



## Getting Started with the HSLS:09 Data

### Module Objectives

- Introduce users to the data collected across the data collection rounds of the High School Longitudinal Study of 2009 (HSLS:09)
- Describe the process of downloading the available public-use HSLS:09 data
- Describe the resources available within the restricted-use DVD
- Describe the contents of the data files
- Describe variable information and naming conventions
- Provide resources that are available to learn more about the study, the data, and the data files

### HSLS:09 Data Collection Components

HSLS:09 data are obtained directly from one or more respondents across multiple points in time in the study

Respondents:	Data collections across the study:	Collection methods:
<ul style="list-style-type: none"><li>• Students</li><li>• Parents</li><li>• Math Teachers*</li><li>• Science Teachers*</li><li>• School Counselors</li><li>• School Administrators</li><li>• High School and Postsecondary Education Transcripts</li></ul>	<ul style="list-style-type: none"><li>• 2009 (9<sup>th</sup> grade)</li><li>• 2012</li><li>• 2013</li><li>• 2016</li><li>• 2025</li></ul>	<ul style="list-style-type: none"><li>• Direct Assessment</li><li>• Web Survey</li><li>• Telephone Survey</li><li>• School Records</li></ul>

\*Only for the 2009 round

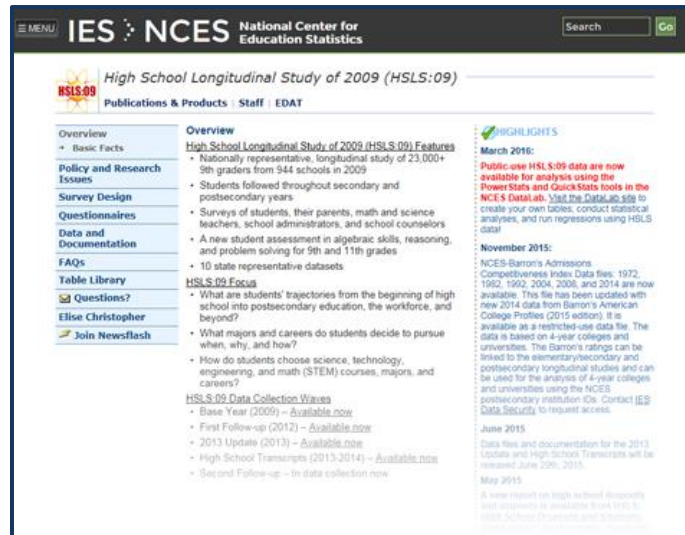
Consider: Most of the data collection instruments that were used to directly obtain data from one or more respondents in the study are available online via the [HSLS Questionnaires page](#)

### Data File Basics

- Data are available in both public- and restricted-use formats
- Public-use data provide data that most users will need for most analyses; they are available in three software-based formats (SPSS, SAS, and Stata)
- Restricted-use files for a given round of data collection contain more data and a wider range of data values than are included in the public-use files
- Researchers who are uncertain of which data file to use should first examine the corresponding public-use data file to ascertain whether it can be used to meet their specific analytical objectives

## Downloading Public-use HSLS:09 Data

- Go to the Education Data Analysis Tool ([eDAT](#))
  - Download the syntax file for the statistical software package of choice
- Go to the Data and Documentation page on the [HSLS:09 homepage](#)
  - Download the [Data File Documentation](#)



## Using QuickStats and PowerStats to Analyze HSLS:09 Data

- Analyses of HSLS:09 data can be conducted using tools in the NCES DataLab
  - QuickStats
    - Generate percentages, averages tables, and simple graphs
  - PowerStats
    - May be used to calculate complex averages, percentages, medians, and centiles tables
    - May also be used to conduct linear and logistic regressions
- For more information about using the NCES DataLab tools, review the DLDT module [DataLab Tools: QuickStats, PowerStats, and TrendStats](#)

### Accessing the Restricted-use HSLs:09 Data

Restricted-use HSLs:09 data contains additional resources within the DVD

- README file
  - Most important resource on the DVD; always start with the README file
  - Information about DVD contents and structure
  - Installation information for the Electronic Codebook (ECB) software

### Accessing the Restricted-use HSLs:09 Data

- Electronic Codebook (ECB)
- Reference materials
  - Source documents, etc.
- Reports
  - Methodological and/or analytical

### Contents of the Base Year Data File

Student-level data file (all merged to the student)	School-level data file (all merged to the school)
<ul style="list-style-type: none"><li>• Derived variables</li><li>• Student-level analytic weights</li><li>• Student assessment</li><li>• Student questionnaire</li><li>• Parent questionnaire</li><li>• Math teacher questionnaire</li><li>• Science teacher questionnaire</li><li>• School counselor questionnaire</li><li>• School administrator questionnaire</li></ul>	<ul style="list-style-type: none"><li>• Derived variables</li><li>• School-level analytic weights</li><li>• School counselor questionnaire</li><li>• School administrator questionnaire</li></ul>

### Contents of the First Follow-up Data File

#### Student-level data file (all merged to the student)

- Derived variables
- Student-level analytic weights
- Student assessment
- Student questionnaire
- Parent questionnaire
- School counselor questionnaire
- School administrator questionnaire

### **Contents of the 2013 Update Data File**

- Derived variables
- Student-level analytic weights
- Student and parent questionnaires
- High school transcript school files
- High school transcript course files

### **Contents of the Second Follow-up Data File**

The HSLS:09 Second Follow-up Data File includes

- Derived variables
- Student-level analytic weights
- Student questionnaires

### Variable Naming

Character 1	Character 2	Characters 3-12
<p>Component identifiers</p> <p>Composite variables = X</p> <p>Student = S</p> <p>Parent = P</p> <p>Math teacher = M</p> <p>Science teacher = N</p> <p>Administrator = A</p> <p>Counselor = C</p> <p>Weights = W</p> <p>Transcripts = T</p>	<p>Round identifier (i.e., 1, 2, 3), in which all base year variables are "1" and subsequent rounds will follow sequentially (e.g., first follow-up is "2")</p>	<p>Indicates a descriptive name for the variable</p>

### Variable Labels

- Provide more description than the variable name
- For convenience, retain the first two characters of the variable name
- Examples
  - Variable name: P1JOBNOW1
  - Variable label: P1 C05 Parent 1 currently holds a job

### Variable Naming Conventions Examples

Name	Label
X1SEX	X1 Student's sex
X1RACE	X1 Student's race/ethnicity composite
S1SUREHSGRAD	S1 F10 How sure the 9 <sup>th</sup> grader is that he/she will graduate from high school
P1HOMELANG	P1 B21 Language other than English is regularly spoken in the home
M1TEACHING	M1 B01A Math teachers in this school set high standards for teaching
N1TEACHING	N1 C01A Science teachers in this school set high standards for teaching
A1ADA	A1 A19 Average daily attendance percentage for high school students
C1FTCNLSL	C1 A01A Number of full-time high school counselors
W1STUDENT	W1 Base year student analytic weight
T3SGPAO	T3 Grade point average overall

### Composite/Derived Variables

- What are composite/derived variables?
  - Variables not directly collected as part of instruments
- Why use them?
  - Users may not have all data necessary to create similar variables
  - Convenience (time/effort)
  - Fewer missing values (imputation)
- How were they created?
  - Check data file documentation



**Examples of Composite/Derived Variables**

## Algebra Assessment

Name	Label
<b>X1TXMTH</b>	X1 Mathematics theta score
<b>X1TXMSEM</b>	X1 Mathematics standard error of measurement for raw theta score
<b>X1TXMSCR</b>	X1 Mathematics IRT-estimated number right score (of 72 base year items)
<b>X1TXMTSCOR</b>	X1 Mathematics standardized theta score
<b>X1TXMQUINT</b>	X1 Mathematics quintile score
<b>X1TXMPROF1</b>	X1 Mathematics proficiency probability score: level 1
<b>X1TXMPROF2</b>	X1 Mathematics proficiency probability score: level 2
<b>X1TXMPROF3</b>	X1 Mathematics proficiency probability score: level 3
<b>X1TXMPROF4</b>	X1 Mathematics proficiency probability score: level 4
<b>X1TXMPROF5</b>	X1 Mathematics proficiency probability score: level 5

**Examples of Composite/Derived Variables (Continued)**

## Family Characteristics

Name	Label
<b>X1P1RELATION</b>	X1 Parent 1: relationship to 9 <sup>th</sup> grader
<b>X1PAR1EDU</b>	X1 Parent 1: highest level of education
<b>X1PAR1EMP</b>	X1 Parent 1: employment status
<b>X1PAR1RACE</b>	X1 Parent 1: race/ethnicity
<b>X1P2RELATION</b>	X1 Parent 2: spouse's relationship to 9 <sup>th</sup> grader
<b>X1PAR2EDU</b>	X1 Parent 2: highest level of education
<b>X1PAR2EMP</b>	X1 Parent 2: employment status
<b>X1PAR2RACE</b>	X1 Parent 2: race/ethnicity
<b>X1PAREDU</b>	X1 Parents'/guardians' highest level of education
<b>X1PARPATTERN</b>	X1 P1-P2 relationship pattern
<b>X1MOMREL</b>	X1 Mother/female guardian's relationship to 9 <sup>th</sup> grader
<b>X1MOMEDU</b>	X1 Mother/female guardian's highest level of education
<b>X1MOMEMP</b>	X1 Mother/female guardian's employment status
<b>X1MOMRACE</b>	X1 Mother/female guardian's race/ethnicity
<b>X1DADREL</b>	X1 Father/male guardian's relationship to 9 <sup>th</sup> grader
<b>X1DADEDU</b>	X1 Father/male guardian's highest level of education
<b>X1DADEMP</b>	X1 Father/male guardian's employment status
<b>X1DADRACE</b>	X1 Father/male guardian's race/ethnicity

### Resources Available From Other Sources

- To learn more about the study, the data, and the data file
  - Read [Base Year Data File Documentation](#)
  - Read [First Follow-up Data File Documentation](#)
  - Read [2013 Update and High School Transcripts Data File Documentation](#)
  - Review the [Questionnaires](#)
  - Read [HSLs:09: A First Look at Fall 2009 9th-Graders](#)
  - Read [HSLs:09: A First Look at Fall 2009 Ninth-Graders in 2012](#)
  - Read [HSLs:09: A First Look at Fall 2009 Ninth-Graders in 2013](#)
- Visit [HSLs:09](#) main study page for study overview, publications, and staff contact information

### Module Summary and Resources

#### Summary

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#### Resources

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