Data Collected Through the Common Core of Data (CCD)

Module Objectives

- Describe the Common Core of Data (CCD) mission and the associated data
- Describe how data are collected, accessed, and the types and levels of data
- Describe how to aggregate data from the CCD
- Explain how missing, not applicable, and suppressed data are addressed
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**Common Core of Data (CCD) Mission**

- Provide the public with a complete and accurate accounting of the U.S. public elementary and secondary education system
  - CCD supplies researchers with data from the U.S. public elementary and secondary education system
- Single access point for all of the data
- The goal of the CCD is to provide accurate and consistent data in a timely manner

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**Common Core of Data (CCD)**

- Annual collection of public school systems data in the
  - U.S. states and
  - State-level jurisdictions
    - Department of Defense Education Activity (DoDEA)
    - Bureau of Indian Education (BIE)
    - U.S. Island Areas (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands)
- Nonfiscal
  - Obtained from state-level education officials through the EDFacts data collection system
- Fiscal
  - Collected from the state-level education officials via the Census Bureau
Collecting Data for the CCD

- CCD is
  - The Department of Education’s primary database on public elementary and secondary education in the United States
  - A comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are designed to be comparable across all states
- Each state submits nonfiscal data to EDFacts
- Fiscal data are collected from the Census Bureau
- The data are reviewed using various reports from the analysts
- Data files are created that meet NCES quality standards

Collecting Data for the CCD (Continued)

- The methodology for collecting the nonfiscal and fiscal data are similar but there are some differences
- For both collections, the data come directly from the states
  - Nonfiscal data are submitted via EDFacts
  - Fiscal data are submitted to the Census Bureau
- Data are reviewed to ensure quality
  - Error Reports
- Data files are created based on NCES quality standards
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Data Collection for the CCD (Continued)

- Annual editing to
  - Improve data quality
  - Reduce burden on the states
- Changes in the process may include
  - Adding new edits based on additional items being collected
  - Changing the rules for suppression* to ensure that data meet NCES data quality standards

*You will learn more about suppression later in the module.

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CCD Universe Design

- Collects data about all
  - Public elementary and secondary schools
  - School districts (Local Education Agencies/LEA)
  - State education agencies
- Contains three categories of information
  - General descriptive information on schools and school districts
  - Data on students and staff
  - Fiscal data at the district and state level
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CCD Universe Design (Continued)

- Data are collected at the following levels
  - State Education Agencies (SEAs)
  - 100,000 public elementary and secondary schools
  - 18,000 public school districts in the 50 states, DC, Department of Defense Schools, and outlying areas
- The SEAs compile CCD requested data into prescribed formats and transmit the information to NCES

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CCD Universe Design (Continued)

Main components of CCD

<table>
<thead>
<tr>
<th>Level</th>
<th>Nonfiscal</th>
<th>Fiscal</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Universe</td>
<td>National Public Education</td>
</tr>
<tr>
<td></td>
<td>Dropout and Completer</td>
<td>Financial Survey (NPEFS)</td>
</tr>
<tr>
<td>District</td>
<td>Universe</td>
<td>Local Education Agency</td>
</tr>
<tr>
<td></td>
<td>Dropout and Completer</td>
<td>Fiscal Data (F-33)</td>
</tr>
<tr>
<td>School</td>
<td>Universe</td>
<td></td>
</tr>
</tbody>
</table>
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CCD Universe Descriptions

Public School Universe
- Information on all public elementary and secondary schools in operation during a school year including school location and type
- Enrollment by grade and student characteristics
- Number of classroom teachers

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CCD Universe Descriptions (Continued)

School District (Local Education Agency/LEA) Universe
- Phone number
- Location and type of agency
- Current number of students
- Number of high school graduates and completers in the previous year
CCD Universe Descriptions (Continued)

State Nonfiscal Universe

- Students and staff information aggregated to the state level including
  - Number of students by grade level
  - Full-time equivalent staff by major employment category
  - High school graduates and completers in the previous year

CCD Universe Descriptions (Continued)

State Fiscal Universe (NPEFS)

- Detailed data aggregated to the state level including
  - Average daily attendance
  - School district revenues by source (local, state, and federal)
  - Expenditures by function (instruction, support services, and non-instruction) and subfunction (e.g., school administration)
CCD Universe Descriptions (Continued)

School District (Local Education Agency) Fiscal Data (F-33)
- Detailed data by school district including
  - Revenues by source
  - Expenditures by function and subfunction
    - Total expenditures and current expenditures
  - Enrollment

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CCD Universe Descriptions (Continued)

- Dropout and Completer Information (District and State Level)
  - Numbers of dropouts from each of grades 9–12 and the relevant event dropout rates
  - The numbers of high school diploma recipients, other high school completers, and the relevant Averaged Freshman Graduation Rate (AFGR)
- The restricted-use data files contain more detailed counts than the public-use data files
Accessing the Data

- Most of the CCD data can be linked across files by using the NCES ID
- Unique NCES IDs are assigned to every school and district on the file
  - School NCES ID is 12 digits
  - District NCES ID is 7 digits
- First seven digits of the school’s NCES ID is the district’s NCES ID
- The NCES IDs are generally consistent across years

Available Data from the CCD

CCD data include the following information at the school, district, and/or state-level

- Basic Information
- Characteristics
- Enrollments
- Teachers and Staff
- General Finance
- Dropout and Completer
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Available Data from the CCD (Continued)

CCD data include the following information at the school, district, and/or state-level:

- **Basic Information**
  - Includes address, telephone numbers, county information (name and ID), and NCES IDs.

- **Characteristics**
  - Includes charter status, magnet status, and locale codes.

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Available Data from the CCD (Continued)

**Enrollment**

- Total count of students by race/ethnicity, gender, and/or grade.
- Any combination of race/ethnicity, gender, and/or grade.
- Counts of students who are reported as eligible for free and reduced-price lunch.
Available Data from the CCD (Continued)

Teacher and Staff
- School level - teacher FTE counts (not a head count)
- District and state level - other staff information such as principals, counselors, and support staff

Available Data from the CCD (Continued)

- General finance
  - Includes current and total expenditures
  - Revenues by source (i.e., federal, state, and local)
  - Ratios of expenditures per pupil
- Dropout and Completer Information
  - Rates (e.g., Average Freshman Graduation Rate)
  - Counts of diplomas and graduates
  - Restricted-use version of the district level file
Available Data from the CCD (Continued)

Starting with SY 2014-15, nonfiscal data files split into components within levels

- Components include
  - Directory (all levels)
  - Membership (all levels)
  - Staff (all levels)
  - Children with Disabilities (LEA only)
  - English Language Leaners (LEA only)
  - School Characteristics (School only)
  - Lunch Program Eligibility Counts (School only)

- Components can be merged using the appropriate unique ID
  - FIPST (state level)
  - LEAID (LEA level)
  - NCESSCH (school level)
Levels of Data for the CCD

- Not all CCD data are available at every level
- Examples
  - Free-lunch eligibility counts are only available at the school level
  - Staff counts are available at the district but not the school level

Aggregating Across Levels for the CCD

If the data are available on a lower level (e.g., school), the counts can be aggregated to a higher level (e.g., district) by using

- The data files and aggregating using the NCES ID as a key
- NCES ID can be linked to other surveys
- The Elementary/Secondary Information System (ElSi)
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Notes about CCD Aggregation

- When using the data files, be careful about aggregating when including data that are
  o Missing (-1)
  o Not applicable (-2)
  o Suppressed (-9)
- EISi will aggregate the data but only report data where less than 15% of the data elements are missing

Missing, Not Applicable, Suppressed

As CCD data are reviewed, certain elements may be coded as missing, not applicable, or suppressed
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**Missing Data**

- Missing data occur when the element exists but could not be reported
- Reporting agency is not able to report the data or data were not reported to NCES in time
  - On the data file, it is coded as -1
- In reports and in data tool output, it is displayed as “-”
- Examples of potential missing data
  - The number of teachers at a Kindergarten through 6th grade school could not be split into Kindergarten and Elementary teachers
  - The number of students who are eligible for free lunch could not be reported in time to be used on the data file
  - The state could not report which schools are magnet schools, but the state does allow for magnet schools

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**Not Applicable**

- Not applicable occurs when the element does not apply to that case
  - Examples
    - 12th graders in an elementary school
    - Dropout counts for a district with no students
- Not applicable is coded as a -2 in data files and † in reports
Suppressed Data

Data may be suppressed if they do not meet NCES quality standards

- Last year, the school had 500 students with 20 teachers; this year, the school has 5000 students with 20 teachers
- NCES will contact the state to resolve the issue, but the data will be suppressed if a resolution cannot be found
- Suppressed data are coded as a -9 in data files and ≠ in reports

Keys to Using CCD Data Files

- Step 1: Read the documentation
  - The documentation contains information about what is included in the universe data files, the methodology used to collect and process the data, and information about each of the variables on the file
- Step 2: Review at the record layout
  - The record layout gives information concerning the naming convention for each of the variables, the position, and a general description
    - Example: AS05F = Grade 5 students – Asian - Female
- Step 3: Use the SAS or SPSS codes (if applicable)
- Step 4: Save the text file and open the text file with Excel (if applicable)
  - DO NOT CLICK on the text file, the file is not usable in Notepad
Module Summary and Resources

Summary

- Described the Common Core of Data (CCD) mission and the associated data
- Described how data are collected, accessed, and the types and levels of data
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- Explained how missing, not applicable, and suppressed data are addressed

Resources

- Common Core of Data (CCD)
- CCD Universe Design
- Elementary/Secondary Information System (ElSi)