the catalog rather than that in the narrowed Variable List.

## Example of Narrowing a Search

The following example shows you how to narrow the Variable List. In this example, you want to include all the variables from the catalog that measure education. Do the following:

1. In the Variable List, click on the Narrow button.
2. In the Search Text Box (shown in exhibit 8-21), type in "edu" and then click on the Search button.

Exhibit 8-21. Example of narrowing a search

3. The new Variable List will include only the variables that have the text "edu" in the variable name or the variable description.

Exhibit 8-60 (at the end of this chapter) displays the appropriate keywords from the associated catalog. Simply find the topic of interest in the Topic column first. And then enter in the Search Text Box the matching keywords in the Variable Identifier to narrow the search.

### 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 expand the list of variables displayed in the Variable List column.

Performing the Expand Search function will only expand 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 exhibit 8-22.

## Exhibit 8-22. Expand Search Text 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 displayed in the Variables List column.
7. Repeat the Expand Search procedure if necessary.

If no variable names or descriptions in the catalog contain the specified search text, then the message shown in exhibit 8-23 will appear.

Please note that the field ID at the upper right corner of the Variable List reflects the order of the variables in the catalog rather than that in the expanded Variables List.

Exhibit 8-23. No Matches Found message
No Matches Found
No variables in the Variable List matched your search criteria. You can press the Reset button to start over with the complete list of variables for the current catalog. Catalog Name.

Note: After you Narrow/Search the Variable List, your next Narrow/Search applies ONLY to the results of your previous search: the remaining variables in the Variable List. Expand/Search always searches the entire current active catalog, and adds matching variables to the Variable List.


### 8.3.1.4 Resetting Your Variable List

Following a narrowing or expanding of the Variable List as described earlier, 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 Working Taglist

The Working Taglist, shown in exhibit 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. 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 exhibit 8-58 for the catalog-specific required variables.) To create a taglist, add the variables you have selected to the required variables.

Exhibit 8-24. ECB Working Taglist

| WORKING TAGLIST -- Hew |  |  |
| :---: | :---: | :---: |
| Save | Save As |  |
| Variable Name | Variable Description |  |
| VAR1 VAR2 VAR3 | VARIABLE LABEL 1 VARIABLE LABEL 2 VARIABBLE LABEL 3 |  |

### 8.4.1 Opening a Taglist

The 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 exhibit 8-25, appears.

Exhibit 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 exhibit 8-26. 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 ECB.

Exhibit 8-26. Add variables buttons

| Command Button | Description |
| :--- | :--- |
|  | The Tag button moves variables that are <br> selected in the Variable List to the Working <br> 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 following Microsoft Windows ${ }^{\circledR}$ techniques:

■ 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 ${ }^{\circledR}$ techniques discussed earlier.)
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 exhibit 8-27.
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.

Exhibit 8-27. Add Taglist dialog box


### 8.4.3 Removing Variables From the Working Taglist

Variables are removed from your Working Taglist by selecting one or more of the nonrequired variables and clicking one of the two command buttons described in exhibit 8-28. 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.

Exhibit 8-28. Remove variables buttons

| Command Button |  |
| ---: | :--- |
| $<$ | The Untag button removes variables that are <br> selected from the Working Taglist. |
| $\ll$ | The Untag All button removes all non-required <br> variables from the Working Taglist. |

Attempting to remove or untag required variables from the Working Taglist is not permitted by the ECB. A message will be displayed 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 ${ }^{\ominus}$ techniques discussed in previous page.)
2. Click on the Untag button, and the selected variables are removed from your Working Taglist. To remove all nonrequired variables from the Working Taglist, click on the Untag All button.

### 8.4.4 Saving Taglists

The 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 or import 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 or Save As 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 exhibit 8-29.
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.

Exhibit 8-29. Save Taglist As dialog box


## 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 Save As button above the Working Taglist column. You can also click on the Taglist pulldown menu and select the Save As option.
3. The Save Taglist As dialog box appears, shown in exhibit $8-30$, with the current taglist name in the Taglist Name field.
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" only if you wish to replace the old taglist with the new taglist or enter a unique name.

Exhibit 8-30. Save Taglist As dialog box (\#2)


### 8.4.5 Exporting Taglists

Taglists can be saved as external files (*.tlt) for distribution. However, the exported files should be accessed only through the ECBs. Manually modifying the files outside of the ECB software is not recommended.

## How To Export a Taglist:

1. Add to the Working Taglist all the variables that you would like to export.
2. Click on the Taglist pulldown menu (exhibit 8-31) and select the Export option.
3. The Export Working Taglist To dialog box appears.
4. Enter the file name for your taglist.
5. Click on the Save button.
6. You will be prompted to replace the file if the file name you entered already exists. Do so or click on "No" to enter a new file name.

The Working Taglist will be saved under the filename you enter.

Exhibit 8-31. Pulldown menu to select Taglist Export

| 渦 ECLS ECB - Catalog Name - [Creat |  |  |  |
| :---: | :---: | :---: | :---: |
| 䖲 File | Iaglist Extract Tools |  | Codebo |
|  | New $\mathrm{CtI}+\mathrm{N}$ <br> Open $\mathrm{CtI}+0$ |  | ABLE LI |
| Narro |  |  |  |
| Variable | Qpen Ctri+0 |  |  |
| VAR1 | Add |  | $\begin{aligned} & \text { escription } \\ & \hline \text { EABEL } \end{aligned}$ |
| VAR2 | Save <br> Save As |  | LABEL |
| VAR3 |  |  |  |
| VAR4 | Import |  | LABEL |
| VAR5 |  |  |  |
| VAR6 | Export |  | LABEL |
| VAR7 |  |  | L LABEL |
| //88 |  |  | FIAREI |

Exhibit 8-32. Export Taglist dialog box


### 8.4.6 Importing Taglists

Taglists can be imported to the Working Taglist from external *.tlt files that are created by the ECB Taglist/Export function. Please note that only taglists exported from the same catalog of the same version ECB should be imported.

## How To Import a Taglist:

1. Save the current Working Taglist before importing new taglist if desired.
2. Click on the Taglist pulldown menu (exhibit 8-33) and select the Import option.

Exhibit 8-33. Pulldown menu to select Taglist Import

| \% ECLS ECB - Catalog Name - [Creat |  |  |
| :---: | :---: | :---: |
| 綧 File | Iaglist Extract Tools | Codebo |
|  | New Ctrit N ABbLE L |  |
| Narrov |  | 2entin |
| Variable |  | escription |
| VAR1 | Add | LABEL |
| VAR2 | Save Ctrl+S | LABEL |
| VAR3 | Save As | LABEL |
| VAR4 |  | L LABEL |
| VAR5 | Import | LABEL |
| VAR6 | Export | E LABEL |
| VAR7 | VAFITMEL | L LABEL |
| VARS | VABIASHL | $F \triangle A R E 1$ |

3. You will be prompted to save the current Working Taglist if unsaved changes have been made. Save the taglist if desired.
4. The Import Taglist From dialog box appears.
5. Enter the file name for the taglist you want to import.
6. Click on the Open button.

The Working Taglist will be replaced by the new imported taglist.

### 8.4.7 Using Predefined Taglists

The ECB provides predefined taglists that 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 section 8.7.2 for listings and descriptions of the catalog-specific predefined taglists.

Exhibit 8-34. Import Taglist dialog box


### 8.4.8 Deleting Taglists

The ECB provides the capability to permanently delete previously saved taglists. Predefined taglists provided with the ECB, however, cannot be deleted through this function.

## How To Delete a Taglist:

1. Close the taglist currently displayed in the Working Taglist column by selecting the New option from the Taglist pulldown menu.
2. The Working Taglist will be replaced by a New taglist.
3. Click on the Taglist pulldown menu and select the Delete option.
4. The Delete Taglist selection screen, shown in exhibit 8-35, appears with the taglists listed that may be deleted.
5. Highlight the taglist that is to be deleted and click on the OK button.
6. A confirmation screen, shown in exhibit 8-36, verifies your intention to delete the taglist.
7. Click on the "Yes" button to permanently delete the saved taglist.

Please note that you cannot delete the taglist that is currently open as the Working Taglist.

Exhibit 8-35. Delete Taglist selection
Delete Taglist
Taglist 3
Taglist 4

Exhibit 8-36. Delete Taglist confirmation window


### 8.4.9 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 ECB main screen. The code book displays several pieces of information about each variable that are described in exhibit 8-37.

Exhibit 8-37. Code book information

| Field | Description |
| :--- | :--- |
| Question Text | The question that was asked of the respondent by the interviewer or that <br> was on the self-administered instruments. |
| Variable Name/ <br> Description | The name of the variable as it appears in the catalog and a brief <br> 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 <br> alphabetical or numeric. Most variables are numeric except the <br> identifiers-which begin with an "A." The number following the "A" or <br> "N" is the length of the variable. For numeric variables, the number after <br> 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 <br> 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 <br> code. The frequency counts are unweighted. |
| Percent | The percentage of respondents providing the corresponding response <br> 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 code book for the current taglist opens in a new window as shown in exhibit 8-38.
4. Use the buttons described in exhibit 8-39 to navigate through the displayed code book.

Exhibit 8-38. Code book view


Exhibit 8-39. Navigation buttons

| Command button |  |
| :--- | :--- |

NOTE: The counter " 1 of $1+$ " on the tool bar on top of the screen indicates the current page number and the last page number of the report. Users must navigate to the last page of the report to load the entire report. Once the user has viewed the last page of the report, the " + " sign will disappear and the correct last page number will show.
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 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 Print option.
3. The Printing Status screen, shown in exhibit 8-40, appears, and the code book prints on your PC's default printer.

## 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.

## Exhibit 8-40. Printing status screen


3. The code book for the current taglist opens in a new window, similar to the one shown in exhibit 8-38.
4. Click on the Export code book button: 0
5. The Export code book selection screen, shown in exhibit 8-41, appears.

Exhibit 8-41. Export code book 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.

Please note that exporting a catalog in its entirety will take a long time due to the large size.

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 response value and its label, unweighted frequencies, and the unweighted percentage distributions as listed on exhibit 8-37. 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 as shown in exhibit 8-42.

Exhibit 8-42. Variable Quick View

```
乲 ECLS ECB - Catalog Name - [Variable Quick View]
```

Variable Name : VAR1 (VARIABLE LABEL 1)
Record Number : 1
Position : 1-1
Format : N1.0
Comment : Comments for variable \#1.

```
\begin{tabular}{l|c|c|c|c|}
\hline Response & Code & Unweighted Freq. & Percent \\
\hline RESPONSE CATEGORY1 & 1 & 100 & \(10.0 \%\) \\
RESPONSE CATEGORY 2 & 2 & 900 \\
& & \(90.0 \%\) \\
Total & & 1,000 & \(100.0 \%\)
\end{tabular}

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.
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.

\section*{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, follow 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.

\section*{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 exhibit 8-43.

Exhibit 8-43. 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 exhibit 8-44. Note that this view includes ALL variables in the catalog and can span more than 1000 pages depending on the size of the ECB. The page number is in the upper left corner of the window.

Exhibit 8-44. 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 (exhibit 8-45). Enter the number of copies you want and click on the OK button.

Exhibit 8-45. 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 will return to the main screen.

\subsection*{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 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 ECB CDROM from which the program can extract data.

SPSS users should note that an entire catalog can 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 exhibit 8-46. 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 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 data set names larger than eight characters, the SAS system will reject these names at run-time.

Exhibit 8-46. Limiting fields dialog box


Refer to section 8.7.3 for instructions on using and modifying the catalog-specific limiting variables.

\section*{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 ECB CD-ROM is loaded 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 exhibit 8-47.

Exhibit 8-47. 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 exhibit 8-48.

Exhibit 8-48. 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 (exhibit 8-49) type in the file name you want the data file to save to and then click on Save.

Exhibit 8-49. Save SAS data file dialog box

9. Run the saved extract program in SAS to extract the data.

\section*{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 ECB CD-ROM is loaded 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 exhibit 8-50.
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 exhibit 8-51.
7. Click on the Save button to store the file.

Exhibit 8-50. Save SPSS program file dialog box


Exhibit 8-51. Save SPSS program file location browse screen

8. In the Save Data File As window (exhibit 8-52), type in the file name you want the data file to save to and then click on Save.
9. Run the saved extract program in SPSS to extract the data.

Exhibit 8-52. Save SPSS data file dialog box


\section*{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 ECB CD-ROM is loaded 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 exhibit 8-53.
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 exhibit 8-54.
7. Click on the Save button to store the file.
8. In the Save Data File As window (exhibit 8-55), type in the file name you want the data file to save to and then click on Save.
9. Run the saved extract program in Stata to extract the data.

Exhibit 8-53. Save Stata program file dialog box


Exhibit 8-54. Save Stata program file location browse screen


Exhibit 8-55. Save Stata data file dialog box


\subsection*{8.5.1 Reviewing the Extract Specifications}

Users should 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. The program should be reviewed before running it because it may need to be customized.

\subsection*{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.

\section*{How To Repair and Compact the ECB Database:}
1. Select the Tools pulldown menu and select the Repair and Compact Database option.
2. After a few seconds, the screen shown in exhibit 8-56 appears indicating that the repair and compact of the database was successfully completed.

Exhibit 8-56. Repair database completed screen

3. Click on the OK button.

\subsection*{8.6 Menu Bar Descriptions}

Exhibit 8-57. Menu Bar Descriptions
\begin{tabular}{|c|}
\hline 莎 ECLS ECB - Catalog Name - [Create Taglist] \\
\hline 翏 File Iaglist Extract Tools Codebook Help \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
File \\
Open Catalog... Print Setup Exit
\end{tabular} & \begin{tabular}{l}
The File menu contains the commands needed to: \\
Select and open a catalog; \\
Set up your software for printing; and Exit the ECB.
\end{tabular} \\
\hline \begin{tabular}{|l|l|}
\hline Iaglist & Extract \\
\hline New & \(\mathrm{Ctrl}+\mathrm{N}\) \\
Open & \(\mathrm{Ctrl}+\mathrm{O}\) \\
Delete & \\
Add & \\
Save & \(\mathrm{Ctrl}+\mathrm{S}\) \\
Save As & \\
\hline Import & \\
Export & \\
\hline
\end{tabular} & \begin{tabular}{l}
The Taglist menu contains the commands required to manipulate the variable lists once a catalog has been selected: \\
- Create a new taglist; \\
- Open a previously saved or predefined taglist; \\
Delete a previously saved taglist; \\
Add a previously saved or predefined taglist to the working taglist; \\
Save the working taglist; \\
Save a taglist with another name; \\
Import a previously exported taglist as working taglist and; \\
Export the working taglist for distribution.
\end{tabular} \\
\hline \begin{tabular}{l} 
Extract \\
\hline SAS \\
SPSS [Windows] \\
SIATA \\
\hline
\end{tabular} & \begin{tabular}{l}
The Extract menu contains options to create a syntax file for: \\
SAS; \\
SPSS for Windows; or \\
Stata.
\end{tabular} \\
\hline Tools \({ }_{\text {Repair and Compact Database }}\) & \begin{tabular}{l}
The Tools menu contains: \\
- The command for repairing and compacting the database.
\end{tabular} \\
\hline \begin{tabular}{|c|}
\hline Codebook \\
\hline Yiew \\
Print \\
\hline
\end{tabular} & \begin{tabular}{l}
The Code Book menu contains the command for: \\
- Viewing the entire code book based on the working taglist; and \\
Printing the entire code book based on the working taglist.
\end{tabular} \\
\hline \begin{tabular}{|c|}
\hline Help \\
\hline Contents \\
\hline about \\
\hline
\end{tabular} & The Help menu provides access to the detailed online help system. \\
\hline
\end{tabular}

\subsection*{8.7 Child Catalog}

This section discusses catalog-specific information. For general information about how the ECB functions work, please refer to previous sections of chapter 8.

The third grade \({ }^{1}\) child catalog contains information for children who participated in the third grade ECLS-K survey and includes data at the child level from the child and from the child's parents, teachers, and school. Exhibit \(8-58\) 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. Three of the variables on the list, P1FIRKDG, T5GLVL, and S5PUPRI, are also limiting fields; they may be used to subset the data being extracted. See section 8.7 .3 for an explanation and description of limiting fields.

Exhibit 8-58. Child catalog required variables
\begin{tabular}{ll}
\hline Field Name & Field Label \\
\hline CHILDID & CHILD IDENTIFICATION NUMBER \\
S5_ID & SPRING 2002 SCHOOL IDENTIFICATION NUMBER \\
T5_ID & SPRING 2002 TEACHR IDENTIFICATION NUMBER \\
D5T_ID & SPRING 2002 SPECIAL ED TEACHER ID NUMBER \\
R5REGION & R5 CENSUS REGION \\
R5URBAN & R5 LOCATION TYPE - 7 CATEGORIES \\
R5LOCALE & R5 LOCATION TYPE - 8 CATEGORIES \\
R5GENDER & R5 CHILD COMPOSITE GENDER \\
R5RACE & R5 CHILD COMPOSITE RACE \\
R5AGE & R5 COMPOSITE CHILD ASSESSMENT AGE(MNTHS) \\
P1FIRKDG & P1 FIRST-TIME KINDERGARTNER \\
W3SESQ5 & W3 CATEGORICAL SES MEASURE \\
T5GLVL & T5 GRADE LEVEL OF CHILD \\
S5SCTYP & S5 SCHOOL TYPE FROM THE SFS \\
S5ENRLS & S5 TOTAL SCHOOL ENROLLMENT \\
S5PUPRI & S5 PUBLIC OR PRIVATE SCHOOL \\
\hline
\end{tabular}

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood
Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

\footnotetext{
\({ }^{1}\) Although the great majority of the sampled children were in the third grade in spring 2002, some of them were actually in other grades. For convenience, we simply refer to this as the "third grade" survey, and refer to all the sampled children as "third-graders" in spring 2002.
}

The child catalog is organized into blocks of data corresponding to specific content areas:
- Identifiers are the child, parent, school, and teacher identification number.
- Field Management System (FMS) data are for methodological analyses.
- School demographic data are obtained from the sampling frame (e.g., census region).
- Child demographic composite variables include age, gender, race/ethnicity, and date of birth.
- Weights are described in detail in chapter 4 . Round 5 weights are for third grade. Cross-year panel weights are described in detail in chapter 9.
- 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 and indirect child assessments.
- Composite variables, including the child demographic variables, were created to facilitate data analysis. See chapter 7, section 7.4 for a detailed description of the composite variables and table 7-11 for a list of all composite variables.
- Direct assessment-related data are the exclusions from the direct assessment (e.g., data from the assessment closing section). 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 fact sheet, the school administrator questionnaire, and the facilities checklist.
- Special education data are the data items from the special education teacher questionnaires.
- Student record abstract data are the data items from the student record abstract form.
- Taylor Series Sampling Strata and primary sampling units (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.

Exhibit 8-59 presents the order of the data blocks on the child data file.

Exhibit 8-59. Child catalog blocks
\begin{tabular}{|c|c|}
\hline Order & Block \\
\hline 1 & Identifiers \\
\hline 2 & FMS data \\
\hline 3 & School demographic data \\
\hline 4 & Round 5 school demographic data \\
\hline \multirow[t]{2}{*}{5} & Round 5 child demographic composites \\
\hline & Weights \\
\hline 6 & Round 5 child weight full sample \\
\hline 7 & Panel 245 child weight full sample \\
\hline 8 & Panel 45 child weight full sample \\
\hline 9 & Panel 1245 child weight full sample \\
\hline 10 & Panel 12345 child weight full sample \\
\hline 11 & Round 5 parent weight full sample \\
\hline 12 & Panel 245 parent weight full sample \\
\hline 13 & Panel 45 parent weight full sample \\
\hline 14 & Panel 1245 parent weight full sample \\
\hline 15 & Panel 12345 parent weight full sample \\
\hline \multirow[t]{2}{*}{16} & Round 5 CPT weight full sample \\
\hline & Flags \\
\hline 17 & Round 5 child assessment data status flags \\
\hline 18 & Round 5 parent interview data status flags \\
\hline 19 & Round 5 teacher questionnaire A data status flags \\
\hline 20 & Round 5 teacher questionnaire B data status flags \\
\hline 21 & Round 5 teacher questionnaire C data status flags \\
\hline 22 & Round 5 school fact sheet data status flags \\
\hline 23 & Round 5 school administrator questionnaire data status flags \\
\hline 24 & Round 5 facilities checklist data status flags \\
\hline 25 & Round 5 special education questionnaire A data status flags \\
\hline 26 & Round 5 special education questionnaire B data status flags \\
\hline 27 & Round 5 student record abstract data status flags \\
\hline \multirow[t]{2}{*}{28} & Round 5 parent data edit flags and error flags \\
\hline & Scores \\
\hline 29 & Round 1 recalibrated child assessment scores \\
\hline 30 & Round 2 recalibrated child assessment scores \\
\hline 31 & Round 3 recalibrated child assessment scores \\
\hline 32 & Round 4 recalibrated child assessment scores \\
\hline 33 & Round 5 recalibrated child assessment scores \\
\hline 34 & Round 5 child assessment science scores \\
\hline 35 & Round 5 child assessment SDQ scores \\
\hline 36 & Round 5 teacher questionnaire C scores \\
\hline
\end{tabular}

See note at end of exhibit.

Exhibit 8-59. Child catalog blocks-Continued
\begin{tabular}{|c|c|}
\hline Order & Block \\
\hline & Composite Variables \\
\hline 37 & Round 5 child composites \\
\hline 38 & Round 1 parent composites \\
\hline 39 & Round 5 parent composites \\
\hline 40 & Cross-round Parent composites \\
\hline 41 & Round 5 teacher questionnaire A composites \\
\hline 42 & Round 5 teacher questionnaire C composite \\
\hline 43 & Round 5 school fact sheet composites \\
\hline 44 & Round 5 school administrator questionnaire composites \\
\hline \multirow[t]{2}{*}{45} & Round 5 student record abstract composites \\
\hline & Direct Assessment Data \\
\hline \multirow[t]{2}{*}{46} & Round 5 child assessment data \\
\hline & Parent Interview Data \\
\hline \multirow[t]{2}{*}{47} & Round 5 parent interview data \\
\hline & Teacher Questionnaire Data \\
\hline 48 & Round 5 teacher questionnaire A data \\
\hline 49 & Round 5 teacher questionnaire B data \\
\hline \multirow[t]{2}{*}{50} & Round 5 teacher questionnaire C data \\
\hline & School Data \\
\hline 51 & Round 5 school fact sheet data \\
\hline 52 & Round 5 school administrator data \\
\hline \multirow[t]{2}{*}{53} & Round 5 facilities checklist data \\
\hline & Special Education Data \\
\hline 54 & Round 5 special education questionnaire A data \\
\hline \multirow[t]{2}{*}{55} & Round 5 special education questionnaire B data \\
\hline & Student Record Abstract Data \\
\hline \multirow[t]{2}{*}{56} & Round 5 student record abstract data \\
\hline & Taylor Series Sampling Strata And Primary Sampling Units (PSU) \\
\hline 57 & Round 5 child Taylor series sampling strata and PSU \\
\hline 58 & Panel 245 child Taylor series sampling strata and PSU \\
\hline 59 & Panel 45 child Taylor series sampling strata and PSU \\
\hline 60 & Panel 1245 child Taylor series sampling strata and PSU \\
\hline 61 & Panel 12345 child Taylor series sampling strata and PSU \\
\hline 62 & Round 5 parent Taylor series sampling strata and PSU \\
\hline 63 & Panel 245 parent Taylor series sampling strata and PSU \\
\hline 64 & Panel 45 parent Taylor series sampling strata and PSU \\
\hline 65 & Panel 1245 parent Taylor series sampling strata and PSU \\
\hline 66 & Panel 12345 parent Taylor series sampling strata and PSU \\
\hline \multirow[t]{2}{*}{67} & Round 5 CPT Taylor series sampling strata and PSU \\
\hline & Replicate Weights \\
\hline 68 & Round 5 child replicate weights \\
\hline 69 & Panel 245 child replicate weights \\
\hline 70 & Panel 45 child replicate weights \\
\hline 71 & Panel 1245 child replicate weights \\
\hline 72 & Panel 12345 child replicate weights \\
\hline 73 & Round 5 parent replicate weights \\
\hline
\end{tabular}

\footnotetext{
See note at end of exhibit.
}

Exhibit 8-59. Child catalog blocks-Continued
\begin{tabular}{cl}
\hline Order & Block \\
\hline 74 & Panel 245 parent replicate weights \\
75 & Panel 45 parent replicate weights \\
76 & Panel 1245 parent replicate weights \\
77 & Panel 12345 parent replicate weights \\
78 & Round 5 CPT replicate weights \\
\hline SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood \\
Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year \\
2001-02.
\end{tabular}

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood 2001-02.

\subsection*{8.7.1 Third Grade Child Catalog Topical Variable Groupings}

The variables within the third grade child catalog are organized into topical categories to help locate and identify desired variables in the ECB. These categories are identified in exhibit 8-60. The first column of the exhibit 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). The third column is a description of the topic. The last column is the Field ID, which is used to 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.

Exhibit 8-60 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.

Exhibit 8-60. Selected child catalog topical variable groupings
\begin{tabular}{|c|c|c|c|}
\hline Topic & Variable identifier & Description & Field ID \\
\hline Identifiers & CHILDID - U5_S_ID (Variable Name) & Parent/Child identification numbers School identification number Teacher identification number & 1-15 \\
\hline Status flags & \begin{tabular}{l}
C5COGDAT - U5SRABS \\
(Variable Name)
\end{tabular} & Child assessment status indicators (e.g., cognitive data available), parent data available, teacher data available, school data available, special education data available, student record abstract data available & 57-71 \\
\hline \begin{tabular}{l}
Recalibrated \\
Cognitive Skills \\
Reading \\
Third grade
\end{tabular} & \begin{tabular}{l}
C5R2R \\
(Variable Name)
\end{tabular} & Reading routing test scores, IRT scale scores, T-scores, proficiency scores, and probability scores & 172-184 \\
\hline \begin{tabular}{l}
Recalibrated \\
Cognitive Skills \\
Math \\
Third grade
\end{tabular} & \begin{tabular}{l}
C5R2M \\
(Variable Name)
\end{tabular} & Math routing test scores, IRT scale scores, T-scores, proficiency scores, and probability scores & 185-195 \\
\hline Cognitive Skills Science & \begin{tabular}{l}
C5SROUNR - C5EARTSC \\
(Variable Name)
\end{tabular} & Science routing test score, IRT scale score, T-score, and item cluster scores & 196-201 \\
\hline Cognitive Skills SDQ & C5 SDQ & SDQ scores & 202-207 \\
\hline \begin{tabular}{l}
Social Skills and Knowledge \\
Teacher Rating
\end{tabular} & \begin{tabular}{l}
T5 Approaches \\
T5 Self \\
T5 Interpersonal \\
T5 Externalizing \\
T5 Internalizing \\
T5 Combination \\
self/interpersonal
\end{tabular} & Six factor scores from the social rating scale in teacher form C: approaches to learning, self-control, interpersonal, externalizing problem behaviors, internalizing problem behaviors, and combination of self control and interpersonal & \[
\begin{aligned}
& 212 \\
& 213 \\
& 214 \\
& 215 \\
& 216 \\
& 217
\end{aligned}
\] \\
\hline \multirow[t]{3}{*}{Composite/ Derived Variables} & \begin{tabular}{l}
R5DOBMM - R5AGE \\
C5HEIGHT - C5BMI \\
(Variable Name)
\end{tabular} & Related to child (e.g., child DOB, child race, child gender, etc.) & \[
\begin{gathered}
38-43 \\
218-220
\end{gathered}
\] \\
\hline & P1FIRKDG - IF3_ICAT (Variable Name) & Related to parent interview (e.g., parent occupation, parent highest education, etc.) & 221-277 \\
\hline & \[
\begin{aligned}
& \text { A5CLSZ - T5GLVL } \\
& \text { (Variable Name) }
\end{aligned}
\] & Related to teacher information (e.g., class size, percentage minority in class, etc.) & 278-283 \\
\hline
\end{tabular}

See note at end of exhibit.

Exhibit 8-60. Selected child catalog topical variable groupings-Continued
\begin{tabular}{|c|c|c|c|}
\hline Topic & Variable identifier & Description & Field ID \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Composite/Derived \\
Variables- \\
Continued
\end{tabular}} & \[
\begin{aligned}
& \text { L5SCHBMM - L5SCHEYY } \\
& \text { S5SCTYP - S5SCINC } \\
& \text { (Variable Name) }
\end{aligned}
\] & Related to school information (e.g., school year, school type, school enrollment, percent minority, etc.) & \[
\begin{aligned}
& 284-289 \\
& 290-298
\end{aligned}
\] \\
\hline & \begin{tabular}{l}
U5RIEP \\
(Variable Name)
\end{tabular} & Related to student record abstract: IEP record & 299 \\
\hline Child Assessment: Closing section & C5 ACQ & Includes: child's grade level, height and weight; location, environment and accommodations of assessment, etc. & 302-321 \\
\hline \begin{tabular}{l}
Parent Interview: \\
Family Structure
\end{tabular} & P5 Roster P5 FSQ & Includes: relationship of people to child, age of people, gender of people, and race/ethnicity of people, round joined, round left & \[
\begin{aligned}
& \hline 331-581 \\
& 582-746
\end{aligned}
\] \\
\hline \begin{tabular}{l}
Parent Interview: \\
Parent Involvement with Child’s School
\end{tabular} & P5 PIQ & Includes: parents' contact with school, parent attendance in school related activities, barriers to attendance to school related activities & 747-806 \\
\hline \begin{tabular}{l}
Parent Interview: \\
Home \\
Environment, \\
Activities and \\
Cognitive \\
Stimulation
\end{tabular} & P5 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 & 807-917 \\
\hline Parent Interview: Critical Family Processes & P5 CFQ & Includes: helps from family/friends, information on parents' relationship to each other & 918-924 \\
\hline Parent Interview: Child Care & P5 CCQ & Includes: child care arrangements (i.e., relative care, non-relative care, center care) & 925-989 \\
\hline Parent Interview: Discipline, Warmth and Emotional Supportiveness & P5 DWQ & Includes: parents' interaction with child and discipline strategies (e.g., spanking, time-out) & 990-1010 \\
\hline \begin{tabular}{l}
Parent Interview: \\
Non-resident \\
Parent Question
\end{tabular} & P5 NRQ & Includes: information on non-resident parent and custody arrangements & 1011-1083 \\
\hline Parent Interview: Child’s Health and Well-Being & P5 CHQ & Includes: information on dentist and doctor, updates information on indicators for developmental difficulties & 1084-1177 \\
\hline
\end{tabular}

\footnotetext{
See note at end of exhibit.
}

Exhibit 8-60. Selected child catalog topical variable groupings-Continued
\begin{tabular}{|c|c|c|c|}
\hline Topic & Variable identifier & Description & Field ID \\
\hline \begin{tabular}{l}
Parent Interview: \\
Parent's \\
Psychological \\
Well-Being and \\
Health
\end{tabular} & P5 PPQ & Includes: parent depression, parent health problems & 1178-1192 \\
\hline \begin{tabular}{l}
Parent Interview: \\
Food Security
\end{tabular} & P5 FDQ & Includes: parents' food sufficiency in the household & 1193-1210 \\
\hline \begin{tabular}{l}
Parent Interview: \\
Parent Education
\end{tabular} & P5 PEQ & Includes: parents’ education level, job training, currently attending courses & 1211-1224 \\
\hline \begin{tabular}{l}
Parent Interview: \\
Parent \\
Employment
\end{tabular} & P5 EMQ & Includes: parents' employment status & 1225-1256 \\
\hline \begin{tabular}{l}
Parent Interview: \\
Welfare and \\
Other Public \\
Transfers
\end{tabular} & P5 WPQ & Includes: family's utilization of TANF or food stamps, free/reduced breakfast or lunch & 1257-1282 \\
\hline Parent Interview: Parents Income and Assets & P5 PAQ & Includes: household income & 1283-1288 \\
\hline \begin{tabular}{l}
Parent Interview: \\
Child Mobility and \\
Plans to Move
\end{tabular} & P5 CMQ & Includes: number of places child lived, reasons for moving, mode, language and location of interview & 1289-1302 \\
\hline \begin{tabular}{l}
Teacher \\
Questionnaire A: \\
Classroom and \\
Student \\
Characteristics
\end{tabular} & A5 Q1 - A5 Q20 & Includes: Grades, class age and raceethnic composition, gender composition, percent limited English proficient, languages in classroom & 1306-1386 \\
\hline \begin{tabular}{l}
Teacher \\
Questionnaire A: \\
Instructional \\
Activities and \\
Curricular Focus
\end{tabular} & A5 Q21 - A5 Q45 & Includes: Instructional approach, presence of centers/learning areas, curriculum content, teacher's aide, physical resources (e.g., texts, equipment, materials for art and music). & 1387-1490 \\
\hline \begin{tabular}{l}
Teacher \\
Questionnaire A: \\
Language Arts \\
Instructional \\
Information
\end{tabular} & A5 Q46 - A5 Q52 & Includes: Instructional time spent on specific aspects of language arts & 1491-1529 \\
\hline \begin{tabular}{l}
Teacher \\
Questionnaire A: \\
Mathematics \\
Instructional \\
Information
\end{tabular} & A5 Q53 - A5 Q54 & Includes: Instructional time spent on specific aspects of mathematics & 1530-1556 \\
\hline
\end{tabular}

See note at end of exhibit.

Exhibit 8-60. Selected child catalog topical variable groupings-Continued
\begin{tabular}{lllc}
\hline Topic & Variable identifier & Description & Field ID \\
\hline Teacher & A5 Q55 - A5 Q56 & Includes: Instructional time spent on & \(1557-1577\) \\
\begin{tabular}{l} 
Questionnaire A: \\
Science
\end{tabular} & & & \\
\begin{tabular}{l} 
Instructional \\
Information
\end{tabular} & & & \\
\hline Teacher & A5 Q57 & & \\
\begin{tabular}{l} 
Questionnaire A:
\end{tabular} & & specific aspects of science
\end{tabular}

See note at end of exhibit.

Exhibit 8-60. Selected child catalog topical variable groupings-Continued
\begin{tabular}{|c|c|c|c|}
\hline Topic & Variable identifier & Description & Field ID \\
\hline \begin{tabular}{l}
School \\
Questionnaire: \\
School Policies and Practices
\end{tabular} & S5 Q25 - S5 Q30 & Includes: Uniform code, testing and assessments, retention & 1940-1972 \\
\hline \begin{tabular}{l}
School \\
Questionnaire: \\
School-Family- \\
Community \\
Connections
\end{tabular} & S5 Q31 - S5 Q32 & Includes: Programs and services for families, parent involvement in school & 1973-1982 \\
\hline \begin{tabular}{l}
School \\
Questionnaire: \\
School Programs for Special \\
Populations
\end{tabular} & S5 Q33 - S5 Q39 & Includes: Limited English proficient, special education, gifted and talented & 1983-2002 \\
\hline \begin{tabular}{l}
School \\
Questionnaire: \\
Staffing and \\
Teacher \\
Characteristics
\end{tabular} & S5 Q40 - S5 Q41 & Includes: School staff list, staff's raceethnic distribution & 2003-2034 \\
\hline School Questionnaire: School Governance and Climate & S5 Q43- S5 Q44 & Includes: Goals/objectives for teachers, school's climate in early grades & 2037-2054 \\
\hline \begin{tabular}{l}
School \\
Questionnaire: \\
Principal \\
Characteristics
\end{tabular} & S5 Q45 - S5 Q51 & Includes: Principal's gender, raceethnicity, birth year, experience and education & 2055-2067 \\
\hline Facilities Checklist & K5 Q1 - K5 Q6 & Includes: Measures of security, learning environment, happiness, and surrounding neighborhood & 2071-2113 \\
\hline Special Education Teacher & D5 Q1 - D5 Q15 & Includes: Special education teacher information such as gender, years teaching, educational background and certification, and working with IEP children & 2114-2166 \\
\hline Special Education Student & E5 Q1 - E5 Q24 & Includes: information specific to the study child, such as disability category, Individualized Education Plan goals, special education services received, involvement in a general education program, accommodations used and evaluations performed & 2167-2272 \\
\hline Student Record Abstract & U5 Q1 - U5 Q13 & Includes: Student attendance and Individualized Education Plan record & 2273-2313 \\
\hline
\end{tabular}

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

\subsection*{8.7.2 Child Catalog Predefined Taglists}

There is one predefined taglist provided with the child catalog that can be used for extracting data. This taglist, third grade, is defined in exhibit 8-61. The required variables, identified with "Yes" appearing in the Required field column, are the same as those listed in exhibit \(8-58\). The limiting variables, identified as "Yes" in the Limiting field column, are the same as those described in section 8.7.3.

\subsection*{8.7.3 Child Catalog Limiting Fields}

The limiting fields for the child catalog include (a) whether the child attended kindergarten for the first time in the base year (base year variable), (b) child’s grade level in spring 2002, and (c) child's school type (public vs. private) in spring 2002. 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 and for cases with "not ascertained" or "not applicable" data on school type if he or she would like to create a data file that only includes public school third-graders. The selection indicator will be either a "Yes" or "No" to specify whether the variable code should be included or excluded, respectively.

The limiting fields feature for the catalog allows the user to create a subset of cases based on the settings of the Select column in the Extract Specifications (exhibit 8-62) window. The default setting is all "Yes" in the Select column meaning that all records will be present in the extract file. To exclude records in a particular category of a variable, change the "Yes" associated with that code in the Select column 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 default specifications above will include children from all grades. To restrict the extract to records for thirdgraders only, double-click the "Yes" next to all the classes other than third grade to change the other codes to "No."

Exhibit 8-61. Third grade predefined taglist—child catalog
\begin{tabular}{|c|c|c|c|}
\hline Field Name & Field Label & Required field & Limiting field \\
\hline CHILDID & CHILD IDENTIFICATION NUMBER & Yes & No \\
\hline S5_ID & SPRING 2002 SCHOOL IDENTIFICATION NUMBER & Yes & No \\
\hline T5_ID & SPRING 2002 TEACHR IDENTIFICATION NUMBER & Yes & No \\
\hline D5T_ID & SPRING 2002 SPECIAL ED TEACHER ID NUMBER & Yes & No \\
\hline R5REGION & R5 CENSUS REGION & Yes & No \\
\hline R5URBAN & R5 LOCATION TYPE - 7 CATEGORIES & Yes & No \\
\hline R5LOCALE & R5 LOCATION TYPE - 8 CATEGORIES & Yes & No \\
\hline R5GENDER & R5 CHILD COMPOSITE GENDER & Yes & No \\
\hline R5RACE & R5 CHILD COMPOSITE RACE & Yes & No \\
\hline R5AGE & R5 COMPOSITE CHILD ASSESSMENT AGE(MNTHS) & Yes & No \\
\hline C5CW0 & C5 CHILD WEIGHT FULL SAMPLE & No & No \\
\hline C245CW0 & C2C4C5 CHILD PANEL WEIGHT FULL SAMPLE & No & No \\
\hline C45CW0 & C4C5 CHILD PANEL WEIGHT FULL SAMPLE & No & No \\
\hline C1_5FC0 & C1245 CHILD PANEL WEIGHT FULL SAMPLE & No & No \\
\hline C1_5SC0 & C12345 CHILD PANEL WEIGHT FULL SAMPLE & No & No \\
\hline C5PW0 & C5 PARENT WEIGHT FULL SAMPLE & No & No \\
\hline C245PW0 & C2C4C5 PARENT PANEL WEIGHT FULL SAMPLE & No & No \\
\hline C45PW0 & C4C5 PARENT PANEL WEIGHT FULL SAMPLE & No & No \\
\hline C1_5FP0 & C1245 PARENT PANEL WEIGHT FULL SAMPLE & No & No \\
\hline C1_5SP0 & C12345 PARENT PANEL WEIGHT FULL SAMPLE & No & No \\
\hline C5CPTW0 & C5 CHILD-PARENT-TCHER WEIGHT FULL SAMPLE & No & No \\
\hline C5R2RSCL & C5 RC2 READING IRT SCALE SCORE & No & No \\
\hline C5R2RPF & C5 RC2 READING HIGHEST PROF LVL MASTERED & No & No \\
\hline C5R2RPB1 & C5 RC2 PROB1 - LETTER RECOGNITION & No & No \\
\hline C5R2RPB2 & C5 RC2 PROB2 - BEGINNING SOUNDS & No & No \\
\hline C5R2RPB3 & C5 RC2 PROB3 - ENDING SOUNDS & No & No \\
\hline C5R2RPB4 & C5 RC2 PROB4 - SIGHT WORDS & No & No \\
\hline C5R2RPB5 & C5 RC2 PROB5 - WORD IN CONTEXT & No & No \\
\hline C5R2RPB6 & C5 RC2 PROB6 - LITERAL INFERENCE & No & No \\
\hline C5R2RPB7 & C5 RC2 PROB7 - EXTRAPOLATION & No & No \\
\hline C5R2RPB8 & C5 RC2 PROB8 - EVALUATION & No & No \\
\hline C5R2RDEC & C5 RC2 DECODING SCORE GR3 & No & No \\
\hline C5R2MSCL & C5 RC2 MATH IRT SCALE SCORE & No & No \\
\hline C5R2MPB2 & C5 RC2 PROB2 - RELATIVE SIZE & No & No \\
\hline C5R2MPB3 & C5 RC2 PROB3 - ORDINALITY, SEQUENCE & No & No \\
\hline C5R2MPB4 & C5 RC2 PROB4 - ADD/SUBTRACT & No & No \\
\hline C5R2MPB5 & C5 RC2 PROB5 - MULTIPLY/DIVIDE & No & No \\
\hline C5R2MPB6 & C5 RC2 PROB6 - PLACE VALUE & No & No \\
\hline C5R2MPB7 & C5 RC2 PROB7 - RATE \& MEASUREMENT & No & No \\
\hline C5SSCALE & C5 SCIENCE IRT SCALE SCORE & No & No \\
\hline C5LIFESC & C5 LIFE SCIENCE GR3 & No & No \\
\hline C5PHYSSC & C5 PHYSICAL SCIENCE GR3 & No & No \\
\hline
\end{tabular}

\footnotetext{
See note at end of exhibit.
}

Exhibit 8-61. Third grade predefined taglist—child catalog-Continued
\begin{tabular}{l|l|c|c}
\hline Field Name & Field Label & Required field & Limiting field \\
\hline C5EARTSC & C5 EARTH SCIENCE GR3 & No & No \\
\hline C5SDQRDC & C5 SDQ PRCVD INTEREST/COMPETENCE-READING & No & No \\
\hline C5SDQMTC & C5 SDQ PRCVD INTEREST/COMPETENCE-MATH & No & No \\
\hline C5SDQSBC & C5 SDQ PRCVD INTEREST/COMPETENCE-ALL SBJ & No & No \\
\hline C5SDQPRC & C5 SDQ PRCVD INTEREST/COMPETENCE-PEER RL & No & No \\
\hline C5SDQEXT & C5 SDQ EXTERNALIZING PROBLEMS & No & No \\
\hline C5SDQINT & C5 SDQ INTERNALIZING PROBLEMS & No & No \\
\hline P1FIRKDG & P1 FIRST-TIME KINDERGARTNER & Yes & Yes \\
\hline W3SESQ5 & W3 CATEGORICAL SES MEASURE & Yes & No \\
\hline T5GLVL & T5 GRADE LEVEL OF CHILD & Yes & Yes \\
\hline S5SCTYP & S5 SCHOOL TYPE FROM THE SFS & Yes & No \\
\hline S5ENRLS & S5 TOTAL SCHOOL ENROLLMENT & Yes & No \\
\hline S5PUPRI & S5 PUBLIC OR PRIVATE SCHOOL & Yes & Yes \\
\hline
\end{tabular}

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

Exhibit 8-62 is the child catalog Extract Specifications window.

Exhibit 8-62. Child catalog Extract Specifications window


SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02

Exhibit 8-63 is the main screen of the Third Grade Public-Use ECB.

Exhibit 8-63. Third Grade Public-Use ECB main screen


SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02

\section*{9. CREATING A LONGITUDINAL FILE}

Longitudinal analyses with the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K) can be conducted both "within school year" and "across school years." Examples of within-year analyses are those that look at children's growth in cognitive scores between fall and spring of kindergarten or between fall and spring of first grade. Such analyses do not require the combined use of kindergarten and first grade data. They can be conducted using just the kindergarten base year files or just the first grade files. Therefore, within-school year analyses are not discussed in this chapter. Since data were only collected once for third grade, no within-third grade analyses are possible. Cross-year analyses, on the other hand, are those that combine information from two or more of the kindergarten, first grade, or third grade years and are the focus of this chapter.

This chapter describes how to combine (or merge) the kindergarten, first grade, and third grade files to create cross-year files for \(\mathrm{K}-3\) longitudinal analyses. The information contained in this chapter applies to users of the base year, first grade, and third grade files. Users of the public-use files can consider using the public-use longitudinal file briefly described in chapter 1 , which combines data from the base year, first, and third grades. It contains longitudinal weights so that analysts can examine children's growth and development between kindergarten and third grade. Although it is somewhat streamlined, it contains most of the variables in the restricted-use files.

This chapter begins with a discussion of K-3 longitudinal analyses and the types of research questions that can be addressed with cross-year files. It then describes the merging procedures and the \(\mathrm{K}-\) 3 longitudinal weights.

\subsection*{9.1 Conducting Longitudinal Analyses}

As described in chapter 1, one of the primary goals of the ECLS-K is to understand how children's early experiences influence their transition into kindergarten and their progression through the early elementary school years. A major strength of the ECLS-K design is that it captures important aspects of children's experiences as they occur. Thus, information about children's transition into kindergarten is measured in the fall of their kindergarten year and again in the spring. Capturing this information as it occurs means that the information is not distorted by faulty memory or by revisions to
memory based on subsequent experiences. In addition, information from earlier points in time can be used as predictors of later events and experiences, thereby strengthening the ability of researchers to make causal inferences.

In conducting K-3 longitudinal analyses with the ECLS-K data, it is important to keep in mind the sample design described in chapter 4. Certain features of the design must be considered. First, because the first and third grade data are only released as child-based files, all analyses involving either first grade or third grade data will, of necessity, be child-based. Second, the first and third grade data are not representative of all first grade or third grade schools or classrooms or teachers in the United States. Since the sample was not freshened in third grade, the children are not representative of all children attending third grade in the 2001-2002 school year. Children who started their schooling in the U.S. in second or third grade are not represented in the sample. Researchers conducting K-3 analyses should not attempt to use the data to describe the population of all third grade children, their classrooms, teachers, or schools. However, information about the schools can be used in the child-based analyses to examine, for example, the influence of the school environment on children's learning or to describe the learning environments of the group of children who attended kindergarten 3 years earlier. Users may also examine the influence of the kindergarten year school characteristics on children's later school experiences.

\subsection*{9.2 Examples of Research Questions}

A variety of research questions can be examined using the \(\mathrm{K}-3\) longitudinal files. The following are some examples:
1. How much do children's reading and math skills increase between the fall of kindergarten and the spring of third grade?
2. Do measures of school readiness at the beginning of kindergarten predict children's skill and knowledge levels at the end of third grade?
3. What family background characteristics (e.g., family poverty, parent education, maternal employment) affect children's later school outcomes?
4. Do children who easily adapted to a school setting in kindergarten do better in third grade than their peers who experienced more difficulty settling into school or are there any lingering effects of a slow adjustment to kindergarten?
5. Are there particular school or classroom characteristics that enhance growth rates in reading and math skills between first and third grade?

To study these and similar questions, researchers would combine information from two or more rounds of data collection, across the kindergarten, first, and third grade years. For the first question, the researcher would need to examine differences between fall-kindergarten and spring-third grade assessment scores. To do this, one would combine fall-kindergarten data with spring-third grade data. Similarly, questions 2 and 3 (regarding the relationship between readiness at kindergarten entry-or maternal employment in that time frame-and third grade outcomes) would be examined by combining data from the same two time points. Note that for question 3 one would need to include data from the parent interview in the base year.

Researchers who want to examine the influence of children's kindergarten adjustment on their later grade performance, as in question 4, might use data from several rounds (i.e., fall-kindergarten, spring-kindergarten, spring-first grade, and spring-third grade). For example, one could create variables from fall-kindergarten and spring-kindergarten to measure adjustment during kindergarten and then relate those variables to outcomes in the spring of the first and third grades.

To be assigned a longitudinal weight for the K-3 data, a case must have participated in at least one of the base year rounds, and in both spring-first grade and spring-third grade. Thus, the K-3 longitudinal weights should not be used to examine questions that only use data from the base year and the first grade years. For such analyses, it is advisable to use the \(\mathrm{K}-1\) longitudinal weights.

\subsection*{9.3 Merging Base Year Child-Level Data With the First Grade and Third Grade ChildLevel Data}

To create a K-3 data file, which combines data from the base year, first grade, and third grade data collections, an analyst should use the ECLS-K Base Year Restricted-Use or Public-Use Electronic Code Book (NCES 2000-097 or NCES 2001-029); the ECLS-K First Grade Restricted-Use or Public-Use Electronic Code Book (NCES 2002-127 or NCES 2002-134); and the ECLS-K Third Grade Restricted-Use or Public-Use Electronic Code Book (NCES 2003-002 or NCES 2004-002). The same procedures can be followed by users who wish to create a K-3 longitudinal file themselves using publicuse data files. To create a longitudinal file, perform the following steps to merge the base year child-level variables needed for analysis with the first grade and third grade child-level variables needed:
1. Select the variables to be analyzed from the base year ECB child catalog and the variable CHILDID. This creates a "working taglist" (see section 8.4 in chapter 8 for more detail on how to create a working taglist).
2. Run the program generated after extraction to create a base year data set (DATA1).
3. Using the child catalog from the First Grade Restricted-Use ECB, select the variables to be analyzed and the variable CHILDID.
4. Run the program generated after extraction to create a first grade data set (DATA2).
5. Using the child catalog from the Third Grade Restricted-Use ECB, select the variables to be analyzed and the variable CHILDID.
6. Run the program generated after extraction to create a third grade data set (DATA3).
7. Sort DATA1 and DATA2 and DATA3 by CHILDID.
8. Merge DATA1 and DATA2 and DATA3 by CHILDID.

This merged file will contain 21,409 cases, some of which will not have \(\mathrm{K}-3\) longitudinal weights. For example, base year respondents who did not participate in either fall or spring of first grade or spring of third grade, and movers who were not included in the first grade and third grade sample, will not have any \(\mathrm{K}-3\) longitudinal weights. To select cases with \(\mathrm{K}-3\) longitudinal data, a user can use a \(\mathrm{K}-3\) longitudinal weight appropriate to the analysis.

\subsection*{9.4 K-3 Longitudinal Weights}

\subsection*{9.4.1 Types of K-3 Longitudinal Weights}

K-3 longitudinal weights are used to analyze data in a K-3 file created by merging base year, first grade, and third grade data, whereas cross-sectional weights are used for analyses within one round of data collection. There are several sets of K-3 longitudinal weights computed for children with complete data from different combinations of rounds. All K-3 longitudinal weights are child-level weights. There are no K-3 longitudinal weights at the school or teacher level since school- and teacherlevel weights are not computed for the first grade or third grade year. The K-3 longitudinal weights are defined as follows:
- C45CW0 is nonzero if assessment data are present for both spring-first grade and spring-third grade, or if the child was excluded from direct assessment in both of these rounds of data collection due to a disability;
- C45PW0 is nonzero if parent interview data are present for both spring-first grade and spring-third grade;
- C245CW0 is nonzero if assessment data are present for spring-kindergarten and spring-first grade and spring-third grade, or if the child was excluded from direct assessment in all of these three rounds of data collection due to a disability;
- C245PW0 is nonzero if parent interview data are present for spring-kindergarten and spring-first grade and spring-third grade;
- C1_5FC0 is nonzero if assessment data are present for four rounds of data collections involving the full sample of children (fall-kindergarten, spring-kindergarten, springfirst grade, and spring-third grade), or if the child was excluded from direct assessment in all four of these rounds of data collection due to a disability;
- C1_5FP0 is nonzero if parent interview data are present for four rounds of data collections involving the full sample of children (fall-kindergarten, springkindergarten, spring-first grade, and spring-third grade);
- C1_5SC0 is nonzero if assessment data are present for all five rounds of data collection (fall-kindergarten, spring-kindergarten, fall-first grade, spring-first grade, and spring-third grade), or if the child was excluded from direct assessment in all five rounds of data collection due to a disability; and
- C1_5SP0 is nonzero if parent interview data are present for all five rounds of data collection (fall-kindergarten, spring-kindergarten, fall-first grade, spring-first grade, and spring-third grade).

The use of the K-3 longitudinal weights, available on the third grade restricted-use ECB, is described in exhibit 9-1. This exhibit is designed to help users choose appropriate weights for their analysis. First, decide which two or more points in time are the focus of the analysis. The analysis could pertain to two points in time (spring-first grade and spring-third grade), three points in time (springkindergarten, spring-first grade, and spring-third grade), four points in time (fall-kindergarten, springkindergarten, spring-first grade, and spring-third grade), or five points in time (all five rounds of data collection). For example, if the analysis uses spring-first grade and spring-third grade data, then the appropriate weights would be those beginning with C45 (denoting child-level data from round 4, springfirst grade AND round 5, spring-third grade). Second, consider the source of the data, which also affects the choice of the weight. In exhibit 9-1, details under "to be used for analysis of ..." provide guidance based on whether the data were collected through the child assessments, parent interviews, or teacher questionnaires A or B. For the same example noted earlier, the two weights available are C45CW0 and

C45PW0. If parent data from spring-first grade and spring-third grade are needed for the analysis, then C45PW0 should be used.

Base year longitudinal weights for the analysis of the base year data (within the kindergarten year) alone are described in the base year user's manuals. First grade longitudinal weights for the analysis of the first grade data (within the first grade year) alone, and of the combined kindergarten/first grade data are described in the first grade user's manuals.

K-3 longitudinal weights are used to produce estimates of differences between two or more rounds of data collection spanning across kindergarten, first grade, and third grade. Simple examples involving two rounds of data collection are the differences in children's mean assessment scores between spring-first grade and spring-third grade using the C45CW0 weight and the difference in the total number of persons in the household size using C45PW0. K-3 longitudinal weights are also used to study the characteristics of children who were assessed in two or more rounds of data collection. For example, one can study how family background characteristics of children in kindergarten affect assessment scores in spring-third grade for children who were assessed in spring-kindergarten, spring-first grade, and springthird grade. In this case, C245PW0 is used to study the characteristics of the children as reported by their parents, and C245CW0 is used to estimate the difference in assessment scores between springkindergarten and spring-third grade. As noted earlier, any longitudinal analysis that uses data from fallfirst grade will be limited to a 27 percent subsample of children.

Exhibit 9-1. ECLS-K: K-3 longitudinal weights, spring-third grade: School year 2001-02
\begin{tabular}{ll}
\hline Weight & to be used for analysis of ... \\
\hline C45CW0 & \begin{tabular}{l} 
child direct assessment data from BOTH spring-first grade and spring-third grade, alone \\
or in conjunction with any combination of a limited set of child characteristics (e.g., age, \\
sex, race/ethnicity).
\end{tabular} \\
C45PW0 & \begin{tabular}{l} 
parent interview data from BOTH spring-first grade and spring-third grade. \\
C24ild direct assessment data from spring-kindergarten AND spring-first grade AND \\
spring-third grade, alone or in conjunction with any combination of a limited set of child \\
characteristics (e.g., age, sex, race/ethnicity).
\end{tabular} \\
C245PW0 & \begin{tabular}{l} 
parent interview data from spring-kindergarten AND spring-first grade AND spring-third \\
grade. \\
C1_5FC0 \\
child direct assessment data from FOUR rounds of data collections involving the FULL \\
sample of children (fall-kindergarten, spring-kindergarten, spring-first grade, spring-third \\
grade), alone or in conjunction with any combination of a limited set of child \\
characteristics (e.g., age, sex, race/ethnicity).
\end{tabular} \\
C1_5FP0 & \begin{tabular}{l} 
parent interview data from FOUR rounds of data collections involving the FULL sample \\
of children (fall-kindergarten, spring-kindergarten, spring-first grade, spring-third grade)
\end{tabular} \\
C1_5SC0 & \begin{tabular}{l} 
child direct assessment data from ALL FIVE rounds of data collection, alone or in \\
conjunction with any combination of a limited set of child characteristics (e.g., age, sex, \\
and race/ethnicity).
\end{tabular} \\
\hline
\end{tabular}

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

There may be combinations of data for which no weights were developed. For further advice on which weights to use when analyzing a complex combination of data, contact NCES at ECLS@ed.gov.

\subsection*{9.4.2 Weighting Procedures}

In this section we discuss the statistical procedures used to produce the \(\mathrm{K}-3\) longitudinal weights. These procedures are nearly identical to the procedures used for the cross-sectional weights (see chapter 4). The differences are primarily in how mover status and eligible respondents are defined, and in how adjustment cells are created. For example, in computing weight C45CW0, a child was identified as a mover if the child moved in either spring-first grade or spring-third grade; a respondent was defined as a child for whom both cross-sectional weights, C4CW0 and C5CW0, are nonzero. A child with a nonzero C45CW0 had both spring-first grade and spring-third grade scorable cognitive assessment data, or was excluded from the cognitive assessments because he or she was a child with disabilities. Longitudinal
weights involving the fall-first grade collections were computed differently to adjust for the fact that only a subsample of children were included in fall-first grade.

\subsection*{9.4.2.1 Longitudinal Weights Not Involving the Fall-First Grade Data}

The first stage of weighting was to compute an initial child weight that reflects the following:

■ Adjustment of the school base weight for base year school-level nonresponse;
- Adjustment of the child weights for base year child-level nonresponse; and
- Adjustment of the base year child weight for subsampling of schools for freshening in first grade (for children sampled in first grade only).

The second stage of weighting was to adjust the initial child weight computed in the first stage for the following:
- \(\quad\) Subsampling of movers and
- Child-level nonresponse.

In the adjustment for subsampling of movers, mover status was created so that it was specific to each panel. For example, for the spring-first grade/spring-third grade panel (longitudinal weights C45CW0 and C45PW0), a child was a mover if he or she was a mover in spring-first grade or spring-third grade, i.e., in either round he attended a school that was not the school where he was sampled in kindergarten. The adjustment factor for subsampling movers was computed within cells created using the following characteristics: whether children were sampled in kindergarten or first grade, whether they were movers in spring-first grade, whether they were language minority children, the school type of their original sample school, and the region where their original sample school was located. Eight children with large weights had their weights trimmed by half. However, the weights were not redistributed because the total sum of weights was re-established in the raking procedure that came later. In both steps of the nonresponse adjustment, separate nonresponse classes were created for movers and nonmovers using various combinations of response status of child assessments and parent interviews in the base year, as well as whether children belonged to the language minority group (all weights), and the type of household collected from the parent interviews (C45PW0, C245PW0, C1_5FP0 only).

The third and last stage was to rake the weights adjusted in the second stage to sample-based control totals. The raking factor was computed separately within raking cells as the sample-based control total for the raking cell over the sum of the nonresponse adjusted weights for children in the same cell. Raking cells (also known as raking dimensions) were created using school and child characteristics collected in the base year or first grade year: school type, region, urbanicity, sex, age, race/ethnicity, socioeconomic status (SES), language minority status, whether sampled in kindergarten or first grade, and if sampled in kindergarten, mover status.

\subsection*{9.4.2.2 Longitudinal Weights Involving the Fall-First Grade Data}

For the longitudinal weights involving the fall-first grade data collection where children were part of a subsample of the ECLS-K full sample, the initial weights were from fall-first grade. These were the base year child adjusted weights (as described in section 4.6.3.2 for base year respondents), incorporating the school subsampling factor appropriate for fall-first grade. These weights were also trimmed to reduce the weight of all the children in one private school that had a large school weight.

The adjustments for subsampling movers and for child nonresponse are identical to those for the other longitudinal weights. The adjustment factor for subsampling movers was computed within cells created using the following characteristics: whether children moved in fall-first grade or spring-first grade and whether they belonged in the language minority group. One child with large weights had his weight trimmed by half. However, the weights were not redistributed because the total sum of weights was reestablished in the raking procedure that came later. In both steps of the nonresponse adjustment for the C1_5SC0 weight, separate nonresponse classes were created for movers and nonmovers using the parent interview response status from the base year as well as whether children belonged to the language minority group. For the C1_5SP0 weight, nonresponse classes were created using the type of household collected from the parent interviews and whether children belonged to the language minority group.

The raking dimensions are the same as those for the other longitudinal weights. After the first raking for the C1_5SC0 weight, four children had their weights trimmed, then all the weights were raked again. Only one raking was necessary for the C1_5SP0 weight.

\subsection*{9.4.3 Characteristics of Longitudinal Weights}

The statistical characteristics of the longitudinal weights are presented in table 9-1. For each weight, the number of cases with nonzero values is presented together with the mean weight, the standard deviation, the coefficient of variation (i.e., the standard deviation as a percentage of the mean weight), the minimum value of the weight, the maximum value of the weight, the skewness, the kurtosis, and the sum of weights.

Table 9-1. Characteristics of child-level K-3 longitudinal weights, spring-third grade: School year 2001-02
\begin{tabular}{lrrrrrrrrr}
\hline \begin{tabular}{l} 
Variable \\
name
\end{tabular} & \begin{tabular}{c} 
Number \\
of cases
\end{tabular} & Mean & \begin{tabular}{c} 
Standard \\
deviation
\end{tabular} & \begin{tabular}{c} 
CV \(^{1}\) \\
\((\times 100)\)
\end{tabular} & Minimum & Maximum & Skewness & Kurtosis & Sum \\
\hline C45CW0 & 13,964 & 281.86 & 273.52 & 97.04 & 1.68 & \(3,897.42\) & 3.37 & 19.90 & \(3,935,960\) \\
C45PW0 & 12,652 & 310.98 & 266.89 & 85.82 & 1.68 & \(3,718.34\) & 3.11 & 17.32 & \(3,934,550\) \\
C245CW0 & 13,694 & 280.68 & 277.47 & 98.86 & 1.65 & \(4,119.55\) & 3.55 & 22.53 & \(3,843,642\) \\
C245PW0 & 12,204 & 314.92 & 267.05 & 84.80 & 1.78 & \(3,121.66\) & 2.87 & 14.51 & \(3,843,272\) \\
C1_5FC0 & 12,558 & 306.07 & 303.52 & 99.17 & 1.68 & \(4,264.25\) & 3.59 & 22.83 & \(3,843,607\) \\
C1_5FP0 & 10,998 & 349.42 & 299.17 & 85.62 & 1.92 & \(3,754.91\) & 3.18 & 17.88 & \(3,842,954\) \\
C1_5SC0 & 4,032 & 952.67 & 875.12 & 91.86 & 64.97 & \(7,174.65\) & 3.28 & 13.78 & \(3,841,183\) \\
C1_5SP0 & 3,522 & \(1,090.37\) & 816.79 & 74.91 & 104.68 & \(6,801.61\) & 2.56 & 9.19 & \(3,840,278\) \\
\hline
\end{tabular}
\({ }^{1}\) Coefficient of variation.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

The difference in the estimate of the population of students (sum of weights) between the different panels of students and types of weights is due to a combination of factors, among them: (1) the number of base year respondents who became ineligible (due to death, leaving the country, or being a nonsampled mover) after the base year, (2) the adjustment of the weights for the children of unknown eligibility, and (3) the difference in the number of records used to construct sample-based control totals. Of the eight longitudinal weights computed, only the first two (C45CW0 and C45PW0) involve children sampled in first grade. For these two weights, the child records included in the file used for computing the control totals are records of base year respondents and records of eligible children sampled in first grade. For all other longitudinal weights, records of children sampled in first grade were not included in the file, causing the sum of weights to be smaller.

\subsection*{9.4.4 Variance Estimation}

For each K-3 full sample weight listed in exhibit 9-1, 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 longitudinal weights not involving the fall-first grade data, there are 90 replicate weights. For a description of how the replicates were formed, see chapter 4, section 4.7. For the two longitudinal weights involving fall-first grade (C1_5SC0 and C1_5SP0), there are 40 replicate weights. The smaller number of replicates was due to the fact that only a subsample of schools was included in the fall-first grade sample. The weights associated with the fall-first grade data do not account for the Durbin method of selecting primary sampling units (PSUs), since it no longer applied. Rather, they reflect the fact that only one of the two sampled PSUs in the non-self-representing (NSR) strata was kept in the subsample. To account for this feature, pairs of similar NSR PSUs were collapsed into 19 variance strata. The self-representing (SR) PSUs account for the remaining 21 variance strata.

Each replicate weight variable name has the same weight prefix as for the full sample weight variable name. For example, the replicate weights for C1_5FC0 are C1_5FC1 through C1_5FC90; the replicate weights for C1_5SC0 are C1_5SC1 through C1_5SC40.

Stratum and first-stage unit identifiers used with the Taylor Series method are provided for each of the K-3 longitudinal weights in the file. They are described in exhibit 9-2. For a description of the Taylor Series method, see chapter 4, section 4.7.2.

Specifications for computing standard errors are given in table 9-2. For each type of analysis described in table 9-2, users can choose between the replication method and the Taylor Series method for computing standard errors.

Exhibit 9-2. ECLS-K Taylor Series stratum and first-stage unit identifiers, spring-third grade: School year 2001-02
\begin{tabular}{ll}
\hline Variable name & Description \\
\hline C45CSTR & Sampling stratum—spring-first grade/spring-third grade longitudinal C-weights \\
C45CPSU & \begin{tabular}{l} 
First-stage primary sampling unit within stratum—spring-first grade/spring-third grade \\
longitudinal C-weights
\end{tabular} \\
C45PSTR & \begin{tabular}{l} 
Sampling stratum—spring-first grade/spring-third grade longitudinal P-weights
\end{tabular} \\
C45PPSU & \begin{tabular}{l} 
First-stage primary sampling unit within stratum—spring-first grade/spring-third grade \\
longitudinal P-weights
\end{tabular} \\
C245CSTR & \begin{tabular}{l} 
Sampling stratum—spring-kindergarten/spring-first grade/spring-third grade \\
longitudinal C-weights
\end{tabular} \\
C245CPSU & \begin{tabular}{l} 
First-stage primary sampling unit within stratum—spring-kindergarten/spring-first \\
grade/spring-third grade longitudinal C-weights
\end{tabular} \\
C245PSTR & \begin{tabular}{l} 
Sampling stratum—spring-kindergarten/spring-first grade/spring-third grade \\
longitudinal P-weights
\end{tabular} \\
C245PPSU & \begin{tabular}{l} 
First-stage primary sampling unit within stratum—spring-kindergarten/spring-first \\
grade/spring-third grade longitudinal P-weights
\end{tabular} \\
C15FCPSU & \begin{tabular}{l} 
Sampling stratum—fall-kindergarten/spring-kindergarten/spring-first grade/spring-third \\
grade longitudinal C-weights
\end{tabular} \\
C15FPSTR & \begin{tabular}{l} 
First-stage primary sampling unit within stratum—fall-kindergarten/spring- \\
kindergarten/spring-first grade/spring-third grade longitudinal C-weights
\end{tabular} \\
Campling stratum—fall-kindergarten/spring-kindergarten/spring-first grade/spring-third \\
grade longitudinal P-weights
\end{tabular}

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

Table 9-2. Specifications for computing standard errors, spring third-grade: School year 2001-02

\({ }^{1}\) WR = with replacement, specified only if using SUDAAN. WR is the only option available if using SAS, Stata, or AM.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

For the replication method using WesVar, the full sample weight, the replicate weights, and the method of replication are required parameters. Variance estimation using the ECLS-K data should be done using the paired jackknife method (JK2). As an example, to compute the mean difference in reading scores between spring-kindergarten and spring-first grade and their standard errors, users need to specify C45CW0 as the full sample weight, C45CW1 to C45CW90 as the replicate weights, and JK2 as the method of replication.

For the Taylor Series method using SUDAAN, SAS, Stata, or AM the full sample weight, the sample design, the nesting stratum, and PSU variables are required. For the same example earlier, the full sample weight (C45CW0), the stratum variable (C45CSTR), and the PSU variable (C45CPSU) must be specified. The "with replacement" sample design option, WR, must also be specified if using SUDAAN.

\subsection*{9.4.5 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. For a discussion of design effects and their use, see chapter 4, section 4.8. In this section, design effects are presented for selected illustrative estimates produced using kindergarten-first grade longitudinal weights. The tables that follow show estimates, standard errors, and design effects for selected means and proportions based on the ECLS-K child and parent 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 JK2.

Standard errors and design effects are presented in tables 9-3 to 9-6. Data items are from the direct child assessment, the parent interview, and the teacher child-level questionnaire. Full sample weights were used to compute the estimates; then the corresponding replicate weights were used to compute standard errors and design effects.

Table 9-3. ECLS-K, spring-first grade/spring-third grade panel: standard errors and design effects using C45CW0-C45CW90 and C45PW0-C45PW90, by selected child and parent variables: School years 1999-2000 and 2001-02
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Survey item & Variable name & Number of cases & Estimate & \[
\begin{array}{r}
\text { Design } \\
\mathrm{SE}^{1}
\end{array}
\] & \[
\begin{gathered}
\hline \mathrm{SRS} \\
\mathrm{SE}^{2}
\end{gathered}
\] & \(\mathrm{DEFT}^{3}\) & DEFF \(^{4}\) \\
\hline \multicolumn{8}{|l|}{Difference between spring-first grade and spring-third grade scores (mean)} \\
\hline Reading scale score & C5R2RSCL-C4R2RSCL & 13,504 & 39.41 & 0.285 & 0.130 & 2.195 & 4.819 \\
\hline Math scale score & C5R2MSCL- C4R2MSCL & 13,842 & 29.36 & 0.229 & 0.097 & 2.366 & 5.600 \\
\hline Approaches to learning-Teacher & TSLEARN- T4LEARN & 10,526 & -0.02 & 0.010 & 0.006 & 1.546 & 2.390 \\
\hline Self-control-Teacher & T5CONTRO- T4CONTRO & 10,351 & 0.01 & 0.010 & 0.007 & 1.490 & 2.219 \\
\hline Interpersonal-Teacher & TSINTERP- T4INTERP & 10,311 & -0.04 & 0.011 & 0.007 & 1.602 & 2.565 \\
\hline Externalizing problems-Teacher & TSEXTERN- T4EXTERN & 10,451 & 0.07 & 0.010 & 0.006 & 1.661 & 2.759 \\
\hline Internalizing problems-Teacher & TSINTERN- T4INTERN & 10,317 & 0.06 & 0.011 & 0.007 & 1.681 & 2.825 \\
\hline \multicolumn{8}{|l|}{Other differences} \\
\hline Child's Body Mass Index (BMI) & C5BMI-C4BMI & 12,588 & 1.77 & 0.032 & 0.018 & 1.791 & 3.209 \\
\hline Child's height & C5HEIGHT-C4HEIGHT & 12,950 & 4.67 & 0.022 & 0.013 & 1.751 & 3.067 \\
\hline Child's weight & C5WEIGHT-C4WEIGHT & 12,735 & 18.88 & 0.142 & 0.089 & 1.604 & 2.574 \\
\hline Household size & P5HTOTAL-P4HTOTAL & 12,650 & 0.04 & 0.011 & 0.008 & 1.451 & 2.106 \\
\hline Number of hours watched TV after dinner & P5TVAFDH-P4TVAFDH & 12,377 & 0.10 & 0.013 & 0.008 & 1.562 & 2.439 \\
\hline \multicolumn{8}{|l|}{Child and parent characteristics from parent interview (percent)} \\
\hline Lived in single parent family & P5HFAMIL & 12,652 & 25.18 & 0.699 & 0.386 & 1.812 & 3.285 \\
\hline Lived in two-parent family & P5HFAMIL & 12,652 & 72.48 & 0.784 & 0.397 & 1.975 & 3.901 \\
\hline Mom worked 35 hours+/week & P5HMEMP & 9,265 & 67.07 & 0.826 & 0.488 & 1.691 & 2.859 \\
\hline Primary care is center-based & P5PRIMNW & 4,462 & 36.46 & 1.357 & 0.721 & 1.883 & 3.545 \\
\hline Primary care is home-based & P5PRIMNW & 4,462 & 63.54 & 1.357 & 0.721 & 1.883 & 3.545 \\
\hline Parents had high school or less & W3PARED & 12,652 & 32.63 & 0.871 & 0.417 & 2.089 & 4.364 \\
\hline Household income category below median & W3INCCAT & 12,652 & 41.82 & 1.038 & 0.439 & 2.366 & 5.598 \\
\hline Parent attended PTA & P5ATTENP & 12,636 & 43.55 & 0.941 & 0.441 & 2.133 & 4.550 \\
\hline Practiced reading, writing, numbers daily & P5RDWRNM & 12,557 & 49.44 & 0.602 & 0.446 & 1.350 & 1.823 \\
\hline Visited library & P5LIBRAR & 12,558 & 54.35 & 0.798 & 0.445 & 1.795 & 3.222 \\
\hline Used computer 1-2 times per week & Р5НОМЕСМ, P5COMPWK & 10,121 & 41.82 & 0.648 & 0.491 & 1.321 & 1.746 \\
\hline Had Internet access & P5HOMECM, P5INTACC & 9,883 & 86.06 & 0.431 & 0.348 & 1.237 & 1.529 \\
\hline Used computer 1-2 times/week for homework & P5НОМECM, P5CMPEDU & 9,862 & 53.06 & 0.639 & 0.503 & 1.271 & 1.615 \\
\hline Had family rule for TV & P5TVHOME, P5TVRULE & 12,488 & 91.68 & 0.315 & 0.247 & 1.273 & 1.620 \\
\hline Did homework 3-4 times per week & P50FTDHW & 12,539 & 40.40 & 0.694 & 0.438 & 1.583 & 2.506 \\
\hline Have someone help with reading homework & P5HELPR & 12,370 & 98.52 & 0.177 & 0.108 & 1.633 & 2.666 \\
\hline Completely true child and self have close time & P5WARMCL & 12,263 & 68.49 & 0.586 & 0.419 & 1.397 & 1.953 \\
\hline Took away privilege when child angry & P5HITPRV & 12,250 & 62.23 & 1.011 & 0.438 & 2.308 & 5.328 \\
\hline Self-reported in very good health & PSHEALTH & 12,240 & 86.77 & 0.542 & 0.306 & 1.769 & 3.128 \\
\hline HH received food stamps in last 12 months & P5FSTAMP & 12,472 & 14.03 & 0.736 & 0.311 & 2.367 & 5.604 \\
\hline \multicolumn{8}{|l|}{Child characteristics from teacher questionnaire C (percent)} \\
\hline Enrolled in third grade & T5GRade & 11,397 & 88.25 & 0.672 & 0.301 & 2.229 & 4.969 \\
\hline Average in language skills & T5RTLANG & 11,262 & 70.83 & 0.784 & 0.428 & 1.831 & 3.353 \\
\hline Average in science/social studies & T5RTSCI & 11,180 & 79.63 & 0.918 & 0.381 & 2.411 & 5.812 \\
\hline Average in math skills & T5RTMTH & 11,227 & 77.37 & 0.805 & 0.395 & 2.040 & 4.160 \\
\hline
\end{tabular}

\footnotetext{
See notes at end of table.
}

Table 9-3. ECLS-K, spring-first grade/spring-third grade panel: standard errors and design effects using C45CW0-C45CW90 and C45PW0-C45PW90, by selected child and parent variables: School years 1999-2000 and 2001-02-Continued
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Survey item & Variable name & Number of cases & Estimate & \[
\begin{array}{r}
\text { Design } \\
\mathrm{SE}^{1}
\end{array}
\] & \[
\begin{gathered}
\hline \text { SRS } \\
\mathrm{SE}^{2}
\end{gathered}
\] & \(\mathrm{DEFT}^{3}\) & DEFF \({ }^{4}\) \\
\hline \multicolumn{8}{|l|}{Child characteristics (mean)} \\
\hline Age of child in months & R5AGE & 13,901 & 111.21 & 0.093 & 0.040 & 2.299 & 5.285 \\
\hline Child's BMI & C5Bmi & 13,417 & 18.69 & 0.045 & 0.033 & 1.366 & 1.866 \\
\hline Child's household size & P5HTOTAL & 12,652 & 4.58 & 0.025 & 0.012 & 2.015 & 4.059 \\
\hline Number of children <18 in child's HH & P5LESS18 & 12,652 & 2.52 & 0.021 & 0.010 & 2.099 & 4.404 \\
\hline Number of siblings in HH & P5NUMSIB & 12,652 & 1.56 & 0.020 & 0.010 & 1.968 & 3.874 \\
\hline Number of hours watched TV after dinner & P5TVAFDH & 12,470 & 0.88 & 0.012 & 0.007 & 1.656 & 2.742 \\
\hline Median & & & & & & 1.769 & 3.169 \\
\hline Mean & & & & & & 1.815 & 3.438 \\
\hline Standard deviation & & & & & & 0.366 & 1.396 \\
\hline Coefficient of variation & & & & & & 0.202 & 0.406 \\
\hline Minimum & & & & & & 1.237 & 1.529 \\
\hline Maximum & & & & & & 2.685 & 7.209 \\
\hline
\end{tabular}
\({ }^{1}\) Design SE is the standard error under the ECLS-K sample design. For an explanation of this statistic, see chapter 4, section 4.8 .
\({ }^{2}\) SRS SE is the standard error assuming simple random sample. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{3}\) DEFT is the root design effect. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{4}\) DEFF is the design effect. For an explanation of this statistic, see chapter 4, section 4.8.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 first and third grade data collections, school years 1999-2000 and 2001-02.

Table 9-4. ECLS-K, spring-kindergarten/spring-first grade/spring-third grade panel: standard errors and design effects using C245CW0-C245CW90 and C245PW0-C245PW90, by selected child and parent variables: School years 1998-99, 1999-2000, and 2001-02
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Survey item & Variable name & Number of cases & Estimate & \[
\begin{array}{r}
\text { Design } \\
\mathrm{SE}^{1} \\
\hline
\end{array}
\] & \[
\begin{gathered}
\hline \mathrm{SRS} \\
\mathrm{SE}^{2}
\end{gathered}
\] & \(\mathrm{DEFT}^{3}\) & DEFF \({ }^{4}\) \\
\hline \multicolumn{8}{|l|}{Difference between spring-first grade and spring-third grade scores (mean)} \\
\hline Reading scale score & C5R2RSCL-C4R2RSCL & 13,260 & 39.39 & 0.278 & 0.131 & 2.126 & 4.518 \\
\hline Math scale score & C5R2MSCL- C4R2MSCL & 13,579 & 29.39 & 0.238 & 0.097 & 2.445 & 5.976 \\
\hline Approaches to learning-Teacher & TSLEARN- T4LEARN & 10,376 & -0.02 & 0.011 & 0.007 & 1.670 & 2.790 \\
\hline Self-control-Teacher & T5CONTRO- T4CONTRO & 10,206 & 0.01 & 0.010 & 0.006 & 1.553 & 2.411 \\
\hline Interpersonal-Teacher & TSINTERP- T4INTERP & 10,165 & -0.04 & 0.012 & 0.007 & 1.737 & 3.016 \\
\hline Externalizing problems-Teacher & TSEXTERN- T4EXTERN & 10,300 & 0.06 & 0.009 & 0.006 & 1.594 & 2.541 \\
\hline Internalizing problems-Teacher & TSINTERN- T4INTERN & 10,175 & 0.06 & 0.010 & 0.007 & 1.534 & 2.353 \\
\hline \multicolumn{8}{|l|}{Difference between spring-kindergarten and spring-third grade scores (mean)} \\
\hline Reading scale score & C5R2RSCL-C2R2RSCL & 12,867 & 69.03 & 0.356 & 0.147 & 2.423 & 5.873 \\
\hline Math scale score & C5R2MSCL- C2R2MSCL & 13,451 & 52.60 & 0.295 & 0.110 & 2.692 & 7.248 \\
\hline Approaches to learning-Teacher & TSLEARN- T2LEARN & 10,836 & -0.10 & 0.010 & 0.007 & 1.536 & 2.360 \\
\hline Self-control-Teacher & T5CONTRO- T2CONTRO & 10,674 & -0.01 & 0.010 & 0.006 & 1.553 & 2.411 \\
\hline Interpersonal-Teacher & TSINTERP- T2INTERP & 10,609 & -0.06 & 0.010 & 0.007 & 1.427 & 2.037 \\
\hline Externalizing problems-Teacher & TSEXTERN- T2EXTERN & 10,770 & 0.07 & 0.010 & 0.006 & 1.592 & 2.535 \\
\hline Internalizing problems-Teacher & TSINTERN- T2INTERN & 10,648 & 0.10 & 0.013 & 0.006 & 2.025 & 4.099 \\
\hline \multicolumn{8}{|l|}{Other differences} \\
\hline Child's BMI & C5BMI-C4BMI & 12,370 & 1.76 & 0.032 & 0.018 & 1.764 & 3.111 \\
\hline Child's height & C5HEIGHT-C4HEIGHT & 12,727 & 4.66 & 0.022 & 0.013 & 1.738 & 3.019 \\
\hline Child's weight & C5WEIGHT-C4WEIGHT & 12,507 & 18.77 & 0.137 & 0.089 & 1.536 & 2.360 \\
\hline Household size & P5HTOTAL-P4HTOTAL & 12,202 & 0.04 & 0.012 & 0.008 & 1.442 & 2.080 \\
\hline Number of hours watched TV after dinner & P5TVAFDH-P4TVAFDH & 11,962 & 0.10 & 0.015 & 0.009 & 1.664 & 2.768 \\
\hline \multicolumn{8}{|l|}{Child and parent characteristics from parent interview (percent)} \\
\hline Lived in single parent family & P5HFAMIL & 12,204 & 25.08 & 0.706 & 0.392 & 1.800 & 3.240 \\
\hline Lived in two-parent family & P5HFAMIL & 12,204 & 72.53 & 0.806 & 0.404 & 1.994 & 3.975 \\
\hline Mom worked 35 hours+/week & P5HMEMP & 8,996 & 66.99 & 0.782 & 0.496 & 1.578 & 2.490 \\
\hline Primary care is center-based & P5PRIMNW & 4,308 & 36.83 & 1.405 & 0.735 & 1.912 & 3.657 \\
\hline Primary care is home-based & P5PRIMNW & 4,308 & 63.17 & 1.405 & 0.735 & 1.912 & 3.657 \\
\hline Parents had high school or less & W3PARED & 12,204 & 32.11 & 0.840 & 0.423 & 1.987 & 3.948 \\
\hline Household income category below median & W3INCCAT & 12,204 & 41.48 & 1.053 & 0.446 & 2.361 & 5.575 \\
\hline Parent attended PTA & P5ATTENP & 12,188 & 43.81 & 0.907 & 0.450 & 2.017 & 4.070 \\
\hline Practiced reading, writing, numbers daily & P5RDWRNM & 12,124 & 49.48 & 0.630 & 0.455 & 1.386 & 1.922 \\
\hline Visited library & P5LIBRAR & 12,124 & 54.86 & 0.810 & 0.452 & 1.793 & 3.215 \\
\hline Used computer 1-2 times per week & P5НОМECM, P5COMPWK & 9,848 & 41.99 & 0.690 & 0.497 & 1.387 & 1.924 \\
\hline Had Internet access & P5HOMECM, PSINTACC & 9,615 & 86.08 & 0.458 & 0.353 & 1.297 & 1.683 \\
\hline Used computer 1-2 times/week for homework & P5HOMECM, P5CMPEDU & 9,594 & 53.05 & 0.606 & 0.510 & 1.189 & 1.414 \\
\hline Had family rule for TV & P5TVHOME, P5TVRULE & 12,061 & 91.72 & 0.335 & 0.251 & 1.335 & 1.781 \\
\hline Did homework 3-4 times per week & P50FTDHW & 12,107 & 40.73 & 0.701 & 0.447 & 1.569 & 2.462 \\
\hline Have someone help with reading homework & P5HELPR & 11,941 & 98.52 & 0.175 & 0.111 & 1.580 & 2.497 \\
\hline Completely true child and self have close time & P5WARMCL & 11,854 & 68.53 & 0.595 & 0.426 & 1.396 & 1.948 \\
\hline Took away privilege when child angry & P5HITPRV & 11,840 & 62.23 & 1.010 & 0.446 & 2.267 & 5.140 \\
\hline Self-reported in very good health & PSHEALTH & 11,835 & 87.07 & 0.515 & 0.308 & 1.670 & 2.790 \\
\hline HH received food stamps in last 12 months & P5FSTAMP & 12,050 & 13.93 & 0.740 & 0.315 & 2.346 & 5.504 \\
\hline
\end{tabular}

\footnotetext{
See notes at end of table.
}

Table 9-4. ECLS-K, spring-kindergarten/spring-first grade/spring-third grade panel: standard errors and design effects using C245CW0-C245CW90 and C245PW0-C245PW90, by selected child and parent variables: School years 1998-99, 1999-2000, and 2001-02—Continued
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Survey item & Variable name & Number of cases & Estimate & Design \(\mathrm{SE}^{1}\) & \[
\begin{gathered}
\hline \mathrm{SRS} \\
\mathrm{SE}^{2}
\end{gathered}
\] & \(\mathrm{DEFT}^{3}\) & \(\mathrm{DEFF}^{4}\) \\
\hline \multicolumn{8}{|l|}{Child characteristics from teacher questionnaire C (percent)} \\
\hline Enrolled in third grade & t5grade & 11,209 & 88.30 & 0.690 & 0.304 & 2.271 & 5.159 \\
\hline Average in language skills & T5RTLANG & 11,080 & 71.36 & 0.751 & 0.429 & 1.750 & 3.061 \\
\hline Average in science/social studies & T5RTSCI & 10,997 & 80.16 & 0.790 & 0.381 & 2.076 & 4.311 \\
\hline Average in math skills & T5RTMTH & 11,046 & 77.66 & 0.723 & 0.396 & 1.825 & 3.331 \\
\hline \multicolumn{8}{|l|}{Child characteristics (mean)} \\
\hline Age of child in months & R5AGE & 13,636 & 111.03 & 0.080 & 0.038 & 2.094 & 4.383 \\
\hline Child's BMI & C5BMI & 13,167 & 18.66 & 0.045 & 0.033 & 1.362 & 1.855 \\
\hline Child's household size & P5HTOTAL & 12,204 & 4.57 & 0.025 & 0.013 & 1.976 & 3.903 \\
\hline Number of children <18 in child's HH & P5LESS18 & 12,204 & 2.52 & 0.021 & 0.010 & 2.046 & 4.188 \\
\hline Number of siblings in HH & P5NUMSIB & 12,204 & 1.55 & 0.020 & 0.010 & 1.927 & 3.714 \\
\hline Number of hours watched TV after dinner & P5TVAFDH & 12,045 & 0.88 & 0.012 & 0.007 & 1.603 & 2.569 \\
\hline Median & & & & & & 1.738 & 3.040 \\
\hline Mean & & & & & & 1.791 & 3.340 \\
\hline Standard deviation & & & & & & 0.345 & 1.315 \\
\hline Coefficient of variation & & & & & & 0.192 & 0.394 \\
\hline Minimum & & & & & & 1.189 & 1.414 \\
\hline Maximum & & & & & & 2.692 & 7.248 \\
\hline
\end{tabular}
\({ }^{1}\) Design SE is the standard error under the ECLS-K sample design. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{2}\) SRS SE is the standard error assuming simple random sample. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{3}\) DEFT is the root design effect. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{4}\) DEFF is the design effect. For an explanation of this statistic, see chapter 4, section 4.8.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 kindergarten, first grade, and third grade data collections, school years 1998-99, 1999-2000, and 2001-02.

Table 9-5. ECLS-K, fall-kindergarten/spring-kindergarten/spring-first grade/spring-third grade panel: standard errors and design effects using C1_5FC0-C1_5FC90 and C1_5FP0-C1_5FP90, by selected child and parent variables: School years 1998-99, 1999-2000, and 2001-02
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Survey item & Variable name & Number of cases & Estimate & \[
\begin{array}{r}
\text { Design } \\
\mathrm{SE}^{1}
\end{array}
\] & \[
\begin{gathered}
\hline \text { SRS } \\
\mathrm{SE}^{2}
\end{gathered}
\] & \(\mathrm{DEFT}^{3}\) & DEFF \({ }^{4}\) \\
\hline \multicolumn{8}{|l|}{Difference between spring-first grade and spring-third grade scores (mean)} \\
\hline Reading scale score & C5R2RSCL-C4R2RSCL & 12,170 & 39.43 & 0.290 & 0.136 & 2.125 & 4.515 \\
\hline Math scale score & C5R2MSCL- C4R2MSCL & 12,454 & 29.42 & 0.224 & 0.102 & 2.206 & 4.867 \\
\hline Approaches to learning-Teacher & TSLEARN- T4LEARN & 9,464 & -0.02 & 0.010 & 0.007 & 1.464 & 2.144 \\
\hline Self-control-Teacher & T5CONTRO- T4CONTRO & 9,314 & 0.02 & 0.010 & 0.007 & 1.496 & 2.239 \\
\hline Interpersonal-Teacher & TSINTERP- T4INTERP & 9,273 & -0.04 & 0.012 & 0.007 & 1.616 & 2.612 \\
\hline Externalizing problems-Teacher & TSEXTERN- T4EXTERN & 9,395 & 0.07 & 0.009 & 0.006 & 1.494 & 2.233 \\
\hline Internalizing problems-Teacher & TSINTERN- T4INTERN & 9,277 & 0.05 & 0.011 & 0.007 & 1.670 & 2.788 \\
\hline \multicolumn{8}{|l|}{Difference between spring-kindergarten and spring-third grade scores (mean)} \\
\hline Reading scale score & C5R2RSCL-C2R2RSCL & 11,816 & 69.04 & 0.358 & 0.153 & 2.345 & 5.499 \\
\hline Math scale score & C5R2MSCL- C2R2MSCL & 12,347 & 52.57 & 0.271 & 0.114 & 2.377 & 5.651 \\
\hline Approaches to learning-Teacher & TSLEARN- T2LEARN & 9,918 & -0.10 & 0.011 & 0.007 & 1.533 & 2.350 \\
\hline Self-control-Teacher & T5CONTRO- T2CONTRO & 9,767 & 0.00 & 0.011 & 0.007 & 1.496 & 2.239 \\
\hline Interpersonal-Teacher & TSINTERP- T2INTERP & 9,710 & -0.06 & 0.011 & 0.008 & 1.433 & 2.053 \\
\hline Externalizing problems-Teacher & TSEXTERN- T2EXTERN & 9,851 & 0.07 & 0.010 & 0.007 & 1.523 & 2.320 \\
\hline Internalizing problems-Teacher & TSINTERN- T2INTERN & 9,741 & 0.09 & 0.014 & 0.007 & 2.095 & 4.387 \\
\hline \multicolumn{8}{|l|}{Other differences} \\
\hline Child's BMI & C5BMI-C4BMI & 11,312 & 1.76 & 0.032 & 0.019 & 1.678 & 2.815 \\
\hline Child's height & C5HEIGHT-C4HEIGHT & 11,659 & 4.64 & 0.022 & 0.013 & 1.721 & 2.963 \\
\hline Child's weight & C5WEIGHT-C4WEIGHT & 11,440 & 18.72 & 0.135 & 0.093 & 1.444 & 2.086 \\
\hline Household size & P5HTOTAL-P4HTOTAL & 10,996 & 0.04 & 0.011 & 0.008 & 1.318 & 1.736 \\
\hline Number of hours watched TV after dinner & P5TVAFDH-P4TVAFDH & 10,791 & 0.11 & 0.017 & 0.009 & 1.823 & 3.322 \\
\hline \multicolumn{8}{|l|}{Child and parent characteristics from parent interview (percent)} \\
\hline Lived in single parent family & P5HFAMIL & 10,998 & 25.07 & 0.691 & 0.413 & 1.672 & 2.794 \\
\hline Lived in two-parent family & P5HFAMIL & 10,998 & 72.61 & 0.800 & 0.426 & 1.880 & 3.536 \\
\hline Mom worked 35 hours+/week & P5HMEMP & 8,115 & 67.28 & 0.836 & 0.521 & 1.604 & 2.573 \\
\hline Primary care is center-based & P5PRIMNW & 3,883 & 36.96 & 1.490 & 0.775 & 1.923 & 3.699 \\
\hline Primary care is home-based & PSPRIMNW & 3,883 & 63.04 & 1.490 & 0.775 & 1.923 & 3.699 \\
\hline Parents had high school or less & W3PARED & 10,998 & 32.01 & 0.828 & 0.445 & 1.861 & 3.463 \\
\hline Household income category below median & W3inccat & 10,998 & 41.11 & 1.059 & 0.469 & 2.257 & 5.092 \\
\hline Parent attended PTA & P5ATTENP & 10,983 & 43.97 & 0.928 & 0.474 & 1.959 & 3.837 \\
\hline Practiced reading, writing, numbers daily & P5RDWRNM & 10,925 & 49.16 & 0.644 & 0.478 & 1.346 & 1.813 \\
\hline Visited library & P5LIBRAR & 10,926 & 55.23 & 0.855 & 0.476 & 1.798 & 3.234 \\
\hline Used computer 1-2 times per week & P5НОМECM, P5COMPWK & 8,934 & 42.18 & 0.727 & 0.523 & 1.391 & 1.935 \\
\hline Had Internet access & P5HOMECM, PSINTACC & 8,729 & 86.36 & 0.432 & 0.368 & 1.175 & 1.381 \\
\hline Used computer 1-2 times/week for homework & P5HOMECM, P5CMPEDU & 8,709 & 53.40 & 0.648 & 0.534 & 1.213 & 1.471 \\
\hline Had family rule for TV & P5TVHOME, P5TVRULE & 10,878 & 91.60 & 0.369 & 0.266 & 1.389 & 1.928 \\
\hline Did homework 3-4 times per week & P50FTDHW & 10,909 & 40.85 & 0.770 & 0.471 & 1.636 & 2.675 \\
\hline Have someone help with reading homework & P5HELPR & 10,764 & 98.45 & 0.211 & 0.119 & 1.770 & 3.132 \\
\hline Completely true child and self have close time & P5WARMCL & 10,687 & 68.54 & 0.652 & 0.449 & 1.451 & 2.106 \\
\hline Took away privilege when child angry & P5HITPRV & 10,679 & 62.19 & 1.019 & 0.469 & 2.172 & 4.718 \\
\hline Self-reported in very good health & P5HEALTH & 10,668 & 87.13 & 0.525 & 0.324 & 1.620 & 2.624 \\
\hline HH received food stamps in last 12 months & P5FSTAMP & 10,857 & 13.68 & 0.755 & 0.330 & 2.288 & 5.234 \\
\hline
\end{tabular}

\footnotetext{
See notes at end of table.
}

Table 9-5. ECLS-K, fall-kindergarten/spring-kindergarten/spring-first grade/spring-third grade panel: standard errors and design effects using C1_5FC0-C1_5FC90 and C1_5FP0-C1_5FP90, by selected child and parent variables: School years 1998-99, 1999-2000, and 2001-02Continued
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Survey item & Variable name & Number of cases & Estimate & \[
\begin{array}{r}
\text { Design } \\
\mathrm{SE}^{1} \\
\hline
\end{array}
\] & \[
\begin{gathered}
\hline \text { SRS } \\
\mathrm{SE}^{2}
\end{gathered}
\] & \(\mathrm{DEFT}^{3}\) & DEFF \({ }^{4}\) \\
\hline \multicolumn{8}{|l|}{Child characteristics from teacher questionnaire C (percent)} \\
\hline Enrolled in third grade & T5GRADE & 10,225 & 88.65 & 0.703 & 0.314 & 2.242 & 5.027 \\
\hline Average in language skills & T5RTLANG & 10,098 & 71.61 & 0.760 & 0.449 & 1.694 & 2.870 \\
\hline Average in science/social studies & T5RTSCI & 10,018 & 80.51 & 0.803 & 0.396 & 2.029 & 4.116 \\
\hline Average in math skills & T5RTMTH & 10,070 & 77.92 & 0.763 & 0.413 & 1.847 & 3.410 \\
\hline \multicolumn{8}{|l|}{Child characteristics (mean)} \\
\hline Age of child in months & R5AGE & 12,507 & 111.02 & 0.079 & 0.040 & 1.989 & 3.957 \\
\hline Child's BMI & C5BMI & 12,074 & 18.64 & 0.047 & 0.035 & 1.343 & 1.804 \\
\hline Child's household size & P5HTOTAL & 10,998 & 4.58 & 0.025 & 0.013 & 1.934 & 3.740 \\
\hline Number of children <18 in child's HH & P5LESS18 & 10,998 & 2.53 & 0.022 & 0.011 & 2.013 & 4.051 \\
\hline Number of siblings in HH & P5NUMSIB & 10,998 & 1.56 & 0.020 & 0.011 & 1.871 & 3.502 \\
\hline Number of hours watched TV after dinner & P5TVAFDH & 10,863 & 0.88 & 0.012 & 0.008 & 1.550 & 2.404 \\
\hline Median & & & & & & 1.694 & 2.917 \\
\hline Mean & & & & & & 1.749 & 3.172 \\
\hline Standard deviation & & & & & & 0.315 & 1.138 \\
\hline Coefficient of variation & & & & & & 0.180 & 0.359 \\
\hline Minimum & & & & & & 1.175 & 1.381 \\
\hline Maximum & & & & & & 2.377 & 5.651 \\
\hline
\end{tabular}

\footnotetext{
\({ }^{1}\) Design SE is the standard error under the ECLS-K sample design. For an explanation of this statistic, see chapter 4, section 4.8 .
\({ }^{2}\) SRS SE is the standard error assuming simple random sample. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{3}\) DEFT is the root design effect. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{4}\) DEFF is the design effect. For an explanation of this statistic, see chapter 4, section 4.8.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 kindergarten, first grade, and third grade data collections, school years 1998-99, 1999-2000, and 2001-02.
}

Table 9-6. ECLS-K, panel of all five rounds: standard errors and design effects for the full sample using C1_5SC0-C1_5SC40 and C1_5SP0-C1_5SP40, by selected child and parent variables: School years 1998-99, 1999-2000, and 2001-02
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Survey item & Variable name & Number of cases & Estimate & \[
\begin{array}{r}
\text { Design } \\
\mathrm{SE}^{1}
\end{array}
\] & \[
\begin{gathered}
\hline \mathrm{SRS} \\
\mathrm{SE}^{2}
\end{gathered}
\] & \(\mathrm{DEFT}^{3}\) & DEFF \({ }^{4}\) \\
\hline \multicolumn{8}{|l|}{Difference between spring-first grade and spring-third grade scores (mean)} \\
\hline Reading scale score & C5R2RSCL-C4R2RSCL & 3,903 & 40.01 & 0.387 & 0.247 & 1.567 & 2.455 \\
\hline Math scale score & C5R2MSCL- C4R2MSCL & 4,005 & 29.22 & 0.384 & 0.180 & 2.131 & 4.543 \\
\hline Approaches to learning-Teacher & TSLEARN- T4LEARN & 2,803 & -0.03 & 0.024 & 0.012 & 1.957 & 3.830 \\
\hline Self-control-Teacher & T5CONTRO- T4CONTRO & 2,748 & 0.01 & 0.022 & 0.012 & 1.823 & 3.323 \\
\hline Interpersonal-Teacher & TSINTERP- T4INTERP & 2,736 & -0.06 & 0.021 & 0.013 & 1.634 & 2.670 \\
\hline Externalizing problems-Teacher & TSEXTERN- T4EXTERN & 2,787 & 0.06 & 0.020 & 0.011 & 1.783 & 3.180 \\
\hline Internalizing problems-Teacher & TSINTERN- T4INTERN & 2,733 & 0.06 & 0.017 & 0.013 & 1.351 & 1.825 \\
\hline \multicolumn{8}{|l|}{Difference between spring-kindergarten and spring-third grade scores (mean)} \\
\hline Reading scale score & C5R2RSCL-C2R2RSCL & 3,800 & 68.97 & 0.531 & 0.267 & 1.987 & 3.947 \\
\hline Math scale score & C5R2MSCL- C2R2MSCL & 3,976 & 52.66 & 0.433 & 0.202 & 2.144 & 4.596 \\
\hline Approaches to learning-Teacher & TSLEARN- T2LEARN & 2,989 & -0.10 & 0.021 & 0.013 & 1.602 & 2.567 \\
\hline Self-control-Teacher & T5CONTRO- T2CONTRO & 2,942 & -0.01 & 0.017 & 0.009 & 1.823 & 3.323 \\
\hline Interpersonal-Teacher & TSINTERP- T2INTERP & 2,903 & -0.05 & 0.019 & 0.013 & 1.426 & 2.033 \\
\hline Externalizing problems-Teacher & TSEXTERN-T2EXTERN & 2,976 & 0.06 & 0.021 & 0.011 & 1.842 & 3.392 \\
\hline Internalizing problems-Teacher & TSINTERN- T2INTERN & 2,925 & 0.09 & 0.020 & 0.012 & 1.616 & 2.612 \\
\hline \multicolumn{8}{|l|}{Other differences} \\
\hline Child's BMI & C5BMI-C4BMI & 3,704 & 1.72 & 0.061 & 0.032 & 1.911 & 3.651 \\
\hline Child's height & C5HEIGHT-C4HEIGHT & 3,760 & 4.59 & 0.039 & 0.022 & 1.806 & 3.263 \\
\hline Child's weight & C5WEIGHT-C4WEIGHT & 3,723 & 18.36 & 0.255 & 0.157 & 1.622 & 2.632 \\
\hline Household size & P5HTOTAL-P4HTOTAL & 3,521 & 0.02 & 0.022 & 0.015 & 1.467 & 2.153 \\
\hline Number of hours watched TV after dinner & P5TVAFDH-P4TVAFDH & 3,451 & 0.11 & 0.023 & 0.016 & 1.420 & 2.017 \\
\hline \multicolumn{8}{|l|}{Child and parent characteristics from parent interview (percent)} \\
\hline Lived in single parent family & P5HFAMIL & 3,522 & 26.27 & 0.893 & 0.742 & 1.204 & 1.449 \\
\hline Lived in two-parent family & P5HFAMIL & 3,522 & 71.34 & 1.020 & 0.762 & 1.339 & 1.792 \\
\hline Mom worked 35 hours+/week & P5HMEMP & 2,581 & 66.45 & 1.195 & 0.929 & 1.286 & 1.653 \\
\hline Primary care is center-based & P5PRIMNW & 1,184 & 34.49 & 1.947 & 1.382 & 1.409 & 1.986 \\
\hline Primary care is home-based & P5PRIMNW & 1,184 & 65.51 & 1.947 & 1.382 & 1.409 & 1.986 \\
\hline Parents had high school or less & W3PARED & 3,522 & 31.46 & 0.864 & 0.783 & 1.104 & 1.219 \\
\hline Household income category below median & W3inccat & 3,522 & 41.22 & 1.672 & 0.829 & 2.016 & 4.064 \\
\hline Parent attended PTA & P5ATTENP & 3,519 & 45.22 & 1.692 & 0.839 & 2.017 & 4.067 \\
\hline Practiced reading, writing, numbers daily & P5RDWRNM & 3,499 & 48.29 & 1.276 & 0.845 & 1.510 & 2.280 \\
\hline Visited library & P5LIBRAR & 3,498 & 55.58 & 1.549 & 0.840 & 1.844 & 3.400 \\
\hline Used computer 1-2 times per week & P5НОМЕСМ, P5COMPWK & 2,836 & 43.98 & 1.011 & 0.932 & 1.085 & 1.177 \\
\hline Had Internet access & P5HOMECM, PSINTACC & 2,768 & 86.19 & 0.980 & 0.656 & 1.494 & 2.231 \\
\hline Used computer 1-2 times/week for homework & P5НОМЕСМ, P5CMPEDU & 2,765 & 53.00 & 1.385 & 0.949 & 1.460 & 2.131 \\
\hline Had family rule for TV & P5TVHOME, P5TVRULE & 3,470 & 91.63 & 0.459 & 0.471 & 0.975 & 0.951 \\
\hline Did homework 3-4 times per week & P50FTDHW & 3,492 & 41.66 & 1.148 & 0.835 & 1.375 & 1.892 \\
\hline Have someone help with reading homework & P5HELPR & 3,436 & 98.22 & 0.418 & 0.226 & 1.852 & 3.430 \\
\hline Completely true child and self have close time & P5WARMCL & 3,414 & 69.17 & 1.011 & 0.790 & 1.279 & 1.636 \\
\hline Took away privilege when child angry & P5HITPRV & 3,408 & 59.70 & 1.512 & 0.840 & 1.800 & 3.240 \\
\hline Self-reported in very good health & P5HEALTH & 3,410 & 87.02 & 0.864 & 0.576 & 1.501 & 2.253 \\
\hline HH received food stamps in last 12 months & P5FSTAMP & 3,474 & 14.44 & 1.231 & 0.596 & 2.064 & 4.261 \\
\hline
\end{tabular}

\footnotetext{
See notes at end of table.
}

Table 9-6. ECLS-K, panel of all five rounds: standard errors and design effects for the full sample using C1_5SC0-C1_5SC40 and C1_5SP0-C1_5SP40, by selected child and parent variables: School years 1998-99, 1999-2000, and 2001-02-Continued
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Survey item & Variable name & Number of cases & Estimate & \[
\begin{array}{r}
\text { Design } \\
\mathrm{SE}^{1} \\
\hline
\end{array}
\] & \[
\begin{gathered}
\hline \mathrm{SRS} \\
\mathrm{SE}^{2}
\end{gathered}
\] & \(\mathrm{DEFT}^{3}\) & DEFF \({ }^{4}\) \\
\hline \multicolumn{8}{|l|}{Child characteristics from teacher questionnaire C (percent)} \\
\hline Enrolled in third grade & T5GRADE & 3,065 & 88.41 & 1.500 & 0.578 & 2.594 & 6.727 \\
\hline Average in language skills & T5RTLANG & 3,031 & 71.98 & 1.070 & 0.816 & 1.312 & 1.721 \\
\hline Average in science/social studies & T5RTSCI & 3,009 & 81.23 & 1.157 & 0.712 & 1.626 & 2.643 \\
\hline Average in math skills & T5RTMTH & 3,029 & 77.43 & 1.045 & 0.759 & 1.376 & 1.894 \\
\hline \multicolumn{8}{|l|}{Child characteristics (mean)} \\
\hline Age of child in months & R5AGE & 4,022 & 111.09 & 0.130 & 0.071 & 1.832 & 3.357 \\
\hline Child's BMI & C5Bmi & 3,861 & 18.53 & 0.089 & 0.062 & 1.437 & 2.066 \\
\hline Child's household size & P5HTOTAL & 3,522 & 4.61 & 0.039 & 0.023 & 1.669 & 2.786 \\
\hline Number of children <18 in child's HH & P5LESS18 & 3,522 & 2.55 & 0.033 & 0.019 & 1.709 & 2.919 \\
\hline Number of siblings in HH & P5NUMSIB & 3,522 & 1.58 & 0.032 & 0.019 & 1.675 & 2.807 \\
\hline Number of hours watched TV after dinner & P5TVAFDH & 3,467 & 0.88 & 0.027 & 0.014 & 1.941 & 3.768 \\
\hline Median & & & & & & 1.622 & 2.622 \\
\hline Mean & & & & & & 1.635 & 2.751 \\
\hline Standard deviation & & & & & & 0.317 & 1.086 \\
\hline Coefficient of variation & & & & & & 0.194 & 0.395 \\
\hline Minimum & & & & & & 0.975 & 0.951 \\
\hline Maximum & & & & & & 2.594 & 6.727 \\
\hline
\end{tabular}
\({ }^{1}\) Design SE is the standard error under the ECLS-K sample design. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{2}\) SRS SE is the standard error assuming simple random sample. For an explanation of this statistic, see chapter 4, section 4.8 .
\({ }^{3}\) DEFT is the root design effect. For an explanation of this statistic, see chapter 4, section 4.8.
\({ }^{4}\) DEFF is the design effect. For an explanation of this statistic, see chapter 4, section 4.8.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 kindergarten, first grade, and third grade data collections, school years 1998-99, 1999-2000, and 2001-02.

The median design effect is 3.2 for the spring-first grade/spring-third grade panel, 3.0 for spring-kindergarten/spring-first grade/spring-third grade panel, 2.9 for the panel of children in all four rounds of data collection involving the full sample of children, and 2.6 for the panel of children in all five rounds of data collection that included children sampled for fall-first grade only.

Table 9-7 presents the median design effects for subgroups based on school type, child's sex and race/ethnicity, geographic region, level of urbanicity, and the socioeconomic status scales of the parents. For the panels that include the full sample of children, the median design effect is lowest for Pacific Islanders (hovering around 1.2 or 1.3) and highest for children in Catholic schools (around 3.4 or 3.5). For the panel involving all five rounds, the range of variability of the median design effects is very different from all other panels. The all-five-round panel has a much reduced sample size, as

Table 9-7. ECLS-K panel: median design effects for subgroups, kindergarten through third grade: School years 1998-99, 1999-2000, and 2001-02
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Subgroups} & \multicolumn{2}{|l|}{Spring-first grade/ spring-third grade} & \multicolumn{2}{|l|}{\begin{tabular}{l}
Spring-kindergarten/ \\
spring-first grade/ \\
spring-third grade
\end{tabular}} & \multicolumn{2}{|l|}{Fall-kindergarten/ spring-kindergarten/ spring-first grade/ spring-third grade} & \multicolumn{2}{|l|}{All five round panel} \\
\hline & DEFT \(^{1}\) & \(\mathrm{DEFF}^{2}\) & \(\mathrm{DEFT}^{1}\) & DEFF \({ }^{2}\) & DEFT \({ }^{1}\) & \(\mathrm{DEFF}^{2}\) & DEFT \({ }^{1}\) & \(\mathrm{DEFF}^{2}\) \\
\hline All students & 1.769 & 3.169 & 1.738 & 3.040 & 1.694 & 2.917 & 1.622 & 2.622 \\
\hline \multicolumn{9}{|l|}{School type} \\
\hline Public & 1.640 & 2.801 & 1.645 & 2.757 & 1.632 & 2.693 & 1.501 & 2.242 \\
\hline Private & 1.880 & 3.521 & 1.876 & 3.559 & 1.849 & 3.444 & 1.756 & 3.113 \\
\hline Catholic private & 1.846 & 3.425 & 1.850 & 3.447 & 1.867 & 3.494 & 1.670 & 2.823 \\
\hline Other private & 1.704 & 2.925 & 1.644 & 2.733 & 1.683 & 2.832 & 1.644 & 2.710 \\
\hline \multicolumn{9}{|l|}{Sex} \\
\hline Male & 1.594 & 2.564 & 1.598 & 2.558 & 1.547 & 2.390 & 1.349 & 1.818 \\
\hline Female & 1.606 & 2.592 & 1.598 & 2.563 & 1.591 & 2.573 & 1.544 & 2.364 \\
\hline \multicolumn{9}{|l|}{Race/ethnicity} \\
\hline White & 1.742 & 3.003 & 1.699 & 2.847 & 1.657 & 2.744 & 1.604 & 2.599 \\
\hline Black & 1.474 & 2.175 & 1.451 & 2.114 & 1.433 & 2.081 & 1.230 & 1.509 \\
\hline Hispanic & 1.378 & 1.901 & 1.358 & 1.848 & 1.341 & 1.810 & 1.311 & 1.717 \\
\hline Asian & 1.501 & 2.237 & 1.488 & 2.201 & 1.499 & 2.241 & 1.582 & 2.511 \\
\hline Pacific Islander & 1.145 & 1.310 & 1.138 & 1.293 & 1.106 & 1.216 & 1.942 & 3.374 \\
\hline American Indian & 1.369 & 1.861 & 1.398 & 1.964 & 1.282 & 1.626 & 1.892 & 2.743 \\
\hline Other & 1.394 & 1.955 & 1.421 & 2.048 & 1.418 & 2.044 & 1.327 & 1.754 \\
\hline \multicolumn{9}{|l|}{Region} \\
\hline Northeast & 1.716 & 2.974 & 1.704 & 2.920 & 1.674 & 2.804 & 1.541 & 2.364 \\
\hline Midwest & 1.724 & 3.008 & 1.792 & 3.213 & 1.714 & 2.950 & 1.610 & 2.529 \\
\hline South & 1.738 & 2.981 & 1.709 & 2.947 & 1.637 & 2.691 & 1.458 & 2.125 \\
\hline West & 1.621 & 2.620 & 1.644 & 2.719 & 1.605 & 2.585 & 1.621 & 2.635 \\
\hline \multicolumn{9}{|l|}{Urbanicity} \\
\hline Central city & 1.659 & 2.770 & 1.663 & 2.778 & 1.645 & 2.734 & 1.559 & 2.354 \\
\hline Urban fringe and large town & 1.616 & 2.598 & 1.640 & 2.685 & 1.597 & 2.549 & 1.541 & 2.330 \\
\hline Small town and rural area & 1.764 & 3.048 & 1.708 & 2.918 & 1.802 & 3.237 & 1.720 & 3.070 \\
\hline \multicolumn{9}{|l|}{Socioeconomic status quintiles} \\
\hline First & 1.465 & 2.147 & 1.408 & 1.979 & 1.389 & 1.924 & 1.219 & 1.489 \\
\hline Second & 1.479 & 2.266 & 1.438 & 2.073 & 1.387 & 1.959 & 1.325 & 1.749 \\
\hline Third & 1.423 & 2.022 & 1.429 & 2.021 & 1.404 & 1.971 & 1.339 & 1.793 \\
\hline Fourth & 1.495 & 2.234 & 1.506 & 2.281 & 1.457 & 2.136 & 1.362 & 1.848 \\
\hline Fifth & 1.512 & 2.305 & 1.503 & 2.263 & 1.477 & 2.209 & 1.317 & 1.767 \\
\hline
\end{tabular}

NOTE: Each median is based on 49 items.
\({ }^{1}\) DEFT is the root design effect. For an explanation of this statistic, see section 4.8.
\({ }^{2}\) DEFF is the design effect. For an explanation of this statistic, see section 4.8.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 kindergarten, first grade, and third grade data collections, school years 1998-99, 1999-2000, and 2001-02.
it includes the fall-first grade subsample from the full base year sample. For this panel, the median design effects range from 1.5 for children of lowest socioeconomic level to a high of 4.1 for Pacific Islanders and 4.5 for American Indians. In this reduced panel, the samples of Pacific Islanders and American Indians are highly clustered, resulting in the higher design effects.

Standard errors and design effects were not computed for items from the teacher and school administrator questionnaires since there are no teacher or school weights computed for spring-third grade year. Although standard errors and design effects may also be calculated for the teacher and school administrator questionnaires at the child level, they are quite large compared to those typically found for the ECLS-K data. Design effects for teacher and school items are large because the intraclass correlation is 100 percent for children in the same school and very high for children in the same class; children attending the same school have the same school data, and children in the same class have the same teacher data. The correlation is not 100 percent for children in the same class because teacher data include not only items about the teacher and the class but also items about the individual students as completed by their teachers.```


[^0]:    ${ }^{1}$ 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).

[^1]:    ${ }^{2}$ It should be noted that in past rounds derived child demographic variables for gender, race/ethnicity, and date of birth (GENDER, RACE, DOBMM, DOBDD, and DOBYY) in the kindergarten and first grade files did not follow the prefix conventions noted above because they combined information across data collection points and/or several sources. In spring-third grade these same demographic variables begin with the prefix R5 (e.g., R5RACE). This was done because reports of these variables from parent data were prioritized over other sources in round 5 and a prefix change was used to indicate the difference to users.

[^2]:    ${ }^{3}$ A number of respondents, both in this and in prior rounds, gave some variant of "biracial" as the other-specify response to child race. In previous rounds, these responses had been considered to be uncodable, and the relevant children were given a value of -9 (not ascertained) for WKRACETH and W1RACETH. In spring-third grade, these responses were treated as multiracial, and the relevant children were given a value of 8 (multiracial) for W3RACETH. This change affected 23 children with parent data from prior rounds.

[^3]:    SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

[^4]:    ${ }^{1}$ No occupation was imputed if "not in labor force" was filled from previous rounds or imputed by hot deck.
    SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 third grade data collection, school year 2001-02.

[^5]:    ${ }^{4}$ The ECLS-K provides an approximate, but not exact measure of poverty. Income category thresholds used in the parent questionnaire are similar, but not identical to those from weighted Census averages.

[^6]:    ${ }^{5}$ Because of a programming issue, many respondents were asked the education question in PEQ. 020 rather than asked to update education information obtained in a previous round. For 1,385 mothers and 1,124 fathers, the spring-third grade education levels were lower than the education levels provided in the base year of the study. One source of the discrepancy may be that the question structures were different in the base year of the study and spring-third grade. In the base year, if a respondent answered any grade less than 12 , he or she was then asked if the person had received a high school diploma or its equivalency, such as a GED. For example, if he or she answered that the highest grade completed was 9th grade, but that he or she had completed a GED, then the highest education level would not be 9th grade, it would be high school diploma/equivalent. However, in spring-third grade, the follow up question on high school equivalency was not asked. Thus, a base year respondent (who was a nonrespondent in spring-first grade) who had answered 9th grade in the base year, would answer 9th grade again in the spring-third grade data collection, but this time due to the absence of the followup question, the highest level of education completed would be 9th grade. Based on a review of the cases, the higher of the two education levels was used. This solution took into consideration that the base year cases had a followup item that collected the information in a more informative way.
    ${ }^{6}$ Missing data were due to "refused" or "don't know" answers from respondents, in addition to program issues that caused a few cases to have missing data.

[^7]:    ${ }^{7}$ In a previous round of the study, respondents who reported they were "biracial" in the "other" category were classified as "uncodable." These responses were reclassified as "multiracial" in spring-third grade. Eighteen parents had race changes due to this change in coding.

[^8]:    ${ }^{8}$ There were also other questions in the school administrator questionnaire that allowed for answers to be recorded as either a number or percent. The flags for these variables are S5ADAFLG (average daily attendance reported as number/percent), S5ASNFLG (question about Asian or Pacific Islander teachers reported as number or percent), S5HSPFLG (question about Hispanic teachers reported as number or percent), S5BLKFLG (question about black teachers reported as number or percent), S5WHTFLG (question about white teachers reported as number or percent), S5INDFLG (question about American Indian or Native Alaskan teachers reported as number or percent), and S5OTHFLG (question about teachers of other races reported as number or percent). In all cases, the final variables related to these flags are reported as percentages, but the flags indicate how the answers were originally recorded by respondents.

[^9]:    ${ }^{9}$ It should be noted that there were some children who could not be located during the field period for the beginning of the round but were located during the field period for the end of the round. Children who could not be located at the beginning of the round, but who were located and enrolled in sampled schools at the end of the round, will have S5_ST_ID values that begin with 999 and S5_ID values that are ID numbers for schools. Others who could not be located at the beginning or end round will have 999 codes for both S5_ST_ID and S5_ID.

[^10]:    See note at end of table.

[^11]:    See note at end of table.

[^12]:    See note at end of table.

[^13]:    See note at end of table.

[^14]:    See note at end of table.

[^15]:    See note at end of table.

[^16]:    See note at end of table.

[^17]:    See note at end of table.

[^18]:    See note at end of table.

