

# How to Obtain and Access ECLS Data

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Tip Sheet

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This tip sheet provides general guidance as well as step-by-step instructions for obtaining and accessing data collected through the three ECLS studies for which data have been released: the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B); the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K); and the Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011).

The ECLS-K and ECLS-K:2011 data are available in two formats: public-use and restricted-use files. The ECLS-B case-level data are only available as restricted-use files. The restricted-use files contain more detailed information than the public-use files, as well as information that may be considered sensitive and/or information that when combined could potentially be used to identify respondents. The public-use files (PUFs) are derived from the restricted-use files (RUFs) and employ data-masking techniques to further minimize the potential for a respondent to be identified. Masking techniques such as suppression or recoding of variables have been applied to certain data values on the public-use files. Before requesting the restricted-use data, please determine if your analysis requires data only available in a RUF.

Raw ECLS data are provided in ASCII files (for example, childK5p.dat for the ECLS-K:2011 Kindergarten-Fifth Grade Public-Use File). Users should not access or modify the ASCII file directly, as any changes made to the ASCII file will alter the raw ECLS data. Therefore, accompanying syntax files are also available to analysts to be run in SPSS for Windows, SAS, or Stata to read in the raw data from the ASCII file and create a data file for analysis. Full syntax files can be used to create a data file containing all the variables available for all rounds of the study. The syntax files also can be customized to create data sets with fewer variables than are contained in the full data set. Alternatively, users can install the Electronic Codebook (ECB) software or use the ECLS-K Online Codebook (https://nces.ed.gov/OnlineCodebook) to generate full or customized data sets. Users may want to create a customized data file to analyze the data more efficiently; doing so may be necessary for some statistical software programs that cannot handle the large size of the full data file.

Users may need to edit the syntax files, whether they use the full version or a customized version, so that the directories specified in the syntax file match the location of the ASCII file on their computers. Also, the syntax files are set up to create and save the data file to a specified directory; for example, for the ECLS-K:2011 Kindergarten-Fifth Grade Public-Use File, the specified directory is C:\ECLSK2011 K5PUF\. Users need to either create this directory on their computers or appropriately edit the "Save to" step in the syntax file to match the location where their file should be saved.

More specific instructions for obtaining and accessing ECLS data are provided in the following section.

<sup>&</sup>lt;sup>1</sup>Anyone who knowingly attempts to identify a respondent in the data is subject to Class E felony charges, a fine up to \$250,000, and/or a prison term up to 5 years.

# **How to Obtain and Access ECLS Public-Use Files (PUFs)**

This section lays out specific steps for obtaining and accessing the ECLS PUF data, using the most recent cohort study data, ECLS-K:2011, as an example. Additional notes for data for the two earlier cohorts, ECLS-K and ECLS-B, are also provided.

#### ECLS-K:2011

First, download and unzip the ZIP file ChildK5p.zip, which contains the full ECLS-K:2011 raw data in the ASCII file childK5p.dat, from the ECLS Data Products page (<a href="https://nces.ed.gov/ecls/dataproducts.asp">https://nces.ed.gov/ecls/dataproducts.asp</a>) under the section **ASCII Data File**. Note that the ASCII file is large and may take a few minutes to download.<sup>2</sup>

Next, follow one of the two options below to create a customized or full data file. As noted earlier, a customized data file may be necessary for some statistical software programs that cannot handle the large size of the full data file. The following two options both provide ways of creating a customized or full data file.

## Option A: Use the ECB to create a full or customized data file.

NOTE: The ECB software requires installation and is not designed for use on Apple Macintosh systems. Users who cannot or do not want to install the ECB can still create a customized or a full data file following instructions for option B below.

- Download the ECLS-K:2011 ECB installation files from the ECLS Data Products page (<a href="https://nces.ed.gov/ecls/dataproducts.asp">https://nces.ed.gov/ecls/dataproducts.asp</a>) under the section Electronic Codebook. Follow the instructions for installing the ECB, which can be found in chapter 8 of the ECLS-K:2011 Kindergarten-Fifth Grade User's Manual (<a href="https://nces.ed.gov/pubs2019/2019051.pdf">https://nces.ed.gov/pubs2019/2019051.pdf</a>).
- 2. Once you have the ECB installed and launched, click "Help" and then "Contents" in the menu. A file named "Installing and Using the ECB.pdf" will open; this file includes further instructions for searching for and selecting variables of interest (section 3), editing a working taglist (section 4), and creating customized syntax files for the software program of choice (section 5).

  If you would like to create a customized data file with only variables of interest, follow the steps described in the "Installing and Using the ECB.pdf" file to move individual variables from the VARIABLE LIST to the WORKING TAGLIST. If you would like to create a full syntax file for generating a full data file, click the double arrow button ( ) between the VARIABLE LIST and the WORKING TAGLIST to select all variables after you launch the ECB. Then follow instructions in sections 4 and 5 in the "Installing and Using the ECB.pdf" file mentioned above.
- 3. Once you have created a customized or full syntax file, review and edit the file paths as described for option B below to make sure that they match the location on your computer where you have saved the ASCII file childK5p.dat and the location on your computer where you would like to save the customized or full data file.

#### Option B: Use the syntax file to create a full or customized data file.

Download a syntax file from the ECLS Data Products page (<a href="https://nces.ed.gov/ecls/dataproducts.asp">https://nces.ed.gov/ecls/dataproducts.asp</a>). The syntax files are provided in SPSS (ECLSK2011\_K5PUF.sps), SAS (ECLSK2011\_K5PUF.sas), and Stata (ECLSK2011\_K5PUF.do) formats. Stata users should also download the dictionary file ECLSK2011\_K5PUF.dct. Specific edits that should be made to the syntax files vary by software program, as shown below.

# **SPSS** users:

Open the ECLSK2011\_K5PUF.sps file in SPSS and edit the line that starts with "FILE HANDLE":
 FILE HANDLE FHAND /NAME= 'D:\childK5p.dat '/LRECL=5009
 Replace the file path in green (D:\) with the one on your computer where the ASCII file childK5p.dat is saved.
 This line communicates to SPSS the location of the ASCII file (i.e., the raw data).

<sup>&</sup>lt;sup>2</sup>For computers with slower connection speeds, it is possible that large files such as this one may become corrupted during the lengthy time it takes for the download. If the file is corrupted, please reattempt the download using a computer with a faster connection speed.

2. Edit the line that starts with "SAVE OUTFILE":

#### SAVE OUTFILE = 'C:\ECLSK2011 K5PUF\ECLSK2011 K5PUF.sav'

Replace the file path in green (C:\ECLSK2011 K5PUF\) with the one on your computer where you would like to save the data file in SPSS format. You can change the data file name if you want, but do not change the .sav file extension.

3. Select all the code in the entire syntax file and run it. It typically takes a few minutes for SPSS to finish running all the code. Once complete, the ECLS-K:2011 data will appear in the SPSS main window.

#### **SAS users:**

1. Open the ECLSK2011 K5PUF.sas in SAS and edit the first line:

## libname LIB 'C:\ECLSK2011 K5PUF\';

Replace the file path in green (C:\ECLSK2011 K5PUF\) with the one on your computer where you would like to save the data file in SAS format.

2. Edit the second line:

## filename in1 'D:\childK5p.dat';

Replace the file path in green (D:\) with the one on your computer where the ASCII file childK5p.dat is saved. This line communicates to SAS the location of the ASCII file (i.e., the raw data).

3. Edit the third line:

# footnote 'C:\ECLSK2011 K5PUF\ECLSK2011\_K5PUF.sas';

Replace the file path in green (C:\ECLSK2011 K5PUF\) with the one you set in step (1). You can change the data file name if you want, but do not change the .sas file extension.

4. Select all the code in the entire syntax file and run it. It typically takes a few minutes for SAS to finish running all the code. Once complete, the ECLS-K:2011 data will be saved in the folder specified in the first line.

#### Stata users:

1. Open the ECLSK2011\_K5PUF.dct file and edit the first line:

# dictionary using "D:\childK5p.dat" {

Replace the file path in green (D:\) with the one on your computer where the ASCII file childK5p.dat is saved. This line communicates to Stata the location of the ASCII file (i.e., the raw data). Save the changes you have made and close the ECLSK2011 K5PUF.dct file.

2. Open the ECLSK2011 K5PUF.do file in Stata and edit the line that starts with "infile using":

#### infile using "C:\ECLSK2011 K5PUF\ECLSK2011 K5PUF.dct""

Replace the file path in green (C:\ECLSK2011 K5PUF\) with the one on your computer where the ECLSK2011\_K5PUF.dct file is saved. Update the .dct file name as well if you changed it in the previous step. This line communicates to Stata the location of the dictionary file.

3. Edit the line that starts with "save" and the line that starts with "use":

# save "C:\ECLSK2011 K5PUF\ECLSK2011\_K5PUF.dta"", replace;

## use "C:\ECLSK2011 K5PUF\ECLSK2011 K5PUF.dta";

Replace the file path in green (C:\ECLSK2011 K5PUF\) with the one on your computer where you would like to save the data file in Stata format. You can change the data file name if you want, but do not change the .dta file extension.

4. Select all the code in the entire syntax file and run it. It typically takes a few minutes for Stata to finish running all the code. Once complete, the ECLS-K:2011 data will appear in the Stata main window.

As an alternative to step (4), you can also save the .do file after making the edits in step (3) and type the following in the command line in the Stata main window:

#### do "C:\ECLSK2011 K5PUF\ECLSK2011 K5PUF.do" nostop

The file path in green (C:\ECLSK2011 K5PUF\) should match where you saved the .do file. The ECLS-K:2011 data will appear in the main window once Stata finishes executing the .do file.

The steps provided above for each software create a data file that includes all the variables available for all rounds of the study. Users looking to create a customized data file can edit the full syntax file so that, when run, it will create a data file with just selected variables of interest. When editing the syntax file, it may be helpful to consult the information contained in the ECLS-K:2011 file record layout, which is available on the ECLS Data Products page (<a href="https://nces.ed.gov/ecls/dataproducts.asp">https://nces.ed.gov/ecls/dataproducts.asp</a>) under the section **File Record Layout**. The file record layout documents the position for each variable in the ASCII file ChildK5p.dat (i.e., the raw data).

# **ECLS-K**

Follow one of the two options below to create a customized or a full data file. As noted earlier, a customized data file may be necessary for some statistical software programs that cannot handle the large size of the full data file. The following two options both provide ways of creating a customized or a full data file.

Option A: Use the ECLS-K Online Codebook to create a full or customized data file.

The ECLS-K Online Codebook can be accessed here: <a href="https://nces.ed.gov/OnlineCodebook/Session/Codebook/">https://nces.ed.gov/OnlineCodebook/Session/Codebook/</a>. Like the ECLS-K:2011 ECB, the ECLS-K Online Codebook allows users to select variables of interest or all variables to create a customized or full data file, respectively, for their software program of choice. Once the ECLS-K Online Codebook is launched, users can follow the steps below to create a data file for analysis:

- 1. Use the dropdown menus for "Files" and "Variable Types" or type in the "Keywords" text box to search for variables of your interest.
- 2. In the research results, click on the variable(s) of your interest and examine the descriptive statistics.
- 3. Click "BACK TO CODEBOOK," check the box in front of the variable(s) of your interest, and click "Add to Syntax."
- 4. Click "DOWNLOAD" under the "My Syntax File" section, select the statistical software format you would like to use, and click "DOWNLOAD SYNTAX FILES" to download the syntax file for the statistical software of your choice.
- 5. Click "Back" to return to the previous page and click "DOWNLOAD" under the "Data Files" section to download the data files. This step may take a few minutes due to large file size.
- 6. Unzip the data and syntax files.
- 7. Open the syntax file and edit the file path (e.g., C:\EDAT\ECLS-K\) and other code wherever needed when following the instructions provided at the beginning of the syntax file.
- 8. Select all the code in the entire syntax file and run it. It typically takes a few minutes for the statistical software to finish running all the code and for the ECLS-K data to appear in the software.

## Option B: Use the syntax file to create a full or customized data file.

First, from the ECLS Data Products page (https://nces.ed.gov/ecls/dataproducts.asp) under the section Child Catalog, download and unzip the ZIP file ChildK8p.zip and the other five child-level catalog segments (see additional notes on these files below), which together contain the raw data needed to create the full ECLS-K ASCII file, childk8p.dat. Next, download a syntax file from the ECLS Data Products page (https://nces.ed.gov/ecls/dataproducts.asp) under the section Child Catalog. Similar to ECLS-K:2011, the syntax files are provided in SPSS (ECLSK\_K-8\_child\_SPSS), SAS (ECLSK\_K-8\_child\_SAS), and Stata (ECLSK\_K-8\_child\_STATA.do) formats. Stata users should also download the dictionary file ECLSK\_K-8\_child\_STATA. Specific edits that should be made to the syntax files vary by software program, as described above for ECLS-K:2011.

#### **Additional Notes**

While the instructions for obtaining and accessing the ECLS-K:2011 PUF data in general apply to obtaining and accessing the ECLS-K PUF data, there are a few additional notes for accessing the latter.

For both ECLS-K:2011 and ECLS-K, there is a child-level data file that includes data from and about the children, their families, their teachers, and their schools. For the ECLS-K, the base-year school-level and teacher-level data are also provided in separate data files to facilitate analyses at those levels, because the ECLS-K data are nationally representative of kindergarten teachers and schools educating kindergartners in the base year.<sup>3</sup> Users interested in conducting school-level or teacher-level analyses can (1) access the school or teacher catalogs in the ECB or (2) download the raw data SCHOOL.dat and TEACHER.dat, respectively, from the ECLS Data Products page (https://nces.ed.gov/ecls/dataproducts.asp), then follow the instructions above to edit the relevant syntax file for the software program of choice. These data and syntax files can be found on the website under the sections Base Year School Catalog and Base Year Teacher Catalog.

Second, the full ECLS-K child-level ASCII file (i.e., the raw data) is extremely large and has been split into six segments (Childk8p.zip; Childk8p.z01; Childk8p.z02; Childk8p.z03; Childk8p.z04; Childk8p.z05). Once the six segments have been downloaded, unzipping the primary file Childk8p.zip will automatically unzip and join the other segments into one large ASCII file.Third, there is an error in the data set contained in Childk8p.zip, Childk8p.z01, Childk8p.z02, Childk8p.z03, Childk8p.z04, Childk8p.z05. Users interested in using the theta scores for the reading, math, or science assessments in their analyses need to download the corrected theta scores for all cases across all years of the study, which can be accessed here: <a href="https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010052">https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010052</a>. Once the corrected theta scores are downloaded, users should delete the originally released theta scores and replace them with the corrected versions.

## **ECLS-B**

Due to the sensitivity of the data and the young age of the children in the ECLS-B, ECLS-B case-level data are available only on restricted-use files, which are available to researchers who are granted an IES Restricted-Use License. However, the public can conduct some ECLS-B data analyses using NCES's online data analysis tool, PowerStats, which can be found on the DataLab website (<a href="https://nces.ed.gov/datalab/">https://nces.ed.gov/datalab/</a>). PowerStats allows for analysis of restricted-use data without access to the case-level data themselves.

# **Accessing ECLS Restricted-Use Files (RUFs)**

Most of the instructions described above for accessing the ECLS PUF data apply to accessing the ECLS restricted-use file (RUF) data. For example, all ECLS RUF data are distributed with an ECB that can be installed on a user's computer. However, there are additional considerations and steps for accessing RUF data. This section provides information about the ECLS RUFs and instructions that are unique to accessing the ECLS RUF data.

# 1. Determine the need for an ECLS RUF

Restricted-use files are only distributed to analysts whose research questions cannot be answered with the public-use version of the data. All analysts who are interested in case-level ECLS-B analyses will need to request the RUF files. Analysts pursuing analyses that utilize ECLS-K or ECLS-K:2011 data should determine if their analysis requires the data only available in a RUF.

## 2. Obtain a restricted-use license

Analysts interested in using ECLS RUF data must first apply for a restricted-use data license. Note that licenses require the applicant to justify the need for the RUF (e.g., why the analysis cannot be conducted using a PUF). Information about applying for a restricted-use data license can be found at <a href="https://nces.ed.gov/pubsearch/licenses.asp">https://nces.ed.gov/pubsearch/licenses.asp</a>. Questions about licenses are best directed to <a href="https://nces.ed.gov/pubsearch/licenses.asp">IESData.Security@ed.gov</a>.

<sup>&</sup>lt;sup>3</sup> The ECLS-K:2011 data are also representative of schools in the base year. However, a separate school-level file is not provided. There are instructions for creating a school-level file from the child-level file in the ECLS-K:2011 base-year User's Manual.

#### 3. Access ECLS RUFs

Once granted a restricted-use data license, analysts who will be using the data on stand-alone computers will receive (1) either an emailed passphrase (sent to the license's Principal Project Officer [PPO]) or a TXT file (xxx.txt) with instructions on obtaining the passphrase for un-encrypting the contents of the delivered files for installation on their computer; and (2) an EXE file (xxx.exe) and zipped files that contains the ECB, data file, and documentation. Analysts who will be accessing data through NCES's secure remote access processes should follow instructions provided at the time access is granted. Once approved, the license will require an amendment to establish remote access to the data, if desired.

All requirements of your license must be followed when accessing the ECLS RUFs. For example, if your license requires that your data be stored on a particular computer, follow these steps only on that computer.

A window will appear after the EXE file is clicked on, as shown below:



The "Browse" button allows you to browse locations on your computer and select where you would like to create the directory for the ECB, data file, and documentation. Designate the location using "Browse," enter the passphrase, and press "OK." The EXE file will run and install/save the appropriate files to your computer.

Then go to the location you designated and click on the Setup.exe file to install the ECB. Once the ECB is installed, follow instructions for option B described above for accessing ECLS data using the ECB to create your own data file(s).

For more information, please visit the ECLS program website or email us at: ecls@ed.gov.

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