

Using National Data to Support Research: Workshop of National Data Institute of NCES & NSCES



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CAIR – Anaheim 2012

Outlines

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- Introduction of National Data Institute (NDI)
- Brief description of frequently visited NCES Datasets
 - Key features of datasets
 - Online resources
 - Web-based analytical tools
- Very brief description of NSF Datasets
- Schedule and application procedure of NDI

National Data Institute

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- NDI is a summer data workshop operated by the AIR
 - Sponsored by NCES and NSF
 - Intensive introduction of multiple federal data to support research on postsecondary, with a focus on studies of STEM education
 - Open to IR, faculty, researchers from state and national association, and graduate students


- Expected Learning Outcomes
 - Enhance understanding about methodological and technical issues relevant to large-scale national data collection
 - Learn to use national data to conduct analyses, with primary emphasis on the web-based data analysis
 - Stimulate interest in using national data to address research questions in postsecondary education

National Center of Educational Statistics Datasets

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- Frequently Visited Postsecondary Datasets
 - NPSAS - the National Postsecondary Student Aid Study
 - BPS - the Beginning Postsecondary Students Longitudinal Study
 - B&B - the Baccalaureate and Beyond Longitudinal Study
- Datasets Starting From High School Cohorts
 - NELS:88 - the National Education Longitudinal Study of 1988
 - ELS: 2002 - the Education Longitudinal Study of 2002
 - HSLS: 2009 - the High School Longitudinal Study of 2009

National Postsecondary Student Aid Study (NPSAS)


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National Postsecondary Student Aid Study
NPSAS Home

<p>Assessments</p> <ul style="list-style-type: none"> • National Assessment of Educational Progress (NAEP) • National Assessments of Adult Literacy (NAAL) <p>Early Childhood</p> <ul style="list-style-type: none"> • Early Childhood Longitudinal Study (ECLS) • National Household Education Survey (NHES) <p>Elementary/Secondary</p> <ul style="list-style-type: none"> • Common Core of Data (CCD) • Secondary Longitudinal Studies Program • School District Demographics System • Schools and Staffing Survey (SASS) • more... 	<p>International</p> <ul style="list-style-type: none"> • International Activities Program (IAP) <p>Library</p> <ul style="list-style-type: none"> • Library Statistics Program <p>Postsecondary</p> <ul style="list-style-type: none"> • Baccalaureate and Beyond (B&B) • Career/Technical Education Statistics (CTES) • Integrated Postsecondary Education Data System (IPEDS) • National Postsecondary Student Aid Study (NPSAS) • more... 	<p>Data Systems, Use, & Privacy</p> <ul style="list-style-type: none"> • Common Education Data Standards (CEDS) • National Forum on Education Statistics • Statewide Longitudinal Data Systems Grant Program - (SLDS) • more... <p>Resources</p> <ul style="list-style-type: none"> • K-12 Practitioners Circle • National Postsecondary Education Cooperative (NPEC) • Statistical Standards Program • more...
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What's New


About NPSAS

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DataLab


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Related Studies



Beginning Postsecondary Students



Baccalaureate and Beyond

As a large, nationally representative sample of institutions and students, NPSAS offers a highly efficient, cost-effective way to identify nationally representative samples of student subpopulations of interest to policymakers and to obtain baseline data for longitudinal study of these subpopulations. Specifically, NPSAS data provide the base-year sample for the Beginning Postsecondary Students (BPS) Longitudinal

National Postsecondary Student Aid Study (NPSAS)



SURVEYS & PROGRAMS

[Baccalaureate and Beyond - B&B](#) | [Staff](#) [All Products](#) [Last 90 Days](#)



B&B studies follow students who complete their baccalaureate degrees. Initially, students in the NPSAS surveys are identified as being in their last year of undergraduate studies. Students are asked question about their future employment and education expectations, as well as about their undergraduate education. In later follow-ups, students are asked questions about their job search activities, education and employment experiences after graduation. Individuals who had shown an interest in becoming teachers are asked additional questions about their pursuit of teaching, and if teaching, about their current teaching position. In the first B&B study, about 11,000 students were identified in NPSAS:93 who completed their degree in the 1992-93 academic year. These students comprised the first B&B cohort and were followed up in 1994 (B&B:93/94), 1997 (B&B:93/97), and 2003 (B&B:93/2003). A new B&B cohort began with NPSAS:2000 and involved only a 1-year follow-up in 2001 (B&B:2000/01). Future B&B cohorts will alternate with BPS in using NPSAS surveys as their base.

[Visit the Baccalaureate and Beyond Homepage](#)

[Beginning Postsecondary Students Longitudinal Study - BPS](#) | [Staff](#) [All Products](#) [Last 90 Days](#)



BPS studies follow students who first begin their postsecondary education. Initially, students in the NPSAS surveys are identified as being first time beginners of undergraduate studies. These students are asked questions about their experiences during, and transitions through postsecondary education and into the labor force, as well as family formation. Transfers, persisters, stopouts/dropouts, and vocational completers are among those included in the studies. In the first BPS study, about 10,600 students were identified in NPSAS:90 as being first time beginning postsecondary students during the academic year 1989-90. These students were followed in 1992 (BPS:90/92) and in 1994 (BPS:90/94). A second cohort of first time, beginning students was identified in NPSAS:96, with follow-ups performed in 1998 (BPS:96/98) and in 2001 (BPS:96/2001). The third cohort was identified in NPSAS:04, and will be followed in 2006 and 2009.

[Visit the Beginning Postsecondary Students Longitudinal Study Homepage](#)

[National Postsecondary Student Aid Study - NPSAS](#) | [Staff](#) [All Products](#) [Last 90 Days](#)



The NPSAS is a comprehensive study that examines how students and their families pay for postsecondary education. It includes nationally representative samples of undergraduates, graduate and first-professional students; students attending public and private less-than-2-year institutions, community colleges, 4-year colleges, and major universities. Students who receive financial aid as well as those who do not receive financial aid participate in NPSAS. Comprehensive student interviews and administrative records, with exceptional detail concerning student financial aid, are available for academic years 1986-87, 1989-90, 1992-93, 1995-96, 1999-2000, and 2003-04.

[Visit the National Postsecondary Student Aid Study Homepage](#)

National Postsecondary Student Aid Study (NPSAS)



National Postsecondary Student Aid Study (NPSAS)

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About NPSAS

NPSAS helps fulfill the NCES mandate to collect, analyze, and publish statistics related to education. The purpose of NPSAS is to compile a comprehensive research dataset, based on student-level records, on financial aid provided by the federal government, the states, postsecondary institutions, employers, and private agencies, along with student demographic and enrollment data. NPSAS is the primary source of information used by the federal government (and others, such as researchers and higher education associations) to analyze student financial aid and to inform public policy on such programs as the Pell grants and Stafford loans.

Survey Design and Methodology

NPSAS data come from multiple sources, including institutional records, government databases, and student interviews. Detailed data on participation in student financial aid programs are extracted from institutional records. Data about family circumstances, demographics, education and work experiences, and student expectations are collected from students through a web-based multi-mode interview (self-administered and computer-assisted telephone (CATI)).

NPSAS Longitudinal Spin-offs

As a large, nationally representative sample of institutions and students, NPSAS offers a highly efficient, cost-effective way to identify nationally representative samples of student subpopulations of interest to policymakers and to obtain baseline data for longitudinal study of these subpopulations. Specifically, NPSAS data provide the base-year sample for the Beginning Postsecondary Students (BPS) longitudinal study and the Baccalaureate and Beyond (B&B) longitudinal study. For BPS, the longitudinal cohort consisted of students beginning their postsecondary education during the NPSAS year (NPSAS:90, NPSAS:96, and NPSAS:04); BPS surveys followed these students over time to examine such issues as persistence and the effects of financial aid on subsequent enrollment. For B&B, NPSAS provided the base-year sample of students obtaining a baccalaureate degree during the NPSAS year (NPSAS:93 and NPSAS:2000); the B&B surveys followed these students over time to examine issues such as the transition from college to work and access to graduate school.

Related Studies



Beginning Postsecondary Students



Baccalaureate and Beyond

National Postsecondary Student Aid Study (NPSAS)

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- Examine how students and their families pay for college
- National representative sample
 - surveys every four years
 - NPSAS:08 contains data on 114,000 undergrads, 24,000 graduates, who were enrolled between July 1, 2007 and June 30, 2008, at 1,900 institutions.
- Student-level records on financial aids from federal governments, the states, institutions, and private agencies
 - family circumstances
 - demographics
 - education and work experiences
 - academic and professional expectations
- Cross-sectional foundation for BPS and B&B

Beginning Postsecondary Students (BPS)

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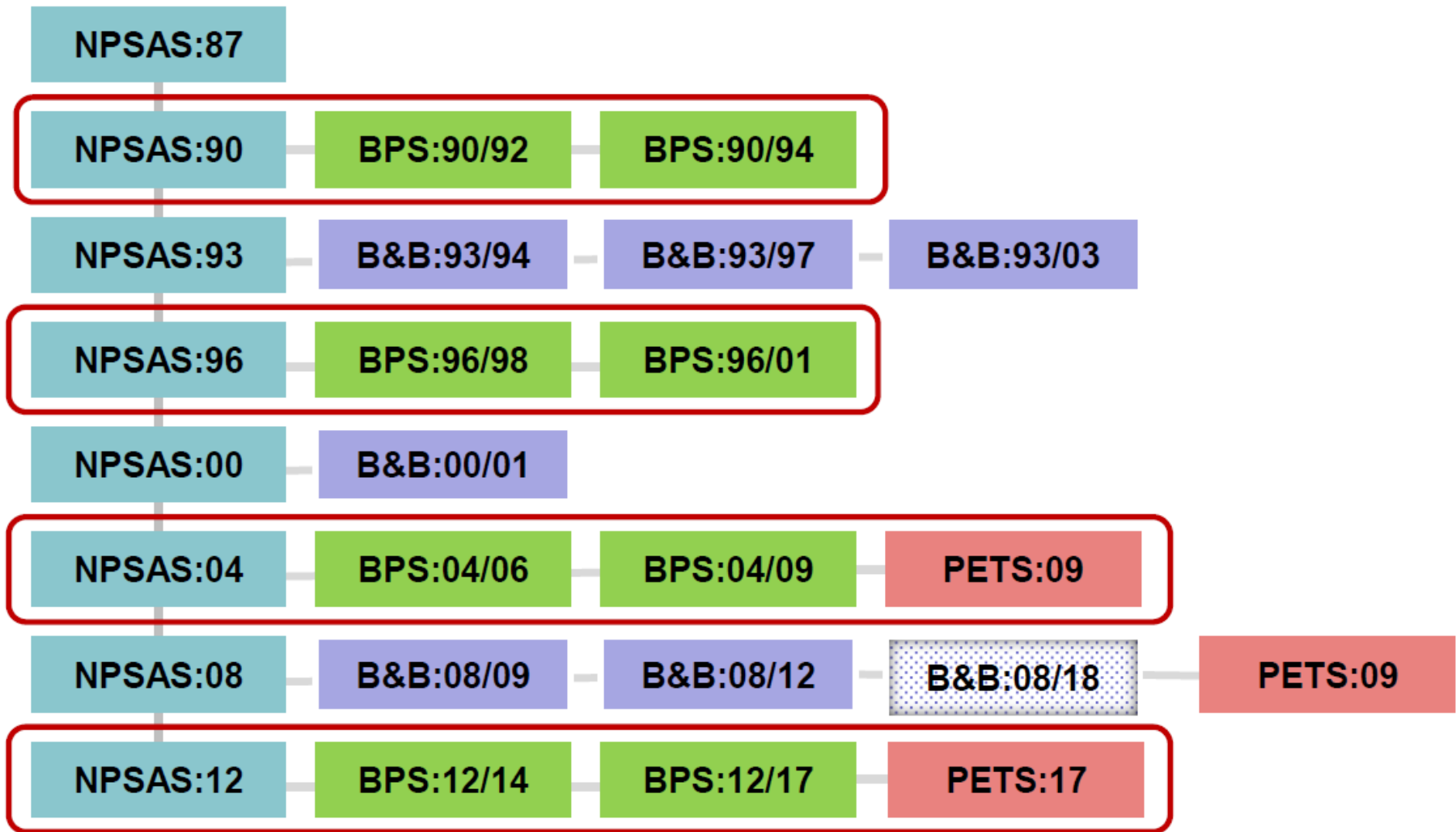
- National representative of first-time beginning students
 - draw sample from NPSAS
 - BPS: 04/09 includes 18,640 respondents representing 4 million students who began in 2003-04
- Longitudinal study
 - same cohort of students are followed at the 3rd and 6th years
 - survey window opens for 6 years
- Focus on student college experience and attainment
 - demographic and selected pre-college information
 - persistence & enrollment in detail
 - academic and social experiences
 - college financing
 - transcripts available for 2004 cohorts (BPS:04/09)

Baccalaureate and Beyond (B&B)

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- National representative of students with baccalaureate degree
 - draw sample from NPSAS
 - same cohort of students for up to 10 years after degree completion
 - B&B:2008 has 19,000 seniors, followed in 2009 and 2012
- Focus on college graduate post-baccalaureate experience
 - work experience and/or graduate education
 - income and debt repayment
 - special emphasis on new elementary and secondary teachers

Chronology of Sample Surveys



Accessibility

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- Public-use data
 - aggregation results only
 - online statistical software - PowerStats
- Restricted-use data
 - unit data accessible
 - transcript information added
 - application needed

PowerStats --- NCES Online Statistical Software



Beginning Postsecondary Students (BPS)

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Baccalaureate
and Beyond



National
Postsecondary
Student Aid
Study

About BPS

Each cycle of the **Beginning Postsecondary Students Longitudinal Study (BPS)** follows a cohort of students who are enrolling in postsecondary education for the first time. The study collects data on student persistence and completion of, postsecondary education programs, their transition to employment, demographic characteristics, and changes over time in their goals, marital status, income, and debt, among other indicators. BPS tracks students' paths through postsecondary education and helps answer questions of policy interest as why students leave school, how financial aid influences persistence and completion, and what percentage of students complete various degree programs.

Survey Design and Methodology


BPS draws its initial cohorts from the National Postsecondary Student Aid Study (NPSAS), which uses a large nationally representative sample of postsecondary students and institutions to examine how students pay for college.

Members of the most recent cohort of BPS, BPS:04/09, were initially surveyed at the end of their first academic year (2003-04) and then received invitations to participate in follow-up surveys at the end of their third (2005-06) and sixth (2008-09) years after entry into postsecondary education. The final BPS:04/09 dataset contains information on nearly 16,700 students. Prior cohorts include BPS:90/94 (around 8,000 students) and BPS:96/2001 (around 12,000 students).

PowerStats --- NCES Online Statistical Software


DATA LAB

Postsecondary & Pre-Elementary Education Data



Create, save and share tables and regressions, using 15 NCES postsecondary survey datasets and 1 pre-elementary education dataset.


GO



College & Career Tables Library


Browse through 5,000+ tables from NCES' postsecondary publications that cover a comprehensive range of topics.

GO



Quickly create simple tables using the most frequently used variables from recent postsecondary and pre-elementary survey data.

GO



IPEDS ANALYTICS: Delta Cost Project Database

Download IPEDS institutional data from 1986-87 to 2008-09 that have been translated for longitudinal analysis.

GO

What's New

- 8/20/2012
New variables added to Baccalaureate & Beyond Longitudinal Study (B&B: 2008/2009) PowerStats. See [Variable list](#).
- 8/7/2012
[New Americans in Postsecondary Education, Occupational and Academic Majors in Postsecondary Education, and IPEDS Series 2010 State Tables](#)

Questions?

Contact PowerStats@ed.gov.

Codebooks

View/download variable information for PowerStats datasets. Files are PDFs.

View by subject **GO**

View by variable name **GO**

PowerStats --- NCES Online Statistical Software



QuickRetrieve

Enter table number:

GO

DataLab | Log out

CREATE NEW



TABLE



REGRESSION

USE EXISTING FILES



MY
LIBRARY



IMPORT
FILE



LAUNCH
BATCH PROCESSOR

GETTING STARTED

LEARN BY DOING (PDF)

- Tables (709KB)
- Linear Regressions (1.23MB)
- Logistic Regressions (1.10MB)
- My Library (1.51MB)
- Import Files (313KB)
- Batch Processor (289KB)

TECHNICAL DOCUMENTS (PDF)

- Calculating Variance Inflation Factor (725KB)

RECENT WORK

Welcome to PowerStats! A list of your recent work will be displayed here. You do not have any work at this time.

PowerStats --- NCES Online Statistical Software



GROUP	WORK SPACE	
<input type="checkbox"/> POSTSECONDARY		
QuickSelect by dataset name ▶	CHOOSE A DATASET	
<input type="checkbox"/> Students	Baccalaureate and Beyond: 2008–2009	
<input checked="" type="checkbox"/> Beginning college students	Baccalaureate and Beyond: 1993–2003	
<input checked="" type="checkbox"/> All undergraduates	Baccalaureate and Beyond: 1993–2003 Graduate students	
<input checked="" type="checkbox"/> Graduating college seniors	Baccalaureate and Beyond: 2000–2001	
<input checked="" type="checkbox"/> Graduate students	Beginning Postsecondary Students: 2009	
<input checked="" type="checkbox"/> Faculty	Beginning Postsecondary Students: 2001	
<input type="checkbox"/> PRE-ELEMENTARY	Beginning Postsecondary Students: 1994	
<input checked="" type="checkbox"/> Students	National Postsecondary Student Aid Study: 2008 Undergraduates	
	National Postsecondary Student Aid Study: 2004 Undergraduates	
	National Postsecondary Student Aid Study: 2000 Undergraduates	
	National Postsecondary Student Aid Study: 1996 Undergraduates	
	National Postsecondary Student Aid Study: 2008 Graduate Students	
	National Postsecondary Student Aid Study: 2004 Graduate Students	
	National Postsecondary Student Aid Study: 2000 Graduate Students	
	National Postsecondary Student Aid Study: 1996 Graduate Students	
	National Study of Postsecondary Faculty: 2004 Faculty	
	National Study of Postsecondary Faculty: 2004 Institution	
	Pre-Elementary Education Longitudinal Study (PEELS), Waves 1-5	

to begin.

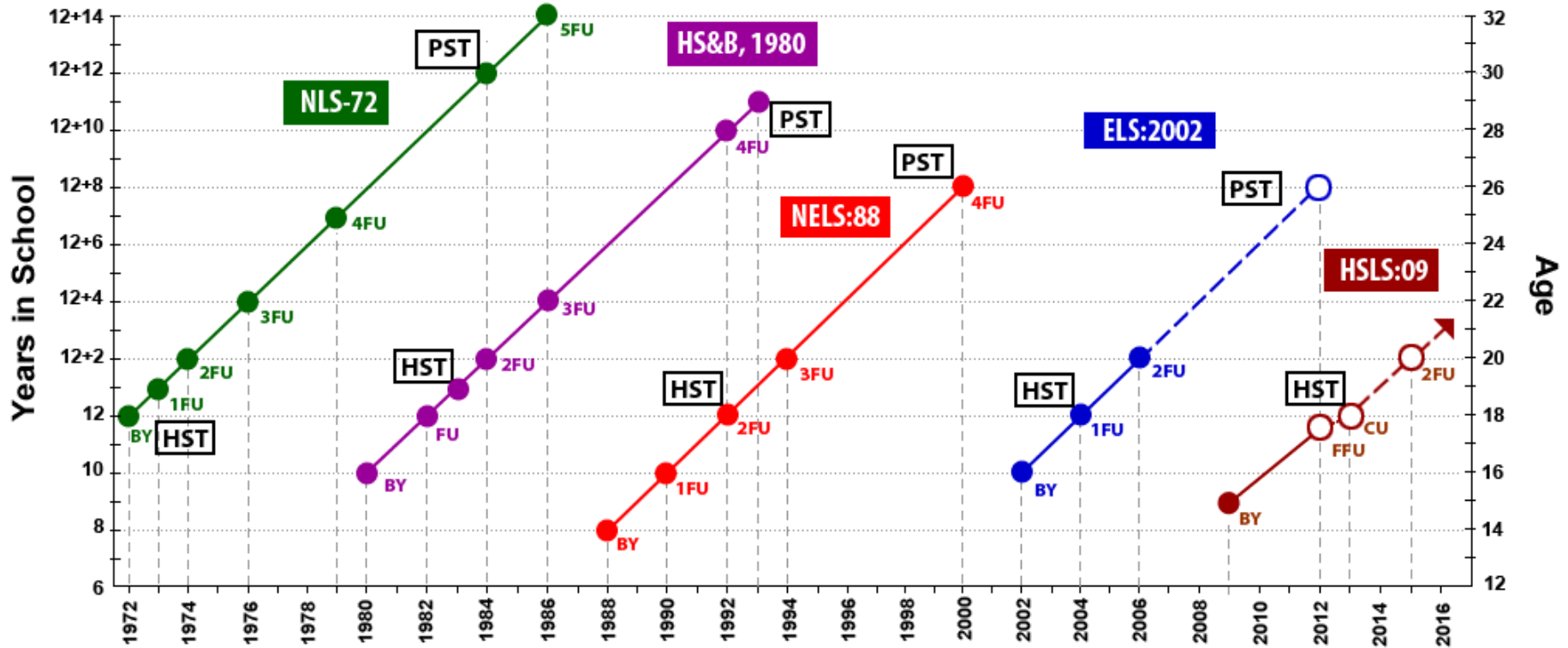
National Center of Educational Statistics Datasets

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- Frequently Visited Postsecondary Datasets
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- Datasets Starting From High School Cohorts
 - NELS:88 - the National Education Longitudinal Study of 1988
 - ELS: 2002 - the Education Longitudinal Study of 2002
 - HSLS: 2009 - the High School Longitudinal Study of 2009

Design of Major Longitudinal Datasets of NCES

Research Design for the NCES High School Cohorts




NLS-72 National Longitudinal Study of the High School Class of 1972
 HS&B High School and Beyond: 1980
 NELS:88 National Education Longitudinal Study of 1988
 ELS:2002 Education Longitudinal Study of 2002
 HSLS:09 High School Longitudinal Study of 2009

BY - Base Year data collection
 1FU - 1st follow-up data collection
 2FU - 2nd follow-up data collection
 3FU - 3rd follow-up data collection
 4FU - 4th follow-up data collection
 6FU - 6th follow-up data collection


CU - College Update
 HST - High School Transcript
 PST - Post-secondary transcript

NCES Datasets Starting from High School Cohorts




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**Beginning
Postsecondary
Students**



**Baccalaureate
and
Beyond**

Assessments

- National Assessment of Educational Progress (NAEP)
- National Assessments of Adult Literacy (NAAL)

Early Childhood

- Early Childhood Longitudinal Study (ECLS)
- National Household Education Survey (NHES)

Elementary/Secondary

- Common Core of Data (CCD)
- Secondary Longitudinal Studies Program
- School District Demographics System
- Schools and Staffing Survey (SASS)
- more...

International

- International Activities Program (IAP)

Library

- Library Statistics Program

Postsecondary

- Baccalaureate and Beyond (B&B)
- Career/Technical Education Statistics (CTES)
- Integrated Postsecondary Education Data System (IPEDS)
- National Postsecondary Student Aid Study (NPSAS)
- more...

Data Systems, Use, & Privacy

- Common Education Data Standards (CEDS)
- National Forum on Education Statistics
- Statewide Longitudinal Data Systems Grant Program - (SLDS)
- more...

Resources

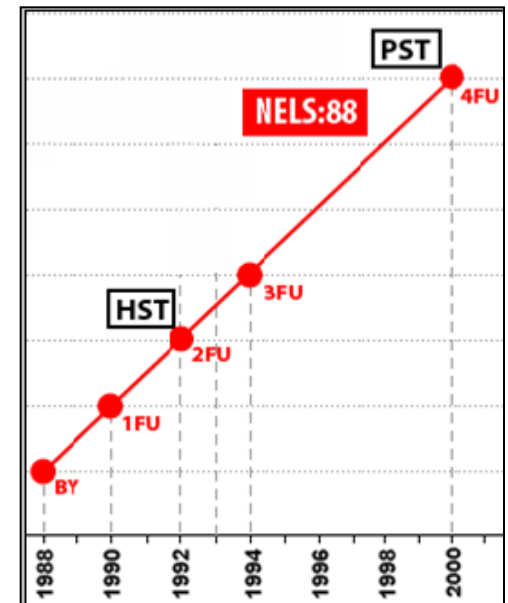
- K-12 Practitioners Circle
- National Postsecondary Education Cooperative (NPEC)
- Statistical Standards Program
- more...

As a large, nationally representative sample of institutions and students, NPSAS offers a highly efficient, cost-effective way to identify nationally representative samples of student subpopulations of interest to policymakers and to obtain baseline data for longitudinal study of these subpopulations. Specifically, NPSAS data provide the base-year sample for the Beginning Postsecondary Students (BPS) Longitudinal

National Education Longitudinal Study of 1988

20

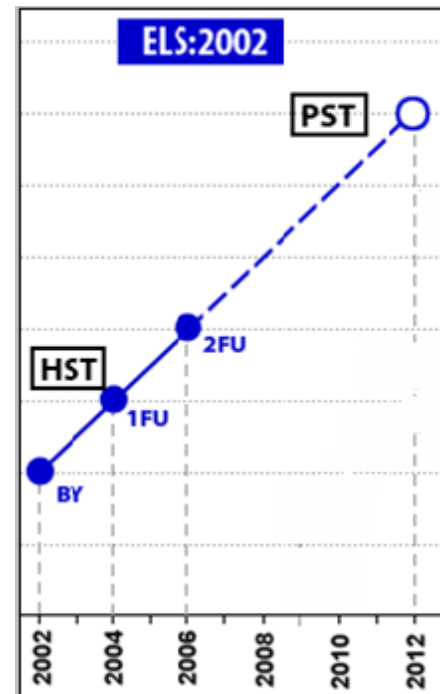
- Key research questions focus on:
 - transition from high school through postsecondary until early adulthood
 - determinants of dropping out
 - effects of family involvement in education
- Data sample
 - national representative 8th graders in 1988
 - 4 follow-ups until early adulthood
 - rich information in
 - ✦ high school predictors
 - ✦ attendance pattern
 - ✦ transcripts in both high school and college



Education Longitudinal Study of 2002

21

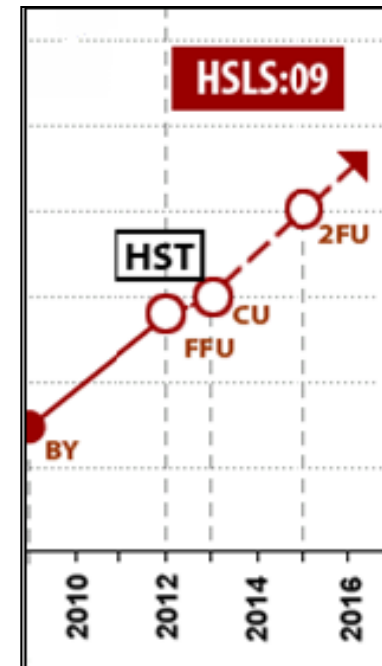
- Key research questions focus on:
 - transition from high school sophomores through college into adult careers
 - college access and choice
 - multiple perspectives on student educational experience
 - special emphasis on mathematics achievement in high school
- Data Sample
 - national representative high school sophomores in 2002
 - assessment data of high school math and English
 - interview data collected from multiple resources
 - experience inside and outside the classroom
 - transcripts of both high school and college
 - federal financial aid



High School Longitudinal Study of 2009

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- Key research questions:
 - student educational trajectories to the workplace and/or beyond
 - student decision making on curriculum and college options
 - STEM course taking
 - State administrative data
- Data Sample
 - national representative, 21,000 9th graders in 2009
 - 35-minutes student survey
 - context data from parents, counselors, teachers ...
 - only BY data available now



Accessibility

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- Public-use data
 - unit data accessible, partially
 - online statistical software – EDAT
- Restricted-use data
 - application and review required
 - full information released

Education Data Analysis Tool (EDAT)

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Education Longitudinal Study of 2002 (ELS:2002)

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EDAT

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→ Historical Background

Policy and Research Issues

Survey Design

Questionnaires

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User Manuals

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Online Bibliography Search Tool

Table Library

✉ Questions?

Elise Christopher

📧 Join Newsflash

Overview: Purpose

The Education Longitudinal Study of 2002 (ELS:2002) is designed to monitor the transition of a national sample of young people as they progress from tenth grade through high school and on to postsecondary education and/or the world of work.

ELS:2002 has two distinctive features:

- First, it is a longitudinal study, which means that the same individuals are surveyed repeatedly over time.
- Second, it is a multilevel study, which means that information is collected from multiple respondent populations that represent students, their parents, their teachers, their librarians, and their schools.

As a longitudinal study, ELS: 2002 follows a nationally representative cohort of students from the time they were high school sophomores through the rest of their high school careers. In 2004, the sample was augmented to make it representative of seniors as well. ELS:2002 continues to follow these students into postsecondary education and/or the labor market. These transitions are complex in that youth may follow

✓ HIGHLIGHTS

July 2012:

Collection of third follow-up survey data is underway! Expect data to be released in 2013.

June 2011:

[NEW! Online Bibliography Search Tool](#)

Search for publications featuring data from ELS:2002 including citations published from 2001 to August 2010.

March 2010:

[Education Longitudinal Study of 2002 Base Year to Second Follow-up Public-use Data](#)

These data are a Public-Use version of the ELS:2002/06 Restricted-use Base Year to Second Follow-up data (NCES

Education Data Analysis Tool (EDAT)

GET STARTED



The Education Data Analysis Tool (EDAT) allows you to download NCES survey datasets to your computer. EDAT guides you through selecting a survey, population, and variables relevant to your analysis.

You will select a statistical software package (SAS, SPSS, Stata, R, S-Plus, or SUDAAN) or a generic file format (ASCII or CSV) for your dataset. EDAT will also use your selections to create a custom syntax file for use with your selected software.

AVAILABLE SURVEYS

Currently, the EDAT application contains ECLS-K (Early Childhood Longitudinal Study - Kindergarten Class of 1998-99), ELS (Education Longitudinal Study of 2002), HSLs (High School Longitudinal Study of 2009), NELS (National Education Longitudinal Study of 1988), NHES (National Household Education Survey), SASS (Schools and Staffing and Teacher Follow-up Surveys), and SSOCS (School Survey on Crime and Safety) datasets. Additional datasets will be added in the near future.

FIRST TIME USER?

It is **STRONGLY** recommended that you print and read the [EDAT User's Guide](#) before proceeding.

IMPORTANT

Selecting a statistical software package (e.g., SAS, SPSS, Stata, R, S-Plus, or SUDAAN) for your dataset and syntax file requires that you have access to that particular software. If you choose to work with a generic file format (e.g., ASCII or CSV), you may use any software or programming language you wish to conduct your analysis.

If you do not have an EDAT Login, [Create New Login](#)

E-mail Address

Remember E-mail Address

Password

[Forgot Password?](#)

LOG IN

Get Started Without Logging In

Education Data Analysis Tool (EDAT)

SELECT SURVEY ?

Select a survey below

- ECLS-K (Early Childhood Longitudinal Study - Kindergarten Class of 1998-99)**
- ELS (Education Longitudinal Study of 2002)**
 - ELS:2002/06
- HSLs (High School Longitudinal Study of 2009)**
 - HSLs:2009 [Read Me](#)
- NELS (National Education Longitudinal Study of 1988)**
 - NELS:1988/00
 - NELS:1988/94
 - NELS:1988/92
- IHES (National Household Education Survey)**
- SASS (Schools and Staffing and Teacher Follow-up Surveys)**
- SSOCS (School Survey on Crime and Safety)**

NEXT

Education Data Analysis Tool (EDAT)



Education Longitudinal Study of 2002 (ELS:2002/06) [Change Survey](#)

dai.li@csuci.edu is logged in

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VARIABLE SEARCH

Review Specific Sections ▾

Student Level (2602)

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- [BY Weights and Composites \(125\)](#)
- [F1 Weights and Composites \(67\)](#)
- [High School Transcript \(Student\) \(6\)](#)
- [F2 Weights and Composites \(158\)](#)
- [BY Student Questionnaire \(381\)](#)
- [F1 Student Questionnaire \(246\)](#)
- [F1 Dropout Questionnaire \(178\)](#)
- [F1 Transfer Questionnaire \(15\)](#)
- [F1 Early Graduate Questionnaire \(46\)](#)
- [F1 New Participant Supplement \(37\)](#)
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- [BY School Composites \(3\)](#)
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- [BY Administrator Questionnaire \(286\)](#)
- [F1 Administrator Questionnaire \(178\)](#)
- [BY Library Questionnaire \(183\)](#)
- [BY Facilities Checklist \(60\)](#)

School Level (725)

- [F2 Institution File \(49\)](#)

- [Download Data and Syntax Files](#)
- [Download Data, Codebook, and Layout Files](#)
- [Download Syntax Files](#)

Temporary Tag File


Questionnaire

178 variables [Comparing 0](#)

[Tag All](#) [Untag All](#)

Tag ▾	Compare ▾	Detail	Name ▾	Label ▾	Type ▾
<input type="checkbox"/>			F1D19	Month and year last attended school (DO)	Questionnaire
<input type="checkbox"/>			F1D20	Grade when last attended school (DO)	Questionnaire
<input type="checkbox"/>			F1D21	Whether passed last grade attended	Questionnaire
<input type="checkbox"/>			F1D22	Left school for more than a month before last left	Questionnaire
<input type="checkbox"/>			F1D23	Month and year first left school for more than a month	Questionnaire
<input type="checkbox"/>			F1D24	Month and year returned to school	Questionnaire
<input type="checkbox"/>			F1D25	Attended school during 2002-2003 school year	Questionnaire
<input type="checkbox"/>			F1D26	Number of school days missed during 2002-2003 school year	Questionnaire
<input type="checkbox"/>			F1D27A	Years of General Science coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D27B	Years of General Physical Science coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D27C	Years of Biology coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D27D	Years of Botany / Zoology coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D27E	Years of Earth Science coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D27F	Years of Chemistry coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D27G	Years of Principles of Technology coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D27H	Years of Physics coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D27I	Years of other science coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D28A	Years of General Math coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D28B	Years of Pre-Algebra coursework (DO)	Questionnaire
<input type="checkbox"/>			F1D28C	Years of Algebra I coursework (DO)	Questionnaire

Public-use vs. Restricted-use Data: ELS

Data Source	Public-Use	Restricted-Use
Follow-ups included	BY, F1, and F2	BY, F1, high school transcripts, and F2
Data file publication number	NCES 2010-338	NCES 2008-346r
How to access data files	 http://nces.ed.gov/edat	Request CD-ROM http://nces.ed.gov/surveys/els2002/obtainingrest.asp
Data File format	One of six programming languages (SAS, Stata, SPSS, Sudaan, R, S-Plus), ASCII or CSV	SAS or SPSS data files containing selected variables
How to select variables of interest	EDAT Tag Files	Electronic codebook (ECB)
How to analyze data	On any web-connected computer, after downloading EDAT tag files and data file	On a restricted-use computer, after obtaining restricted-use license and receiving CD-ROM

NCSES Data

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- Overview of National Center for Science and Engineering Statistics
- Human Resource Statistics Program
 - collect and disseminate postsecondary education and workforce data
 - ✦ survey of institutions --- GSS
 - ✦ survey of individuals --- SED, SDR, NSRCG, NSCG
 - focus on Science, Engineering, and Health degree fields and occupations
- Research and Development Statistics Program
 - surveys of the business sector
 - surveys of higher education
 - surveys of the public sector

Human Resource Statistics Program

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- Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS)
- Multiple surveys of graduates
 - Survey of Earned Doctorates (SED)
 - Survey of Doctorate Recipients (SDR)
 - National Survey of Recent College Graduates (NSRCG)
 - National Survey of College Graduates (NSCG)

Human Resource Statistics Program

Target Population	Survey	Population	Sample Size	Overall Response Rate
All U.S. academic institutions granting graduate degrees in SEH fields	GSS/ Annual	~ 574 institutions ~ 13,285 units	Census	99%
Recent research doctorate recipients	SED/ Annual	~430 institutions ~49,000 doctorates	Census	93%
Doctorate holders in SEH fields	SDR/ Biennial	~752,000 doctorates	40,000 doctorates	81%
College-educated population	NSCG/ Biennial	~ 56 million	100,000	80%
Recent bachelor's and master's degree holders in SEH fields	NSRCG/ Biennial	~2,000 institutions ~1,128,000 bachelor's ~309,000 master's	302 institutions 10,159 bachelor's 7,841 master's	66%

www.nsf.gov/statistics/

Statistics



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[Surveys and Data](#)

- Survey Descriptions
- Data and Tools
 - SESTAT
 - WebCASPAR
 - Data Files
- Errata

National Center for Science and Engineering Statistics (NCSES)

Project Linking Multi-Agency Surveys Produces New Findings on R&D by Multinational Companies

[\[collapse -\]](#)

Education

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Federal Government

[Budget Function](#) • [Demographics](#) • [Expenditures](#) • [Facilities](#) • [Funding](#) • [Research and Development](#) • [Workforce](#)

Business and Industry

[Funding](#) • [Geographic](#) • [Innovation](#) • [Research and Development](#) • [Trends](#) • [Workforce](#)

International

[Education](#) • [Graduate Students](#) • [Research and Development](#) • [Workforce](#)

Research and Development (R&D)

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[Information Technologies](#) • [Public Attitudes and Understanding](#)

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Workforce


[Academic](#) • [Business and Industry](#) • [Degrees](#) • [Demographics](#) • [Disabilities](#) • [Employment](#) • [Federal Government](#) • [Geographic](#) • [Immigrants](#) • [International](#) • [Minorities](#) • [Postdoctorates](#) • [Salaries](#) • [Women](#)

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Survey Descriptions

Statistics



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Survey Descriptions

- [Overview of NCSES Surveys](#)
- [Schedule of Next Release Dates](#)
- [Survey Questionnaires](#)

Education of Scientists and Engineers

[Survey of Earned Doctorates](#)

[Survey of Graduate Students and Postdoctorates in Science and Engineering](#)

[Higher Education Surveys](#) (inactive)

[Integrated Postsecondary Education Data System Completions Survey](#) (non-NCSES survey)

Science and Engineering Workforce

[Survey of Doctorate Recipients](#)

[National Survey of Recent College Graduates](#)

[National Survey of College Graduates](#)

[Occupational Employment Statistics Survey](#) (non-NCSES survey)

Research and Development Funding and Expenditures

[Federal Research and Development by Budget Function](#)

[Business Research and Development and Innovation Survey \(BRDIS\)](#)

[Higher Education Research and Development Survey \(HERD\)](#)

[Survey of Federal Funds for Research and Development](#)

[Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions](#)

[Federally Funded Research and Development Centers R&D Survey](#)

[Survey of Research and Development Expenditures at Universities and Colleges](#) (See HERD)

[Survey of Research and Development Funding and Performance by Nonprofit Organizations](#) (inactive)

Example: Survey of Earned Doctorates

Survey Descriptions

Survey of Earned Doctorates

Questionnaire(s)

Publications and Data:

- [SED Summary Report](#)
- [S&E Degrees](#)
- [S&E Doctorate Awards](#)
- [Women, Minorities, and Persons with Disabilities in S&E](#)
- [Science and Engineering Indicators](#)
- [WebCASPAR \(Integrated Science and Engineering Resources Data System\)](#)
- [Academic Institutional Profiles](#)
- [Science and Engineering State Profiles](#)

Schedule of Next Release Dates

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[NCSES Home](#) > [Survey Descriptions](#) > Survey of Earned Doctorates

Survey of Earned Doctorates

NCSES has launched the SED Tabulation Engine as part of its continuing effort to find alternative strategies for reporting data on field of degree by race/ethnicity/sex. [Learn more.](#)

[Overview](#) • [Survey Design](#) • [Survey Quality Measures](#) • [Trend Data](#) • [Availability of Data](#)

1. Overview (2010 survey cycle)

a. Purpose

The Survey of Earned Doctorates (SED) began in 1957–58 to collect data continuously on the number and characteristics of individuals receiving research doctoral degrees from all accredited U.S. institutions. The results of this annual survey are used to assess characteristics and trends in doctorate education and degrees. This information is vital for educational and labor force planners within the federal government and in academia. The SED is sponsored by the following six federal agencies: National Science Foundation (NSF), National Institutes of Health, U.S. Department of Education, U.S. Department of Agriculture, National Endowment for the Humanities, and National Aeronautics and Space Administration. The National Center for Science and Engineering Statistics (NCSES), formerly the Science Resources Statistics (SRS) Division of NSF, monitors the contract to conduct the SED. The National Opinion Research Center (Chicago, IL) has been conducting the survey for the federal sponsors since 1998. From 1957 to 1997, the SED was conducted by the National Research Council of the National Academy of Sciences under contract to [NCSES](#).

b. Respondents

All individuals receiving research doctorates from accredited U.S. institutions are asked to complete the SED. A research doctorate is a doctoral degree that (1) requires the completion of an original intellectual contribution in the form of a dissertation or an equivalent project of work (e.g., musical composition), and (2) is not primarily intended as a degree for the practice of a profession. The most common research doctorate degree is the Ph.D. Recipients of professional doctoral degrees such as MD, DDS, JD, DPharm, and PsyD are not included in the SED. Each U.S. graduate school is asked to provide the SED to their doctoral graduates and return completed forms to the NSF survey contractor. Respondents are grouped into academic years; the 2010 SED covers the period from 1 July 2009 to 30 June 2010.

Scientists and Engineers Statistical Data System (SESTAT)

SESTAT

Scientists and Engineers Statistical Data System

SESTAT is the Scientists and Engineers Statistical Data System. This integrated data system is a unique source of longitudinal information on the education and employment of the college-educated U.S. science and engineering workforce. These data are collected through three biennial surveys:

- [The National Survey of College Graduates \(NSCG\)](#)
- [The National Survey of Recent College Graduates \(NSRCG\)](#)
- [The Survey of Doctorate Recipients \(SDR\)](#)

The NSCG is the core of SESTAT providing data on the U.S. scientists and engineers (S&E) workforce with at least a bachelor's degree. The NSRCG supplements these data with the inflow of recent college graduates at the bachelor's and master's degree level. The SDR further supplements SESTAT with the stock and inflow of U.S.-degreed doctoral level scientists and engineers.

SESTAT data are available for download or through the SESTAT Data Tool, which allows users to generate their own data tables.

Announcement

[Learn about a possible redesign of the SESTAT Surveys](#) 

[Launch SESTAT Data Tool](#)

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[Request Restricted Data](#)

SESTAT – Online Data Tool

SESTAT Data Tool

Scientists and Engineers Statistical Data System

[SESTAT Home](#)
[Go To Previous Data Tool](#)
[Download Data](#)

Select Survey **xyz Choose Variable(s)** **Specify Population** (optional) **Select Data Type** (optional) **Generate Table**

Step 2: Choose Variable(s) **Guest User** **Advanced Features** **Variable Tools** **Help&Tutorials** **Login**

National Survey of College Graduates, NSCG 2003 **Sample Tables** **Flat Table**

Variable View **All Available Variables**

Variable List

A_JOB_NEVER_WORKED_IND	
A_JOB_NOT_WRKNG_REAS_FAMILY	
A_JOB_NOT_WRKNG_REAS_ILL_DISABLE	
A_JOB_NOT_WRKNG_REAS_JOB_NOT_AVAIL	
A_JOB_NOT_WRKNG_REAS_LAYOFF	
A_JOB_NOT_WRKNG_REAS_NO_NEED	
A_JOB_NOT_WRKNG_REAS_OTHR	
A_JOB_NOT_WRKNG_REAS_RETIRED	
A_JOB_NOT_WRKNG_REAS_RETIRED_YR	

Column

Row

Variable Desc: **Variable Selection Wizard**

Previous **Next**

WebCASPAR – Science & Engineering Resources Data System



WebCASPAR

Integrated Science and Engineering Resources Data System

The WebCASPAR database provides easy access to a large body of statistical data resources for science and engineering (S&E) at U.S. academic institutions. WebCASPAR emphasizes S&E, but its data resources also provide information on non-S&E fields and higher education in general.

Username

Login

[Home](#) | [Table Builder](#) | [Find a Variable](#) | [My WebCASPAR](#) | [Data Updates](#) | [Tutorials](#) | [FAQ](#)

Re

WebCASPAR Home [Page Help](#)

Table Builder: create a data table

To begin creating a table, check one or more boxes beside the desired data source name(s) below, then click *Select Data Source(s)*.

National Science Foundation (NSF) Data Sources

- NSF Survey of Earned Doctorates/Doctorate Records File [Info](#)
(Years Available:1966-2010)
- NSF Survey of Federal Funds for Research and Development [Info](#)
(Years Available:1951-2010)
- NSF Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions [Info](#)
(Years Available:1971-2008)
- NSF Survey of Research and Development Expenditures at Universities and Colleges/Higher Education Research and Development Survey [Info](#)
(Years Available:1972-2010)
- NSF Survey of Science and Engineering Research Facilities [Info](#)
(Years Available:2003-2009)
- NSF-NIH Survey of Graduate Students & Postdoctorates in Science and Engineering [Info](#)
(Years Available:1972-2010)

National Center for Education Statistics (NCES) Data Sources

- IPEDS Completions Survey [Info](#)
(Years Available:1966-2010)
- IPEDS Completions Survey by Race [Info](#)
(Years Available:1977-2010)
- IPEDS Enrollment Survey [Info](#)
(Years Available:1967-2009)
- IPEDS Institutional Characteristics Survey Tuition Data [Info](#)
(Years Available:1969-2009)
- IPEDS Salaries, Tenure, and Fringe Benefits Survey [Info](#)
(Years Available:1971-2010)

Select Data Source(s)

Accessibility

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- Open to public use
 - Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS)
- Obtain restricted-use version under license
 - Survey of Earned Doctorates (SED)
 - Survey of Doctorate Recipients (SDR)
 - National Survey of Recent College Graduates (NSRCG)
 - SESTAT Integrated Data File
- Request data-matching to restricted-use data sets

Schedule of NDI 2012

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- Time
 - application deadline - end of March
 - one-week summer workshop from July 8 - 14, 2012
- Location - Alexandria, old town (Washington, D.C.)
- Events
 - three days lecturing
 - a trip to NSF or NCES
 - one group project
- Cost
 - Fully covered by NDI!

Apply for NDI 2013

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- Application and Deadline
 - deadline around end of March
 - a proposal of a study using one or multiple listed NCES or NSF datasets
- where to find related information

The screenshot shows the AIR (Association for Institutional Research) website. The header includes the AIR logo and the text "ASSOCIATION FOR INSTITUTIONAL RESEARCH Data and Decisions for Higher Education". A search bar is located on the right. The navigation menu includes: HOME, EDUCATION & EVENTS, GRANTS & SCHOLARSHIPS, RESOURCES, CAREERS, eAIR, MEMBERSHIP, and ABOUT US. The breadcrumb trail reads: EDUCATION & EVENTS > Face-to-Face Education > National Data Institute. On the left, a sidebar menu lists: Online Education, Face-to-Face Education (with sub-links to Institute and National Data Institute), Publications, Annual Conference, IPEDS Training, and Calendar of Events. The main content area features the heading "NATIONAL DATA INSTITUTE" and the text "National Data Institute: Using Federal Data to Support Research on Science, Engineering, and Postsecondary Education". A prominent message states: "*** Application process closed for 2012 ***". At the bottom, a navigation bar includes: Overview, 2012 NDI, Application Process, Awards, and Funded Fellowships.

Thank You!

Questions and Comments?

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