NCES Surveys That Describe K–12 Education from the Perspective of Educators and Administrators

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This paper is part of a series on the role of the National Center for Education Statistics (NCES) in the creation, curation, dissemination, and reporting of education-related data and statistics. Each paper in the series focuses on a set of related NCES studies or programs, or a larger theme, to describe NCES's contributions to measuring the condition and progress of education in the United States. Taken together, the studies and programs discussed contribute to the national education-related data infrastructure and produce a comprehensive source of high-quality data at the K-12 or postsecondary levels, or both. The papers are intended to be easy-to-digest syntheses of information available across a wide variety of sources. While they are not a complete, detailed description of NCES's work, they highlight the value of NCES's activities in order to inform discussions about the future of NCES and education statistics produced at the federal level. The American Statistical Association (ASA) is a leading voice in those discussions, supporting the development of these papers to complement its Vision and Strategy for Remaking the National Center for Education Statistics, as part of its project for Re-envisioning the National Center for Education Statistics. The other papers in this series describe NCES's foundational data and collaborative relationships that improve data quality and capacity.

Key Takeaways

- Data on K-12 school staff—their characteristics, working conditions, preparation, and views—are essential for understanding the learning environment for students and the work environment for a large segment of the public sector workforce.
- NCES conducted complementary studies, designed to answer different policy questions without redundancy, focused on collecting information from and about school staff that went beyond what was available in administrative records and could only be obtained by asking educators and administrators directly.
- Across several decades, these studies have provided information on policy-relevant topics—such as teacher shortages by instructional area, school crime and safety, and the effects of the COVID-19 pandemic on schools, school staff, and students—giving policymakers, researchers, journalists, and the general public a common factual foundation for discussion and action.
- Most of NCES's K-12 studies involving school staff were disrupted or terminated in early 2025, leaving significant gaps in the current picture of students' learning environments and the nation's educational workforce.

Overview

Information about and from school staff—e.g., their characteristics, training, and instructional practices—is critical for understanding the context in which student learning takes place and whether the education system is meeting students' needs and promoting their success.

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Numbering around 4.5 million across the public and private school sectors,[1] K-12 teachers and administrators also are an important segment within the labor force. In fact, public school staff compose the largest functional category for state and local government employees.[2] Thus, information about areas such as staff work conditions and job satisfaction is important for understanding the well-being of this segment of the labor force working in a challenging profession, the teacher pipeline, and the health of schools as organizations.

For almost 40 years, the National Center for Education Statistics (NCES) has collected nationally representative data from and about K-12 school staff through various studies in response to legal requirements[3] and policy needs. Basic information on K-12 school staff in the United States, such as the numbers of teachers and principals/head administrators, are foundational data collected in the Common Core of Data (CCD) and Private School Universe Survey (PSS). This basic information is enhanced by data on educators and administrators collected in other NCES studies that provide a more detailed picture of K-12 schools, teachers, and principals than can be obtained anywhere else.

These other NCES studies, which are summarized in Table 1 below and are the focus of this paper,[4] are the only sources of high-quality data that enable comparisons across national subgroups (e.g., public versus private schools and their staff, city versus rural schools and their staff), across states, and internationally. They collect complementary information without being redundant, as each study has a specific focus and answers different questions (e.g., how teachers in different states compare to one another versus how teachers in the United States compare to teachers in other countries).

The studies provide information that is best collected, or can only be collected, from teachers and administrators themselves. In addition, several studies focusing on students included a teacher or principal survey, or both, to collect important contextual information that leads to better understanding of the factors associated with student experiences, learning, progress, and success. These types of data are critical for developing effective policies aimed at creating positive learning and working environments. Taken together, the policy-relevant data collected from and about educators and administrators in NCES studies allow for the examination of status and change in the populations of K-12 schools, teachers, and principals across five different decades.

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[1] This is an overall estimate based on population data published in Education Administrators, Kindergarten through Secondary and Characteristics of Traditional Public, Public Charter, and Private School Teachers.

[2] Annual Survey of Public Employment & Payroll Summary Report

[3] In Section 153 of the Education Sciences Reform Act (ESRA) of 2002 (20 U.S.C. § 9543), Congress requires that NCES collect and disseminate information on teaching, including teacher preparation and certification (20 U.S.C. § 9543(a)(1)(F)), as well as "instruction, the conditions of the education workplace, and the supply of, and demand for, teachers" (20 U.S.C. § 9543(a)(1)(G)). In addition, there are some topics specified in ESRA, such as school safety (20 U.S.C. § 9543(a)(1)(H)), for which the best reporters of information related to those topics are school staff.

[4] For more information on CCD and PSS, see NCES Data Collections That Are Foundational to the Nation's Education Data Infrastructure.

This paper describes several NCES sources of data collected from and about school staff that provide important information about the condition of education as it relates to both the learning environment and the teaching/educational work environment. Before doing so, it highlights the reasons why NCES is ideally situated to collect and disseminate such information.

NCES's Role in Producing Education Statistics and Facilitating Research on Schools and School Staff

- *Long-term commitment and investment*. The federal government has produced education statistics with a mission to report on the "condition and progress of education" for more than 150 years.[5] Congress reaffirms the importance of this mission each year by funding NCES's work through the appropriations process. The federal government has the resources and stability necessary for long-term investment in the collection and dissemination of high-quality data across time. As a result, data infrastructure and standards can be maintained and enhanced long term, and changes in important education indicators can be evaluated across time. Traditionally, state education agencies (SEAs), local education agencies (LEAs), and education institutions at both the K-12 and postsecondary levels have had confidence that the federal government would be a source of assistance as they made significant investments in their own data systems and adopted data standards.
- *High-quality, detailed data unavailable from other sources*.
  - These studies collected data not available in administrative records, including information such as attitudes, perceptions, and activities outside the school setting that can only be obtained by collecting the information directly from school staff.
  - While there are other entities that report national-level statistics about teachers and principals, only NCES studies have samples large enough to allow for more detailed analyses of subgroups, including comparisons across groups.
- *Investigation of a wide range of policy-relevant topics*. Although the studies were designed to address specific policy issues, they collected a broad enough array of information that the data can inform policy issues that were not those of specific concern at the time the studies were designed.
- *Complementary information providing a comprehensive picture of the learning and working environments over time*. Having one organization administer these different studies allows for the collection of complementary—not redundant—information from different populations, at different times, and/or for a different purpose, providing a more comprehensive picture of the learning and working environments across a longer period of time. For example, the School Pulse Panel and the School Survey on Crime and Safety,

[5] The first Department of Education was created in 1867 by Congress, which charged the Commissioner of Education to submit a report to Congress on the condition and progress of education in the various states and territories (Federal Education Data Collection: Celebrating 150 Years). Over time, the organization producing education statistics has carried a variety of names, but its mission to submit to Congress information on the condition of education has remained unchanged. Today this organization is the National Center for Education Statistics.

discussed later in this paper, collected information on school cell phone policies to meet a need for such information at different times. As another example, several of the student-focused studies also include surveys of teachers and parents. Asking similar questions of both of these groups, for example on children's social skills, provides a better understanding of children's experiences in different contexts that affect learning.

- *Consistency resulting in higher-quality data*. Having one organization collect these data ensures consistency in the data provided by a diverse array of institutions and education organizations. Consistency (i.e., having data reported based on the same definition, using the same response values or categories, in every instance in which the data are collected) is critical for producing high-quality data that enable valid comparisons across student groups, schools, districts, states, and countries. For example, across the United States there is a wide variety of PK-12 school configurations in terms of grades served and whether the schools are identified as elementary, middle, secondary, or high schools by their districts. NCES applies a common definition of these educational levels to all PK-12 schools, thereby assuring that any analyses of school level, across both public and private schools, are based on consistent school groupings.
- *Efficient provision of a public good*. Having one organization collect these data and provide them as a public service to others is efficient and customer oriented. With one source collecting and disseminating information that is useful for a variety of stakeholders, the following are achieved:
    - Duplication of effort is minimized and data can be updated on a regular basis.
    - Stakeholders have one source they can consult for their data needs. If NCES does not have the data for which a stakeholder is looking, expert NCES staff can point the stakeholder to another data source or can inform the stakeholder that such data do not exist.
    - State and local governments, including education agencies, as well as educational institutions interested in understanding how they compare to their peers, do not have to compile data across different sources to generate comparisons.
    - Data are available to anyone, regardless of resources, rather than being a commodity available only to those who can pay for them.

Sources of Data About and/or From School Staff[6] and Exemplar Findings and Uses Highlighting Their Value

This section describes the NCES studies that collected data from and/or about school staff that provide important information about the condition of education as it relates to both the K-12 learning environment and the teaching/educational work environment. NCES's largest and longest-running studies focused specifically on teachers and administrators are listed first, with other studies listed after that in alphabetical order. For each data source, exemplar findings published by NCES and external uses highlighting its value are provided below Table 1 in the descriptions of the studies. The examples were chosen to show some of the key statistics produced from each source, as well as some of the variation and complementary information across sources. Each source contains data on many other topics. Links to resources for more detailed information can be found below in the section "For More information."

Table 1: Overview of NCES studies with data collected from and/or about school staff

Data source	Population(s) of interest	Data providers	Data provided	Method of data collection	Periodicity
Schools and Staffing Survey (SASS)/National Teacher and Principal Survey (NTPS), Teacher Follow-up Survey (TFS), Principal Follow-up Survey (PFS)	K-12 public and private schools, teachers, and principals	School staff who were statistically sampled to participate in the study	Characteristics of elementary and secondary schools; characteristics of elementary and secondary teachers; teacher workplace conditions; characteristics of elementary and secondary school principals; school programs and policies; teacher shortage and demand	Selected staff from sampled schools completed surveys sent directly to them, either online or by mail (hard copy)	Every two to four years between 1987–88 and 2024–25
School Pulse Panel (SPP)	All K-12 public schools	Staff at schools that were statistically sampled to participate in the study	Quick turnaround information on school policies, programs, staff, and students; other high-priority, policy-relevant school-level issues such as student absenteeism, after-school and summer programs, college and career readiness, and family engagement	Staff from individual sampled public schools completed online surveys	Generally monthly during the school year, between September 2021 and June 2025

[6] Descriptions are largely taken directly from NCES sources, sometimes verbatim, particularly source descriptions from the *Digest of Education Statistics* and the *Condition of Education*.

Table 1: Overview of NCES studies with data collected from and/or about school staff—Continued

Data source	Population(s) of interest	Data providers	Data provided	Method of data collection	Periodicity
School Survey on Crime and Safety (SSOCS)	All K-12 public schools	Principals at schools that were statistically sampled to participate in the study	Incidence, frequency, seriousness, and nature of violence affecting students and school personnel, other indicators of school safety, related school policies and practices, information on school security personnel	Principals from individual sampled public schools completed surveys, either online or in hard copy	School year 1999–2000, every other school year from 2004 to 2010 and from 2016 to 2020, and school year 2021–22
Teaching and Learning International Survey (TALIS)	Teachers and principals in lower secondary public and private schools (grades 7, 8, and/or 9)	Teachers and principals at schools that were statistically sampled to participate in the study	Background, work environment, professional development, and beliefs and attitudes about teaching	Selected teachers and principals from individual sampled schools completed surveys	2013, 2018, and 2024
Various school-based data collections focused on students (e.g., the National Assessment of Educational Progress, the High School Longitudinal Study of 2009)	Students in various grades focused on by the data collection	Teachers who taught the students statistically sampled to participate in the study and principals of the schools that study students attended	Study focal students' educational activities and coursetaking, academic performance, classroom behaviors Teachers' background, training, experience, and instructional practices, both generally and related to study focal students Principal background, training, and experience, as well as school policies, programs, and student body characteristics	Teachers and principals of students selected for a study completed surveys	Various, depending on the study

National Teacher and Principal Survey (NTPS), Teacher Follow-up Survey (TFS), and Principal Follow-up Survey (PFS)

This group of studies provided descriptive data on the context of public and private elementary and secondary education collected directly from school staff. The studies were designed to address five policy areas: teacher shortage and demand; characteristics of elementary and secondary teachers; teacher workplace conditions; characteristics of elementary and secondary school principals; and school programs and policies.[7] NCES first collected these comprehensive data about the national populations of K-12 schools, teachers, and school principals in the 1987–88 school year through the Schools and Staffing Survey (SASS). SASS was redesigned in the early 2010s and replaced with the National Teacher and Principal Survey (NTPS). Together these studies have allowed for an examination of status and change in the populations of K-12 schools, teachers, and principals since the 1980s.

First in SASS and then in NTPS, nationally and state-representative samples of teachers and principals were surveyed about themselves and their schools to obtain information that went beyond what was available in administrative records or collected in the CCD or PSS.[8] More recently, in the 2015–16, 2017–18, and 2020–21 NTPS,[9] survey questions covered a wide range of topics, including teacher and principal demographics, training and preparation, professional development, compensation, and perceptions of school climate and problems in their schools. Both SASS and NTPS had follow-up surveys—the Teacher Follow-up Survey (TFS) and the Principal Follow-up Survey (PFS)—that provided one-year attrition rates for teachers and principals, respectively. The follow-up collections for NTPS also obtained information on why those who changed schools or left the profession did so, as well as what they were doing that following year (e.g., retired, still employed in the education sector but in a different capacity, employed outside the education sector).

As noted above, this set of studies provides a more detailed picture of K-12 schools, teachers, and principals than can be obtained from administrative records, the CCD, or the PSS. While some information about school structure and staffing fit topically within the CCD and PSS, including questions on these characteristics in those surveys would increase reporting for all K-12 schools in the United States; asking for this information from a representative sample of schools in SASS and NTPS reduces overall reporting burden for the full population of schools. The same is true for teachers and principals. Further, it would be logistically infeasible to survey all teachers and principals in the United States. These studies are the *only* source of policy-relevant data for all K-12 schools, teachers, and principals: (1) on a national level; (2) with large enough sample sizes to enable valid comparisons of different types of schools, teachers, and principals—for example, public versus private; and (3) that are validly comparable across states.

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[7] NCES Handbook of Survey Methods - School and Staffing Survey (SASS)

[8] All data collections, with the exception of the 2015–16 NTPS, included both public and private schools and their staff. The 2015–16 NTPS focused on the public sector.

[9] The most recent data collection for the NTPS occurred in the 2023–24 school year, and follow-up teacher and principal surveys were planned for the 2024–25 school year. These collections and release of data were affected by the Department of Education's reduction in force in March 2025.

Additionally, there are some types of data that are not available in administrative records and are best collected, or can only be collected, from teachers themselves, such as opinions about support from their administration, perspectives about school climate, and activities outside of school hours, including time spent preparing lessons outside of the contracted/regular workday. NTPS is the only data source that provides such information at a national level that can be examined by teacher and school characteristics.

Exemplar NCES findings and external use

- *Teacher certification, licensure, and in-field teaching*. Full certification in the subject area in which a teacher is instructing students is generally accepted as an indicator of teacher quality, though not the only one. All states have requirements related to teacher certification, with some states allowing alternatives to traditional full state certification in order to address teacher shortages. NTPS is the only data source that provides both national and comparable state-level statistics over time on the types of certifications and licensures held by teachers, broken down by both teacher and school characteristics, and makes connections between that certification/licensure and the subjects they teach (i.e., in-field teaching). For example, NCES analysis of the most recent NTPS data available shows the percentage of public school teachers nationally without full teaching certification was higher in 2020–21 (about 7 percent) than in either 2017–18 or 2015–16 (about 6 percent each school year).[10] In 2020–21, there was wide variation across states and DC in the percentage of public school teachers without full teaching certification in the state where they were teaching, with the percentage ranging from 2 percent in Iowa to 28 percent in the District of Columbia.[11]

- *Teachers' personal expenditures for classroom supplies*. One topic of popular and policy concern in recent years has been the amount teachers spend of their own money to purchase classroom supplies without reimbursement because this can indicate lack of sufficient school funding and a reduction in real income for those in the profession. This is the type of data that cannot be collected through administrative records. Information of this nature must be collected from teachers directly to obtain accurate data and fully define the context for interpreting the data. NCES analysis of NTPS data[12] shows that in 2020–21 about 94 percent of all K-12 teachers (in both public and private schools) spent their own money on classroom supplies without reimbursement; among those teachers, the average amount spent that school year was $459. Further, there is variation by some school characteristics. For example, while the percentages of public school teachers who spent their own money were not significantly different (about 95 percent each) between those teaching in schools where less than 35 percent of students were approved for free or reduced-priced lunch and those teaching in schools where 75 percent or more of students were approved, public school teachers in lower-income schools spent significantly more of their own money, $518 on average, than did public school teachers in higher-income schools, $425 on average.[13]

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[10] Data Point: Changes in Public School Teachers' Certification Type

[11] Ibid.

[12] Average amount of their own money that public and private school teachers spent on classroom supplies without reimbursement; percentage who spent any of their own money on classroom supplies without reimbursement during the 2019–20 school year; and among those teachers, average amount spent and percentage distribution by amount spent, by school type; and by selected school and teacher characteristics: 2020–21

[13] Independent analysis of data at https://nces.ed.gov/surveys/ntps/estable/table/ntps/ntps2021_6801_t12ns.

Example: External use of SASS/NTPS data on teacher salaries

A recent analysis by researchers at the Annenberg Institute used SASS and NTPS data spanning 30 years to examine the differences in salaries among teachers.[14] They found "enduring disparities in teacher compensation by school demographics, subject area, and geography": for example, with teachers in high-poverty schools and those in rural schools being paid less after controlling for teacher and school characteristics.

➢ *Teacher shortages*. Concerns about teacher shortages have existed for decades, as evidenced by the fact that teacher shortage and demand was a policy topic guiding the development of the first SASS collection in 1987–88. SASS and NTPS are the only sources of national-level statistics on teacher vacancies and attrition, in a given school year and over time, which can lead to and/or exacerbate shortages. These data show, for example, that teacher shortages are more severe in some subject areas than in others. Among public K–12 schools that had teaching vacancies in a specific field in the 2020–21 school year, 11 and 18 percent found it very difficult or were not able to fill their vacancies for social studies or English/language arts, respectively, while 40 and 42 percent found it very difficult or were not able to fill their vacancies for special education or foreign language, respectively.[15] With respect to teacher attrition, among teachers who were teaching during the 2020–21 school year, 8 percent of those teaching in public schools and 12 percent of those teaching in private schools had left the teaching profession by the following school year.[16] Although teacher shortages during the pandemic were particularly concerning, one-year attrition data from different administrations of the Teacher Follow-up Survey suggest that, nationally, the pandemic did not initially lead to an increase in teachers leaving the profession.[17]

[14] Estimating Compensating Wage Differentials for Public School Teachers in High-Poverty and High-Minority Schools: Evidence from U.S. National Data, 1988–2018

[15] Characteristics of 2020–21 Public and Private K–12 Schools in the United States: Results from the National Teacher and Principal Survey

[16] Teacher Attrition and Mobility. Results From the 2021–22 Teacher Follow-up Survey to the National Teacher and Principal Survey.

[17] Data from the 2012–13 Teacher Follow-up Survey, which are only available for public school teachers, show that 8 percent of teachers had left the profession the following year, which was not statistically different from 2021–22. An analysis by The Economic Policy Institute using JOLTS data from the Bureau of Labor Statistics (BLS) showed increases in vacancy and monthly quit rates for the state and local public education sector during the pandemic. However, while the pandemic exacerbated the increases, they began before the onset of the pandemic. Also, it should be noted that BLS data cover all education sector employees, not just teachers, at all levels of education.

Examples: External uses of NTPS data on teacher retention and attrition

The Learning Policy Institute (LPI) has drawn on NTPS data for their series of policy briefs on teacher shortages as far back as 2016. In more recent years, LPI's briefs included more administrative data published on State websites. However, LPI relies on NTPS for information that can only be obtained from teachers themselves, such as why teachers have left the profession, because NTPS is the only national source of information that goes beyond documenting attrition status to documenting reasons for leaving, as well as educators' employment the year after leaving. For example, among teachers in 2020–21 who were voluntarily no longer teaching the following school year, 16 percent indicated that their most important reason for leaving was because they decided to retire or receive retirement benefits from the previous year's school system, 13 percent indicated that their most important reason was because they decided to pursue a position other than that of a K-12 teacher, and 9 percent indicated that their most important reason for leaving was because they wanted or needed a higher salary.[18] Administrative data can tell only how many teachers left and when. To understand "why," surveys such as NTPS are necessary.

Data explaining the reasons for teacher turnover (changing schools or leaving the teacher profession) are key for developing effective policies aimed at addressing teacher retention. One analysis showed novice teachers' intentions to stay in the teaching field increased as the time they spent with a mentor during their first year of teaching increased.[19] A recent more in-depth analysis of NTPS and TFS data[20] found differences in the rates of turnover for teachers with different background characteristics (rates were higher for teachers with three or fewer years of experience, teachers who were not fully certified, teachers of color, and teachers who were teaching at schools where over 75 percent of students were from a low-income background). The analysis also showed, once teacher and school characteristics were accounted for, turnover was lower among teachers with higher salaries, with higher satisfaction and morale, and who perceived they had more effective and supportive leadership, which lead the researchers to conclude that "policy levers around (1) improving teacher compensation, (2) improving teacher satisfaction and morale, and (3) supporting leadership in the schools, are direct ways of reducing teacher turnover."

➢ *Detailed policy-relevant characteristics of schools, teachers, and principals beyond what is available in administrative data*. In the 2020-21 school year:[21]

- Including *full-time and part-time staff*, public K-12 schools employed an estimated 144,500 school counselors, 65,900 psychologists, and 55,300 social workers. They also employed 103,900 speech therapists and 88,100 nurses, as well as 70,900 technology specialists and 70,500 librarians/library media specialists.
- Nationwide, about 29 percent of public K-12 schools and 17 percent of private K-12 schools reported that they normally offered any *courses entirely online* prior to the coronavirus pandemic.
- Overall, 49 percent of public K-12 schools and 35 percent of private K-12 schools offered instruction beyond the normal school day for *students who needed academic assistance*. A

[18] In their Overview of Teacher Shortages 2025, LPI includes a link to an NCES report on teacher attrition and mobility with these findings related to teacher attrition.

[19] Mentorship Program Components that Influence Beginning Teacher Retention

[20] See Teacher Turnover in the US: Who Leaves, Why, and the Importance of Working Conditions to Build the Teaching Profession and Teacher Turnover in the United States: Who Moves, Who Leaves, and Why | Learning Policy Institute.

[21] Except where noted, all findings come from Characteristics of 2020–21 Public and Private K–12 Schools in the United States: Results From the National Teacher and Principal Survey. There are companion reports focusing on teachers (Characteristics of 2020–21 Public and Private K–12 School Teachers in the United States: Results From the National Teacher and Principal Survey) and principals (Characteristics of 2020–21 Public and Private K–12 School Principals in the United States: Results from the National Teacher and Principal Survey).

higher percentage of public charter schools (56 percent) than traditional public schools (48 percent) did so.

- Among public K-12 schools, the *average start time* was 8:13 a.m., with elementary schools having a later average start time by a few minutes (8:16 a.m.) than middle (8:11 a.m.), combined/other (8:08 a.m.), and secondary/high (8:07 a.m.) schools.
- In general, public school teachers in rural areas tended to have lower *educational attainment* than teachers in cities and suburbs, and the percentage of public school principals who held a doctorate or first professional degree as their highest degree was lower in rural areas (8 percent) than in suburban areas (13 percent) and cities (14 percent) but higher than in towns (6 percent).[22]

Examples: External uses of SASS/NTPS school-level data on arts educators and school librarians

A recent analysis used SASS and NTPS data spanning 30 years to look at arts education in U.S. public schools.[23] The researcher found variation among schools in the percentage of full-time teachers whose main assignment was arts education: for example, schools with higher percentages of students of color and low-income students consistently had lower percentages of full-time arts teachers over this time period.

An analysis of multiple years of NTPS data on school librarians showed about 30 percent of schools reported having no full- or part-time librarians in 2020–21—the first full school year after the onset of the COVID-19 pandemic—an increase from 25 percent in 2015–16.[24] Further, there was variation by school characteristics. For example, 70 percent of charter schools had no librarian, compared to 25 percent of traditional public schools. The five states with the highest percentages of schools without librarians were Alaska (55 percent), Minnesota (51 percent), and Hawaii, West Virginia, and Michigan (about 50 percent each).

School Pulse Panel (SPP)

The School Pulse Panel (SPP) was a monthly survey of public K-12 schools that collected information on high-priority and emerging education-related topics. While development work for the survey was already well underway before the onset of the COVID-19 pandemic, it was launched on an accelerated timeline to meet the need for critical information about the impact of the pandemic on public schools, school staff, and students that could not be collected in NCES's established data collections, many of which needed to be paused. Focal topics in the initial surveys included instructional modes being used in schools (e.g., in-person versus remote learning); learning recovery and learning loss mitigation strategies such as high-dosage tutoring; and safe and healthy school mitigation strategies (e.g., use of COVID testing, masking, social distancing, and quarantining). Other topics included in various monthly surveys between the 2021–22 and 2024–25 school years included information on student absenteeism, after-school and summer programs, arts and civics education, college and career readiness, family engagement, staffing, technology, and transportation.[25]

[22] NTPS data were used in NCES's *Education Across America* indicators, which looked at differences by locale (city, suburb, town, rural area) in various policy-relevant topics, such as teacher and principal characteristics.

[23] Trends in Arts Education in United States Public Schools from 1988 to 2018

[24] Schools without Librarians: First School-level Data on the Post-COVID Era

[25] For a full list of topics covered, see School Pulse Panel - Interactive Results.

A school staff member was asked to complete a short online survey each month[26] during the school year. Some questions, such as those about instructional modes being used in schools, were initially asked every month to track monthly changes in key areas of concern. Other topics, such as student absenteeism, were asked about once or twice a year to track changes between the beginning and end of a school year or from year-to-year. Some topics, such as civics education, cell phone policies, and use of artificial intelligence (AI) for teaching and learning, were included only once in response to a specific interest in, or need for, current information on that topic.

To address concerns that NCES did not have a way to obtain data quickly on emergent issues, SPP was designed as a fast-response survey producing almost-real-time information of current relevance for policymakers, public school leaders, and the general public. Though its initial data collections focused on pandemic-related information, over time it became an important source of timely information on various other policy-relevant topics of heightened interest. NCES aimed to release SPP data in a very short timeframe for a national, sample-based statistical survey—within six to eight weeks after the end of data collection. Given the rapid release schedule, the data did not go through the standard data quality assurance reviews that were typically conducted before NCES released new data for official statistics. For this reason, SPP data were labeled experimental, though there was a high level of confidence that the data were accurate and reliable.

Exemplar NCES findings and external use

➢ SPP filled a critical need for almost-real-time information about what was happening in schools during the COVID-19 pandemic, the effects of which are still being experienced by students and staff today. SPP was the only national study providing policy-relevant data on public schools' use of specific mitigation strategies and strategies to address learning loss, as well as information from the perspective of school leaders about the effects of the pandemic on students and staff that were not being, or could not be, measured directly. For example:

- *Students in quarantine*.[27] In the fall semester of the 2022–23 school year, more than a year after the onset of the pandemic, the percentage of public schools nationwide reporting any students in quarantine due to COVID-19 was higher in December (36 percent) than in November and October (31 and 30 percent, respectively) but lower than in September (47 percent).
- *Schools' use of tutoring*.[28] In May 2024, 87 percent of public schools reported having provided some type of tutoring to students at any time during the school year, which was an increase from the 82 percent of public schools that had reported providing tutoring earlier in the school year (in October 2023). Forty-six percent were providing high-dosage tutoring in May, up from 39 percent in October.

[26] There was no survey administered in several months of the first two school years of SPP data collection (2021–22 and 2022–23). See School Pulse Panel - Methodology for more information about the months of data collection each school year.

[27] School Pulse Panel - Interactive Results. Quarantine.

[28] About One-Quarter of Public Schools Reported That Lack of Focus or Inattention From Students Had a Severe Negative Impact on Learning in 2023-24

- *Mental health services from school*.[29] In April 2022, 69 percent of public school leaders reported there had been an increase in students seeking mental health services from the school since the start of the COVID-19 pandemic, and 29 percent reported that there had been an increase in staff seeking such services.
- *Students behind grade level*.[30] Public school leaders estimated that 32 percent of their students ended the 2023–24 school year behind grade level in at least one academic subject. This percentage varied by some school characteristics, such as region, locale, school level, number of enrolled students, and percentage of students of color.

Examples: External uses of SPP data collected during the COVID-19 pandemic

In February 2023, *The Hechinger Report* published an article on federal efforts to encourage and fund tutoring as a way to address pandemic learning loss.[31] The article cited December 2022 SPP data on high-dosage tutoring, noting that while the SPP is "far from an ideal survey … it's the best snapshot of the recovery that we have so far."

The American Psychiatric Association (APA) used SPP data about professional development provided to teachers to support student well-being as context for findings from their own 2024 poll on American's beliefs related to school staff's role in identifying students' mental health issues, staff training, and mental health education.[32] The APA poll indicated "that 84% of Americans believe school staff play a crucial role in identifying signs of mental health issues in students, but less than half (45%) of Americans believe most school staff have been trained in identifying these concerns." The article noted that, according to the March 2024 SPP, 63 percent of public schools reported offering professional development to teachers to support student well-being.

KFF (formerly the Kaiser Family Foundation) analyzed data from the SPP collected across three school years to describe "The Landscape of School-Based Mental Health Services," reporting, for example, that in the 2024-25 school year, approximately half of public schools said they could effectively provide mental health services to all students in need, while about one-third of schools said they strongly (11%) or moderately disagreed (25%) that they could effectively provide mental health services.[33]

U.S. News & World Report reported that December 2022 SPP data about students behind grade level "bolsters concerns over the severity of academic declines and the ongoing challenges to rebounding in the wake of the coronavirus pandemic."[34]

Axios featured June 2024 SPP data about students behind grade level in a story on the long-term effects of the pandemic, highlighting that looking at data by selected school characteristics "reveals troubling trends — for example, 42% of kids in schools with more than 75% students of color are behind grade level, compared to just 22% at schools with 25% or less students of color."[35]

[29] School Pulse Panel - Interactive Results. Mental Health and Well-being.

[30] About a Third of Public School Students Ended the 2023–24 School Year Behind Grade Level in at Least One Academic Subject, Principals Say

[31] PROOF POINTS: New Federal Survey Estimates One Out of 10 Public School Students Gets High-Dosage Tutoring

[32] Poll Shows Support for School Mental Health Training, but 45% Don't Believe Most School Staff Have Received It

[33] The Landscape of School-Based Mental Health Services

[34] New Data Shows That Just as Many Students Are Behind Grade Level as Last Year

[35] A Third of U.S. K-12 Students Are Behind Grade Level

➢ SPP provided interim data on topics of heightened policy concern, both pandemic related and non-pandemic related, that were covered in NCES's other, non-experimental collections less frequently. For example:

- Data on school policies related to cell phone use have been collected every two to four years since the 2009–10 school year in the School Survey on Crime and Safety (SSOCS). In recent years, schools have moved to put greater restrictions on cell phone usage during the school day due to the perception that it distracts from learning. To meet the need for more detailed and more current national data on this topic, the December 2024 SPP included questions related to school cell phone (and smart watch) policies.[36] The data showed[37] 77 percent of public schools prohibited students from using cell phones during any class, with a higher percentage of elementary schools (86 percent) implementing such a policy compared to high/secondary schools (55 percent). In addition, 53 percent of public school leaders felt that their students' academic performance had been negatively impacted by cell phone usage, 72 percent thought their students' mental health had been negatively impacted, and 73 percent thought cell phones had a negative impact on their students' attention spans.

Example: External use of SPP data on school cell phone policies

The *Times Union* newspaper cited SPP data in a story on New York State's ban on cell phone use during the school day. [38]

- Civics knowledge and skills and civics education have been addressed periodically in NCES studies. For example, in the late 1990s, NCES's National Household Education Surveys Program fielded two surveys asking youth about their civic involvement. The National Assessment of Educational Progress (NAEP) has measured eighth-graders' civics knowledge and skills six times since 1998; student and teacher surveys fielded at the same time as the civics assessment included questions on civics education. The September 2024 SPP included a set of questions asking about ways in which schools may have been incorporating information about the November 2024 national election into their programming.[39] Seventy-seven percent of public schools reported that at least one teacher had incorporated the upcoming national election cycle into their lessons that school year.[40]
- As noted above, though teacher shortages have been a topic of policy concern for decades, this issue became critical during the pandemic. SPP collected teacher shortage information between NTPS collections, which occurred every two to three years. SPP data showed 45 percent of public schools were operating without a full teaching staff in October of 2022.[41] At the beginning of the following school year, the majority of public schools reported that they were facing challenges hiring teachers and other school staff. [42]

[36] SPP-December-2024-Survey.pdf

[37] More than Half of Public School Leaders Say Cell Phones Hurt Academic Performance

[38] Educators hope cellphone ban will improve academic performance

[39] SPP-September-2024-Survey.pdf

[40] School Pulse Panel - Interactive Results. Civics Education

[41] Forty-Five Percent of Public Schools Operating Without a Full Teaching Staff in October

[42] Most U.S. Public Elementary and Secondary Schools Faced Hiring Challenges for the Start of the 2024–25 Academic Year

Examples: External uses of SPP data on staffing shortages

Citing SPP data, a December 2023 blog from the Economic Policy Institute observed "that understaffing stress in schools has relented somewhat in the past year, though progress remains modest and uneven." [43]

Education Week used SPP data from the 2022–23 and 2023–24 school years to describe the school staffing landscape across these two school years.[44]

➢ SPP provided data on topics of policy concern that had not been covered in other NCES collections, such as instruction on digital literacy and use of AI. For example:

- In December 2024,[45] 42 percent of public school leaders reported having a favorable view of their students using AI for their education, while 31 percent reported an unfavorable view. By that same month, 67 percent of schools had provided training on the use of AI to all or some teachers, staff, and/or administrators that school year, and 26 percent had provided training to all teachers. Forty-seven percent of schools reported that they teach students about AI.

Example: External use of SPP data on Artificial Intelligence (AI) in schools

Child Trends published a series of blogs highlighting these data on AI in schools, indicating that "public school leaders are more supportive of teachers using artificial intelligence (AI) than students,"[46] "just 31 percent of public schools have a written policy governing students' use of AI in school,"[47] and "most public schools are not teaching students about the ethical or appropriate use of artificial intelligence."[48]

School Survey on Crime and Safety (SSOCS)

The School Survey on Crime and Safety (SSOCS) was the only recurring federal survey that collected detailed information on the incidence, frequency, seriousness, and nature of violence affecting students and school personnel, as well as other indicators of school safety from the perspective of school staff in public K-12 schools. It was developed after several mass school shootings in the late 1990s, including the one at Columbine High School in 1999, to fill an existing gap in national-level data that were needed to better understand and inform policies aimed at improving school safety and reducing school crime and violence.[49] SSOCS data were used by multiple offices within the Department of Education as well as the Department of Justice.

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[43] The teacher shortage shows small signs of improvement, but it remains widespread | Economic Policy Institute

[44] The New School Staffing Landscape, in Charts

[45] More than Half of Public School Leaders Say Cell Phones Hurt Academic Performance

[46] School Leaders More Likely to Support AI Use by Teachers Than Students | Child Trends

[47] Most Public Schools Lack AI Policies for Students | Child Trends

[48] Most Schools Don't Teach AI Ethics to All Students | Child Trends

[49] From Support Statement Part A of the 2016 and 2018 SSOCS OMB Information Clearance Request: "Around the time when the [NCES Fast Response Survey System] data were being released in 1997–98, a number of tragic shootings occurred at schools across the county. These events took place in Pearl, MS; West Paducah, KY; Jonesboro, AR; and Columbine, CO. When it came to light that neither the Departments of Justice nor Education had a recurring survey by which to measure the frequency of crime and violence at schools, the Department of Education made a commitment to begin such a survey on a regular basis. Thus, planning for SSOCS began."

In each administration of SSOCS, a nationally representative sample of school principals was asked to complete a survey covering various aspects of school crime and safety in addition to violent incidents in schools, including the presence of security staff (e.g., school resource officers), related school policies and programs, staff training and practices, limitations on crime prevention, and disciplinary problems and actions. In the collection covering the 2021–22 school year, school staff were asked about their schools' responses to the COVID-19 pandemic. Repeated administrations of SSOCS from the 1999-2000 school year to the 2021–22 school year have allowed for an examination of status and change in indicators of school crime and safety over two decades. Such information is critical for evaluating whether policies aimed at reducing school crime and making schools safer have been effective.

While various administrative data sources, such as the FBI's Uniform Crime Reporting program, provide objective statistics on crime in the United States, those administrative datasets are not focused on the school environment and leave considerable gaps in information about crime and safety in schools. It is generally acknowledged that these sources provide undercounts of crime because they include only crimes reported to law enforcement, and most crimes are not reported to law enforcement.[50] They may not include less severe but more common types of crimes, such as use of drugs by students. Also, they do not include aspects of school safety that are not crimes or are not subject to reporting beyond the school principal or school district, such as bullying, destruction of school property, and presence of gang activity. Lastly, these data sources do not include information on schools' efforts to maintain student safety, such as installing metal detectors or employing safety officers and other types of security staff. Yet these characteristics and practices are important to understand because they can have significant effects on the learning environment for students and the work environment for school staff. The most efficient and least burdensome way to obtain comprehensive, high-quality information on school crime and safety, including steps being taken to promote a safe school environment, is to ask a representative group of school staff using well-tested, systematic surveys, which SSOCS did. Data collected in SSOCS featured heavily in an annual report NCES produced in collaboration with the Bureau of Justice Statistics until 2024: Indicators of School Crime and Safety. This report was considered the definitive source of national indicators on school crime and safety.[51]

[50] When Crime Statistics Diverge - Council on Criminal Justice

[51] The most recent *Report on Indicators of School Crime in Safety* (ISCS) released by NCES focuses on data through 2023 (see Report on Indicators of School Crime and Safety: 2023). The report with data through 2024 was in development at the time NCES staff was subject to a reduction in force in March 2025. Plans for future versions of ISCS are unknown.

Exemplar NCES findings[52] and external use

➢ *Violent and nonviolent incidents.* During the 2021–22 school year, U.S. public schools recorded about 857,500 violent incidents[53] and 479,500 nonviolent incidents.[54]

Example: External use of SSOCS data on violence in schools
The National Institute of Justice reviewed data from multiple sources, including SSOCS, to show that, while the overall level of crime and violence in schools has generally been declining, and homicides at school are relatively rare, an increase in multiple-victim homicides in schools since 2009 has led to the perception that schools are unsafe.[55]

➢ *Drug and alcohol incidents.* In the 2021–22 school year, about 71 percent of high/secondary schools reported at least one incident of distribution, possession, or use of illegal drugs, a higher percentage than reported incidents of distribution, possession, or use of alcohol (34 percent) or prescription drugs (18 percent).

➢ *Hate crimes*.[56] In the 2021–22 school year, 3 percent of all public schools (approximately 3,000 schools) reported that at least one hate crime occurred at school during the school year. The percentage was higher for schools with over 1,000 students (8 percent) than for schools with fewer students (ranging from 2 to 4 percent).

➢ *Threat assessment.* In the 2021–22 school year, 65 percent of all public schools reported having a threat assessment team, which was a group of school staff that used a formalized process to identify, assess, and manage students who may pose a threat of targeted violence in schools. These teams were less common in rural schools (54 percent) than in schools in towns, suburbs, or cities (64 to 71 percent).

Example: External use of SSOCS data on threats and threat assessment teams
The National Center for School Safety used SSOCS data on the prevalence of threats and threat assessment teams in schools nationally as context in a threat assessment toolkit it developed with support from the Bureau of Justice Assistance, a component of the U.S. Department of Justice's Office of Justice Programs.[57]

[52] All NCES findings in this section come from Crime, Violence, Discipline, and Safety in U.S. Public Schools.

[53] Includes rape or attempted rape, sexual assault other than rape (including threatened rape), robbery (with or without a weapon), physical attack or fight (with or without a weapon), and threat of physical attack (with or without a weapon).

[54] Includes theft or larceny; possession of a firearm or explosive device; possession of a knife or sharp object; distribution, possession, or use of illegal drugs or alcohol; vandalism; and inappropriate distribution, possession, or use of prescription drugs.

[55] What Do the Data Reveal About Violence in Schools?

[56] The FBI also collects information on hate crimes that take place in schools. These statistics are published in a special report from the FBI's Crime Data Explorer, called "Reported Hate Crime at Schools." However, these statistics are based on bias-motivated incidents that law enforcement agencies report to the FBI and are reported as number of incidents. While the SSOCS survey indicates that the hate crime is "a committed criminal offense," it does not specify that it had to be reported to law enforcement to be counted. In addition, the SSOCS data indicate prevalence and variation across schools.

[57] School Threat Assessment Toolkit

➢ *School resource officers.* In the 2021–22 school year, 46 percent of traditional public schools, compared to 18 percent of charter schools, had a school resource officer[58] present at school at least once a week. A lower percentage of public schools located in cities (30 percent) reported that one or more sworn law enforcement officers (including school resource officers) routinely carried a firearm while at school during the 2021–22 school year than did public schools located in suburbs, towns, and rural areas (45 to 55 percent).

Examples: External uses of SSOCS data on School Resource Officers (SROs)

The Government Accountability Office (GAO) used SSOCS data to examine students' school safety and victimization experiences, along with K-12 schools' efforts to address school safety and students' hostile behaviors.[59] GAO found that 2,000 more schools used school resource officers in school year 2017-18 compared to school year 2015–16.

In a meta-analysis investigating the effects of having SROs in schools, researchers noted that SSOCS was one of the only sources of systematically collected national data on SROs and, as a result, its use in research on this topic was widespread.[60] Studies reviewed as part of the meta-analysis looked at the prevalence of SROs performing law enforcement (e.g., motor vehicle traffic control and training school personnel in crime prevention) and non-law enforcement activities (e.g., mentoring students and offering law-related teaching or training for students). One cited study showed that "school resource officers assigned to schools with greater levels of social and educational disadvantage perform more law enforcement-related functions, while school resource officers assigned to schools with less social and educational disadvantage perform more education-related functions."[61]

➢ *Barriers to implementing school safety measures*. The two factors reported most often by schools in 2021–22 as limiting their efforts to reduce or prevent crime "in a major way" were lack of or inadequate alternative placements or programs for disruptive students (30 percent) and inadequate funding (27 percent).

Example: External use of SSOCS survey instrument

A researcher administered the SSOCS survey to staff in districts and schools in Connecticut to examine changes implemented by public school district personnel in response to the Newtown school shooting that occurred in December 2012.[62] The study found that "districts made significant increases in the number of school practices and programs, school security staff, and staff trainings."

Teaching and Learning International Survey (TALIS)

The Teaching and Learning International Survey (TALIS) collected information about teachers, teaching, and learning environments in the United States and other countries that are members of the Organization for Economic Cooperation and Development (OECD). Originally proposed by the United States, it has become the world's largest international survey about teachers and school leaders. Nationally representative samples of teachers and principals in lower secondary

[58] A school resource officer was defined as a sworn law enforcement officer with arrest authority, who has specialized training and is assigned to work in collaboration with school organizations.

[59] K-12 Education: Students' Experiences with Bullying, Hate Speech, Hate Crimes, and Victimization in Schools | U.S. GAO

[60] School-based Law Enforcement Strategies

[61] Lynch: The Effects of Social and Educational Disadvantage

[62] Violence in American Schools: The Impact of the Newtown School Shooting on School Practices and Programs, School Security Staff, Staff Training, and Security Budgets

public and private schools (those offering grades 7, 8, and/or 9) were asked to complete surveys with questions about their backgrounds, work environments, professional development, and beliefs and attitudes about teaching.

Policymakers have long been concerned about the achievement and employment preparedness of U.S. students compared to students in other countries. Therefore, it is important to understand international differences in key factors affecting student success, such as the qualifications of staff directly impacting their education and their learning environments. In addition, understanding how teachers and principals feel about their working environments, including the challenges they face, can shed light on differences in the educational labor markets across countries. There was a purposeful overlap in the topics covered by TALIS and SASS/NTPS to enable the calculation of statistics on the same indicators at the state, national, and international levels. This overlap did not result in a duplication of effort because of the unique information provided by TALIS: only TALIS allowed for comparisons of U.S. teachers and principals to their counterparts in other countries because it was designed to ask the same questions of equivalent teacher and principal populations in all countries in which it was administered.

Exemplar NCES findings[63] and external use

- *Teacher and principal characteristics*. In 2018, nearly all U.S. lower secondary teachers (98 percent) had a bachelor's degree or higher, which was higher than the TALIS average (93 percent).[64] In contrast, U.S. teachers had an average of 15 years of teaching experience, lower than the TALIS average (17 years). Almost all U.S. lower secondary principals (99 percent) had a master's degree or higher, which was higher than the TALIS average (61 percent). While there was no measurable difference in the average number of years as a principal, U.S. principals had significantly fewer years teaching, on average (12 years compared to 20 years internationally).

- *Teacher and principal satisfaction with salary*. In 2018, forty-one percent of U.S. lower secondary teachers and 56 percent of lower secondary principals "agreed" or "strongly agreed" that they were satisfied with the salary they received for their work, which was not measurably different from the TALIS averages (39 percent of teachers and 47 percent of principals).

- *Teacher stress*. Twenty-six percent of U.S. lower secondary teachers reported that they experienced "a lot" of stress in their work in 2018, which was higher than the TALIS average (16 percent). Being held responsible for students' achievement was a source of "quite a bit" or "a lot" of stress for 35 percent of U.S. teachers, which was lower than the TALIS average (45 percent).

[63] All NCES findings in this section come from U.S. Highlighted Results from the 2018 Teaching and Learning International Survey (TALIS) of Teachers and Principals in Lower Secondary Schools (Grades 7-9). Although the United States participated in TALIS 2024, the most recent U.S. TALIS data released by NCES are from 2018.

[64] A total of 49 education systems, including some that are not part of OECD member countries, participated in TALIS 2018. The data cited here are for participating countries that met reporting requirements. For more information, see the TALIS 2018 Technical Notes.

Examples: External uses of TALIS data

The National Center on Education and the Economy hosted a webinar early in the pandemic that drew on results from TALIS 2018 to inform understanding of how prepared school systems were to handle online learning during the coronavirus pandemic.[65] Webinar presenters "discussed the importance of teacher collaboration and technology usage … (and) noted that teaching practices have not been adequately focused on the type of extended, self-directed projects that foster the development of self-organization and motivation."

The United States participated in the 2024 TALIS. However, as of July 2026, no reports or data files had been released by NCES, though findings are being published by other organizations. OECD included findings for the United States in their report "Results from Talis 2024: The State of Teaching."[66] *Education Week* published an article summarizing the TALIS 2024 findings related to teacher job satisfaction, highlighting five points: U.S. teachers' pay satisfaction is similar to that of their global peers, teachers in the United States have higher workloads, longer hours may be crowding out collaboration time, U.S. teachers bring experience from outside the classroom, and globally, teachers feel less valued by society.[67]

Studies of students that included school staff surveys

Most NCES studies focusing on students—that is, those that are representative of certain groups of students rather than teachers or principals—included a teacher or principal survey, or both, to collect contextual information about the school environment and students' experiences within it. As the adults interacting with study students over the course of the school day, school staff are the best reporters of this kind of information. While data from these surveys generally should not be used to describe populations of teachers and principals, they provide important information that helps to better understand factors associated with student experiences, learning, progress, and success. For example, each administration of NAEP includes a teacher survey with questions that ask about the background, training, and experience of teachers who taught students participating in NAEP, as well as important instructional information like use of digital technology and various aspects of instruction related to the NAEP assessment focal subjects (reading, math, civics, etc.), such as time spent teaching the focal subject, instructional areas of focus, emphasis on selected cognitive processes, teaching strategies, resources used, and student activities.[68] The Early Childhood Longitudinal

[65] TALIS 2018: Lessons for the U.S. • NCEE

[66] Results from TALIS 2024 (EN)

[67] How U.S. Teachers' Job Satisfaction Stacks Up Against Their Global Peers'

[68] As examples, see the NAEP 2022 and 2026 fourth-grade reading/mathematics teacher questionnaires at The Nation's Report Card: 2022 Reading and Mathematics Teacher Questionnaire Grade 4 and The Nation's Report Card: 2026 Reading/Mathematics: Teacher Questionnaire Grade 4.

Studies,[69] Secondary Longitudinal Studies,[70] and international assessment studies[71] asked similar questions of teachers. In addition, some studies included student-specific questionnaires that asked teachers to report on the achievement and experiences of the study students that they taught, including information on student achievement and development that were not measured in the studies' standardized assessments. For example, in the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011), kindergartners' teachers reported on the study students' knowledge and skills in reading, mathematics, and science, as well as the students' social skills, classroom behaviors, program participation, and attendance. Special education teachers reported on the disabilities of and services received by students with an Individualized Education Program (IEP) or 504 Plan.

Exemplar NCES findings[72] and external uses

➢ An NCES analysis used information collected from the science and mathematics teachers of students in 12th grade[73] to investigate the relationships between student background characteristics and instructional practices, as well as between instructional practices and student outcomes. Among the many complex relationships found, it was noted that "the most powerful predictor of instructional

[69] These include: the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (ECLS-K); the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011); the Early Childhood Longitudinal Study, Kindergarten Class of 2023–24 (ECLS-K:2024), and the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B). For more information about teacher and school questionnaires, see for example those for the ECLS-K:2011 at Early Childhood Longitudinal Studies Program (ECLS)-Data Collection Instruments. There is one exception regarding lack of teacher representativeness in this set of studies: the ECLS-K (1998–99) and ECLS-K:2024 were designed to be representative of kindergarten teachers in the base year of each study.

[70] These include: the National Longitudinal Study of 1972 (NLS-72), the High School and Beyond Longitudinal Study of 1980 (HS&B), the National Education Longitudinal Study of 1988 (NELS:88), the Education Longitudinal Study of 2002 (ELS:2002), the High School Longitudinal Study of 2009 (HSLS:09), and the High School and Beyond Longitudinal Study of 2022 (HS&B:22). For more information about the teacher and school questionnaires, see Secondary Longitudinal Studies Program (SLS).

[71] These include: the Progress in International Reading Literacy Study (PIRLS), the Trends in International Mathematics and Science Study (TIMSS), the International Computer and Information Literacy Study (ICILS), and the Program for International Student Assessment (PISA). While PISA did include a representative sample of teachers in 2015 and 2018, the primary purpose of collecting data from teachers was to "provide important contextual information about the instructional context of schools with which to interpret PISA results" for students (see Program for International Student Assessment (PISA) - Information for Teachers). Teacher data were collected in TIMSS and PIRLS for a similar purpose. In all three studies, analyses with teacher data should be reported with students as the unit of analysis, because there are no teacher-level analysis weights that allow for the generation of representative teacher estimates. For more information about the teacher and school questionnaires, see International Activities Program.

[72] At one time, NCES had a robust reports program with staff whose primary responsibility was conducting more in-depth analysis of NCES data on topics of policy interest. In more recent years, with reductions in resources, that program was eliminated, and staff focused their efforts on collecting data, producing short reports featuring student characteristics and outcomes, and releasing data files for external research. Searches in NCES's online bibliography tool, ERIC, the Democratizing Data project, and other databases of journal articles result in thousands of publications that use NCES data, including the contextual data from teachers and administrators, demonstrating the value of these data for the broader education research community.

[73] These data are from the 12th-grade follow-up data collection for a cohort of students who were eighth-graders in 1988.

differences is the achievement level of the class, which overshadows the influences of social background and school characteristics."[74]

- An NCES examination of teacher certification and experience drew on data collected from teachers in SASS and the 2013 and 2015 NAEP teacher questionnaires for teachers of fourth- and eighth-grade students.[75] The analysis showed at least 90 percent of the nation's public school students were taught by teachers with state certification in the years for which data were available (2011–12, 2013, and 2015). However, there was variation by selected school and student characteristics and across various jurisdictions. Looking at differences by state in 2015, the percentage of students who had a mathematics teacher with state certification ranged from 61 percent in Ohio to almost 100 percent in Alabama in 4th grade and from 59 percent in the District of Columbia to 99 percent in Nebraska in 8th grade.

- An NCES analysis of kindergartners' approaches to learning, as reported by the children's teachers, showed children who demonstrated more positive approaches to learning in the fall of kindergarten had higher scores on standardized assessments in reading, math, and science in kindergarten and in the spring of first grade.[76]

- An NCES analysis of longitudinal data showed the amount of reading and mathematics homework that students' teachers expected them to complete on a typical evening generally increased from first grade to fifth grade. Children in schools with higher percentages of students of color had teachers who expected more homework on a typical evening compared to children in schools with lower percentages of students of color.[77]

- An NCES analysis of algebra coursetaking in eighth grade found that students enrolled in algebra by the eighth grade in schools where this was commonplace (i.e., where more than 75 percent of the eighth-grade students in the school were taking algebra) had lower average scores on a standardized mathematics assessment than did algebra students in schools where algebra in the eighth grade was less common. However, among students who had relatively strong mathematics skills at the end of fifth grade, there were no differences in average eighth-grade mathematics scores associated with the percentage of eighth-graders in the school who were taking algebra.[78]

Examples: External uses of data from contextual school staff surveys

Researchers using data from the NAEP teacher questionnaire in conjunction with student scores on the NAEP eighth-grade U.S. History assessment found that having a teacher "identified as having a social studies-inclusive teacher education background" and who only taught social studies was associated with a higher average assessment score.[79]

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[74] High School Seniors' Instructional Experiences in Science and Mathematics

[75] Certification Status and Experience of U.S. Public School Teachers: Variations Across Student Subgroups | IES

[76] Kindergartners' Approaches to Learning Behaviors and Academic Outcomes

[77] Expectations and Reports of Homework for Public School Students in the First, Third, and Fifth Grades | IES

[78] Statistics in Brief: Eighth-Grade Algebra: Findings From the Eighth-Grade Round of the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (ECLS-K)

[79] Illuminating the Black Hole: Examining Middle Grade Social Studies Teacher Education Pathways and Student Achievement

Examples: External uses of data from contextual school staff surveys—Continued

Comparisons of data collected from teachers of kindergartners in 1998–99 and teachers of kindergartners in 2010–11 led researchers to conclude that "kindergarten is the new first grade."[80] Their analysis showed teachers of the 2010–11 kindergartners: (1) held higher academic expectations for children both prior to kindergarten entry and during the kindergarten year, (2) spent more time on advanced literacy and math content, teacher-directed instruction, and assessment, and (3) spent less time on art, music, science, and child-selected activities.

Researchers used longitudinal data collected from students, their parents/guardians, and their teachers to investigate factors associated with bullying victimization during elementary school and how that victimization was related to student outcomes in fifth grade.[81]

Research investigating factors affecting reading assessment scores and high school completion for students with emotional behavioral disability using NELS:88 data included information collected from the students' English and language arts teachers to account for classroom ecology and instructional emphasis on different language arts topics.[82]

Researchers using information collected from ninth-graders' mathematics teachers to look at teacher tracking (the practice of assigning more experienced teachers to higher-level, more advanced classes and less experienced teachers to lower-level classes) found that teachers assigned to higher-level classes had higher levels of self-efficacy (the belief that they had the ability to positively influence student learning and behavior) and feelings of responsibility to positively influence student learning and behavior.[83] High self-efficacy and sense of responsibility for student learning have been shown in other research to be positively associated with student learning, leading the researchers to suggest that teacher tracking may lead to more poor outcomes for students in lower-level classes.

[80] Is Kindergarten the New First Grade?

[81] Longitudinal Relations Among Social Contexts, Bullying, Victimization, and Elementary School Outcomes in a Nationally Representative Sample

[82] What Factors Impact Reading Test Score Outcomes and High School Completion for American Students with Emotional Behavioral Disability Characteristics?

[83] Interrogating Tracked Mathematics Teacher Practices: A Logistic Regression Analysis

Examples: External uses of data from contextual school staff surveys—Continued

Information collected from teachers and schools in the longitudinal studies, particularly the secondary longitudinal studies, has facilitated a large body of research on the organization of schools and school and classroom effects on student outcomes. To provide just a handful of the very many examples: Researchers used HS&B data to develop a global measure of communal organization and found that there were fewer reported problems with classroom disruptions, absenteeism, and dropping out in schools with a stronger communal organization.[84] Researchers have examined how school sector (i.e., public or private and, among private schools, Catholic or secular) is related to school climate and student outcomes, showing, for example, that academic coursetaking was greater among students in Catholic high schools compared to students in public high schools[85,86] and that the environment of private high schools was more disciplined than that of public high schools.[86] Information on student course placement has been used to investigate the concept of "opportunity to learn,"[87] i.e., the idea that students can only learn what they have been exposed to, and the prevalence and effects of the instructional practice of tracking, or grouping students by ability, which can affect opportunity to learn.[88]

Future Possibilities

1. Link more detailed teacher data like those collected in the National Teacher and Principal Survey to assessment data collected in the National Assessment of Educational Progress to facilitate analysis examining the effects of teacher characteristics on student achievement for a broader population of students than those that focus on students in one grade.
2. Develop partnerships with schools and school districts to produce findings related to teacher and principal satisfaction, feelings about the school environment, etc., below the state level, making the findings more actionable at a more local level.
3. Invest more resources into analysis of existing contextual data collected from teachers and administrators to further understanding of how characteristics of the school context, such as time spent teaching specific content, affect students' experiences and learning.

[84] Bryk., A.S. (1995). Lessons From Catholic High Schools. In M.T. Hallinan (Ed.), *Restructuring Schools, Promising Practices and Policies* (pp. 81-98). New York: Plenum Press.
[85] Ibid.
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For More Information

Education Sciences Reform Act of 2002 (full text)[89]
National Teacher and Principal Survey, Teacher Follow-up Survey, and Principal Follow-up Survey
School Pulse Panel
Schools and Staffing Survey
School Survey on Crime and Safety
Teaching and Learning International Survey- NCES
Teaching and Learning International Survey- OECD
Condition of Education
Digest of Education Statistics
Handbook of Survey Methods

Reader's Note

As noted at the beginning of this paper, it is intended to be an easy-to-digest synthesis of information available across a wide variety of resources— in many cases, pulling directly (sometimes verbatim) from NCES sources. It is not a comprehensive description of NCES's work. For example, there are millions of statistics that can be generated with NCES data, and so the included exemplar findings and external uses are intended to show key and/or varied uses of the data rather than provide a comprehensive inventory of all uses. Similarly, this paper is not a comprehensive bibliography of published work. Readers interested in more detail are encouraged to visit the resources provided in the section "For More Information." Lastly, the "Future Possibilities" section includes ideas that have been proposed in the past, including some that NCES had been working on prior to March 2025, to encourage thinking about ways to enhance or improve NCES data collections and products.

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