

State of The Field 2025 Data Science and Data Literacy Education in US K-12

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Foreword by

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FOREWORD

STATE OF THE FIELD 2025



Data shapes our modern lives. From the apps we scroll through to the news we read and the way decisions are made in health, business, and government, streams of data flow just beneath the surface. Our access to and use of data is only becoming more advanced. By harnessing the transformative power of data analysis, I personally helped American swimmers to maximize their efficiency, playing a pivotal role in guiding them to Olympic gold medals in Paris 2024. In the last two years, we have seen a powerful combination of data, computational power, and statistical models drive the rise of AI. To help our students, industries, and nation succeed, we must ensure that data and AI literacy are integrated into educational systems. Already, nearly one in four jobs requires data skills, and The World Economic Forum reports that “AI and big data top the list of fastest-growing skills,” even as many employers now consider them essential for their workforce. Without equal access to education in data literacy and data science, today’s students will be left behind in tomorrow’s economy.

This report arrives at a time when educators at all levels, including those at the University of Virginia, are grappling with how to best prepare students for this new reality. Across the country, educators are testing new ways to incorporate data literacy and data science into the K–12 curriculum through new courses, innovative pathways, teacher professional development, and learning standards and frameworks. Their efforts could not be more timely, as many Americans report wishing they had learned more data science skills in middle and high school. However, efforts remain inconsistent, and we risk leaving too many students behind. Additionally, recent results from the Nation’s Report Card indicate that we still have a lot of work to do in developing students’ foundational skills in the math topics that support data science. Even those who are building solid mathematical bases often have limited access to opportunities to develop data and AI literacy skills.

We have significant work ahead to transform our educational systems so they fully prepare students for the mathematical demands of today’s data-driven world. The State of the Field Report is an invaluable resource that shows us exactly where we stand and guides us on the path forward. It offers a comprehensive overview of nationwide developments, establishing a clear baseline on policy and enrollment trends. The report shines a spotlight on schools, districts, and states leading the way in data science education. It amplifies the voices of students at a pivotal time when the job market presents numerous challenges for new graduates. Furthermore, it highlights the meaningful impact Data Science 4 Everyone has made over the past year. By acknowledging both our progress and our obstacles, this report equips educators, policymakers, and advocates with the insights necessary to drive meaningful change.

The stakes are high. Data and AI are no longer niche skills but essential requirements across the workforce. Students who develop data literacy and AI literacy will have access to a broader range of career options, while those who don’t risk being excluded from the fastest-growing sectors of the economy. To ensure students succeed in the workforce of tomorrow and our economy keeps pace with global change, these skills must be made accessible to everyone.

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EXECUTIVE SUMMARY



Our **second annual State of the Field** builds on the work of the National Academies' September 2022 workshop, [Foundations of Data Science for Students in Grades K–12](#), and our March 2024 report, [Beyond Borders 2024: Primary and Secondary Data Science Education Around the World](#). Our goals for this issue include reporting on:

- our definition of data science education in K–12 contexts;
- an update on our development of data science learning progressions for K–12 students;
- our tier system for ranking state policy implementations of data science education;
- a new baseline number of K–12 students enrolled in dedicated data science courses or courses that include data science content modules;
- an analysis of certain demographic characteristics of those students;
- in-depth case studies to demonstrate the ways data science programs can be implemented by schools, districts, and states;
- the voices of students who have received a data science education in K–12; and
- the impact of Data Science 4 Everyone on the field over the last year.

The launch of the [K-12 Data Literacy and Data Science Learning Progressions](#) and our ongoing work to develop subject- and grade-specific articulations are rapidly expanding what is possible for data science education. Two states, New Hampshire and Oregon, now require credits in data analysis or statistics before high school graduation. And eight states have moved up in our three-tier system of data science education policy and implementation. These moves represent the implementation of new policy mechanisms that make it possible for students to learn data science in public schools:

- **Arizona:** Moved from none to Tier 2: State Course Pilot, Course Sequence, or Teacher Professional Development Program
- **District of Columbia:** Moved from none to Tier 1: State Course Code
- **Kentucky:** Moved from none to Tier 1: State Course Code

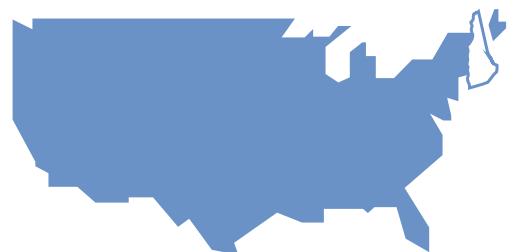
- **Montana:** Moved from Tier 1 to Tier 3: Standards Adoption
- **New York:** Moved from none to Tier 1: State Course Code
- **North Carolina:** Moved from Tier 1 to Tier 2: State Course Pilot, Course Sequence, or Teacher Professional Development Program
- **Tennessee:** Moved from none to Tier 1: State Course Code

FIRST TWO STATES MODERNIZE GRADUATION REQUIREMENTS TO INCLUDE DATA LITERACY:



OREGON

REQUIRES A SEMESTER-LENGTH HALF CREDIT IN DATA ANALYSIS OR STATISTICS, WITHIN THEIR MATHEMATICS TRAJECTORY, FOR HIGH SCHOOL GRADUATION.



NEW HAMPSHIRE

REQUIRES A SEMESTER-LENGTH HALF CREDIT IN DATA ANALYSIS OR STATISTICS, WITHIN THEIR MATHEMATICS TRAJECTORY, FOR HIGH SCHOOL GRADUATION.

EXECUTIVE SUMMARY



More information on our three-tier system for tracking state progress can be found in the Data Science Policy Implementation in K–12 section. More information on enacted state-level K–12 data science education policies and implementations can be found in the State Summaries section.

This year we made substantive changes to our methodology for counting data science student enrollment, which we define as the number of students enrolled in dedicated data science courses or courses that include data science content modules. These changes make it possible to report on the specific states, school districts, and even schools where those students are found. They also make it possible to differentiate students by enrollment in dedicated data science courses and in courses that include data science content modules. Finally, the changes enable us to link our data with information from the National Center for Education Statistics and to map the precise location of schools. Given the development of this updated methodology, counts of student enrollment in 2025 are not comparable to the counts that we reported in 2024. We anticipate fewer methodological changes, and the possibility of year-over-year comparison of data, in future years. More information on methodology changes between reporting years can be found in the Data Science Student Enrollment section.

During the most recent school year with data available, our sources reported a combined **70,190 students** enrolled in data science classes or content modules. 33,548 students were enrolled in dedicated data science classes; 36,110 students were enrolled in classes that included data science content modules (532 students across 13 schools were not classified as enrolled in either dedicated classes or content modules). Our sources also reported a combined **958 schools**, including 880 public schools across **630 school districts**. These counts include 78 private schools and 157 public school districts with district-level student enrollment. Finally, organizations in our Content Partner Network reported a combined **3,091 teachers** nationwide who participated in an estimated total of **23,121 data science professional development hours**. More information, including a demographic analysis, can be found in the Data Science Student Enrollment section. Disaggregation

DATA SCIENCE EDUCATION refers to instruction focused on systematic processes, analytical techniques, and utilization of appropriate technologies to gain knowledge from data. In the context of K–12 education, it equips students with the introductory skills and problem-solving abilities they need to collect, consider, analyze, interpret, and communicate data to answer investigative questions. Data science education draws upon tools and methods across the curriculum, in areas including mathematics, statistics, computer science, sciences, social sciences, and other disciplines. This may include exploratory data analysis, visualization, modeling, and data ethics.

of data science student enrollment by state can be found in the State Summaries section.

This report presents five new case studies, which demonstrate ways in which data science education can be implemented at the state, district, and school levels. We cover exciting work at Genesee Intermediate School District in Michigan, Evanston Township High School in Illinois, KIPP NYC, Loudoun County Public Schools in Virginia, and the Alabama State Department of Education. In the Student Voices section, we also include examples of students whose lives have been impacted by the data science education they received in K–12. Lastly, in the Impact Report section, we present Data Science 4 Everyone's activity and the impact that we have had on the field over the last year. 📊

EXECUTIVE SUMMARY



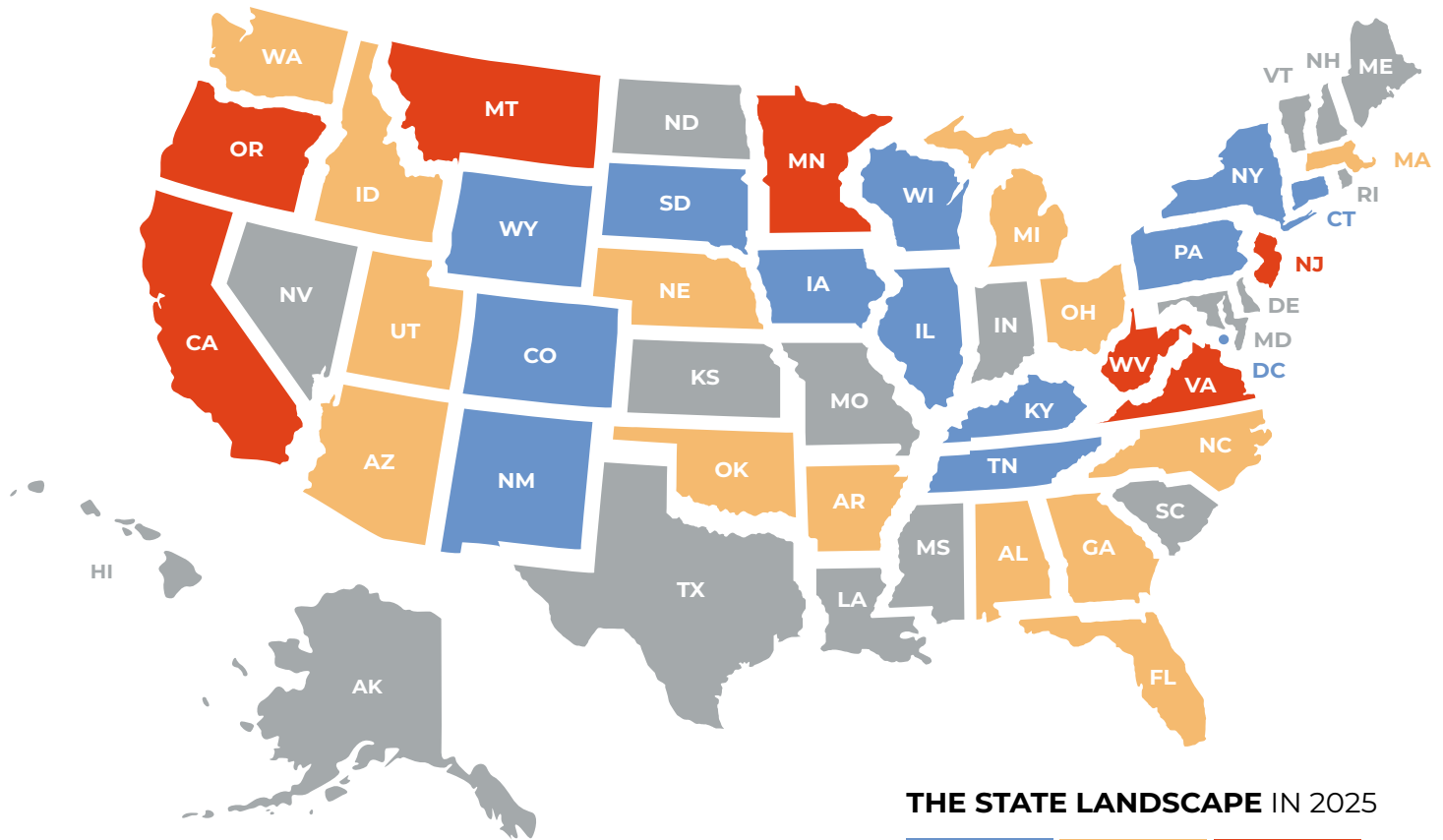
ABOUT DATA SCIENCE 4 EVERYONE

Data Science 4 Everyone is a national coalition committed to ensuring that K–12 students are equipped with the data science and data literacy skills needed to succeed in an increasingly data-driven world. We believe that equitable access to data science education opens doors to higher education, high-paying careers, an engaged community, and a thriving democracy. As new tools and transformative technologies are developed and deployed with increasing speed, it is more essential than ever that our society is fully data literate and prepared to think critically about the origin, collection, modeling, and presentation of data.

ACKNOWLEDGEMENTS

In addition to the efforts of **Data Science 4 Everyone** staff, this report reflects the work of hundreds of individuals and organizations committed to ensuring that all K–12 students have access to an education in data science. We wish to extend our sincere thanks to our Content Partner Network organizations for sharing their impact data and to [Code.org](https://code.org) for their invaluable assistance with the collection of enrollment data from state education agencies, which helped us explore and understand the landscape of students receiving an education in data science across US schools. We also wish to thank the many educators and administrators who provided their insights through interviews and reviews of our case studies. Finally, we are grateful to our funders, whose generous support has made this report possible. Their commitment to expanding access to high-quality, inclusive, and forward-looking education has been instrumental in helping us shine a light on the current state of data science education and the opportunities ahead. ■■

DATA SCIENCE POLICY IMPLEMENTATION IN K-12



THE STATE LANDSCAPE IN 2025

TIER 1:	TIER 2:	TIER 3:
Added to State Course Catalog	State Courses Pilot, Course Sequence, or Teacher PD	Standard or Framework Adoption

DATA SCIENCE POLICY IMPLEMENTATION IN K-12

Data Science 4 Everyone works with administrators and policymakers to understand the fast-changing landscape of data science education. We track the state-level policy mechanisms that ultimately define whether and how data science is taught in a state's school system. And we provide resources such as our data science learning progressions to guide implementation efforts.

We categorize state-level activity into **three tiers of policy and implementation**. These tiers broadly describe a state's progress toward ensuring that every school has the resources to provide education in

data science and data literacy to its students. Our tier categories are not cumulative, and our identification of a state in a higher tier does not indicate that it has implemented each item in lower tiers or that it has more student enrollment in data science courses than states in lower tiers. Rather, higher tiers indicate an increased focus on policies that make it possible for students to learn data science in public schools.

Information on the specific policies that determine each state's policy implementation tier is provided in the State Summaries section of this report.

DATA SCIENCE POLICY IMPLEMENTATION IN K-12



TIER 1: STATE COURSE CODES

Tier 1 states have included data science as a course in their state's **course catalog**, a comprehensive listing of all courses that are approved or recognized by a state's education authority for use in K–12 public schools. This is often a necessary first step for educators to begin teaching dedicated data science courses. Course catalogs often include detailed course descriptions as well as information on credit hours and grade ranges, and they may describe whether a course counts for a required math credit, is part of a career and technical education sequence, or may be taken as a dual-enrollment course. Course codes also enable statewide tracking on course offerings and student enrollment. While K–8 courses may appear in course catalogs, **the vast majority of data science courses we identified are currently offered in grades 9–12.**

The National Forum on Education Statistics, which is supported by the US Department of Education's National Center for Education Statistics, maintains the [School Courses for the Exchange of Data](#) (SCED) classification system. SCED is a voluntary standard for course names, codes, and descriptions that has been widely adopted by state education agencies. Data Science, Data Science Applications, and Data Literacy courses were included in SCED beginning with version 10.0, when they were listed under subject code 22, Miscellaneous. With the release of SCED version 12.0 in 2024, they were recoded into their own Data Science subsection under subject code 25, Integrative Learning. While several states have adopted their own data science course descriptions, **every state education agency that has adopted SCED version 10.0 or later has the following courses in its state course catalog:**

25 051 DATA LITERACY

Data Literacy courses focus on developing students' ability to read, interpret, and analyze data. These courses teach students how to assess the reliability and validity of data, as well as to understand data to draw conclusions and explain the results, such as through summary statistics or data visualization.

25 052 DATA SCIENCE

Data Science courses prepare students to think critically about data and develop the tools, techniques, and principles for reasoning about the world with data. These courses teach students to use scientific methods, data sampling and probability, algorithms, and systems to analyze structured and unstructured data. Students will use modern data analysis tools, including computer programming languages. Course topics may include big data, data cleaning, data modeling, data mining, artificial intelligence, correlation and causation, and bias and uncertainty.

25 053 DATA SCIENCE APPLICATIONS

Data Science Applications courses emphasize the practical uses of data science concepts and the transformation of data to knowledge. Students will explore real-world datasets and answer questions using hands-on analysis, project-based learning, and programming software.

DATA SCIENCE POLICY IMPLEMENTATION IN K-12

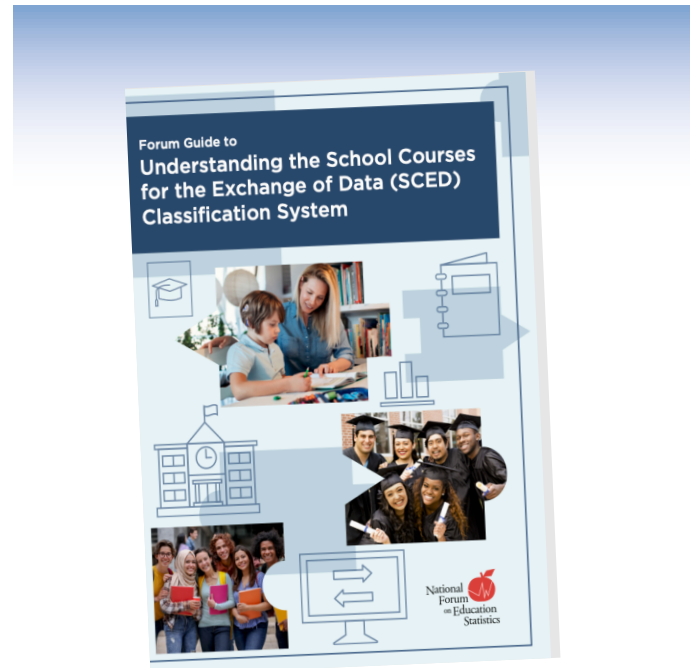


TIER 2: COURSE PILOTS, COURSE SEQUENCES, AND PROFESSIONAL DEVELOPMENT

Tier 2 states have implemented a data science course pilot, course sequence, or teacher professional development program. Course pilots may test new course content, instructional methods, curricular resources, or assessment tools. Several states have used course pilots to test all of these elements. While pilots reach fewer students and parents, they also require fewer resources, which can be helpful when a state is first exploring data science.

Course sequences describe a specific progression of more than one course through a subject area or learning domain. Many states have formally adopted English, math, science, and history sequences that secondary school students are required to complete in order to graduate, while others provide students with choices that prepare them for different post-secondary opportunities. **Course sequences** may also describe college preparatory pathways, such as math sequences that prepare students for calculus, or career and technical education (CTE) pathways.

Teacher professional development refers to a teacher's continuous professional training that schools encourage and often require; many states set required minimum professional development hours for teachers before renewing their license. Teacher professional development comes in many formats, including state education agency- or district-provided training, collaborative learning groups, instruction in the use of emerging technology tools in the classroom, seminars, and conferences. For our purposes, we track professional development programs that are offered statewide or are facilitated in some way by the state education agency (SEA).



IN EARLY 2025,

Data Science 4 Everyone reviewed all available state-level course catalogs to identify the states with dedicated data science courses. With the collaboration and assistance of [Code.org](https://code.org), we then solicited state education agencies across the US for information on student enrollment in dedicated data science courses. The results of our survey of state education agencies are aggregated with enrollment data provided by curriculum and content providers and appear in the Data Science Student Enrollment section of this report, alongside a description of our research design and methodology.

DATA SCIENCE POLICY IMPLEMENTATION IN K-12

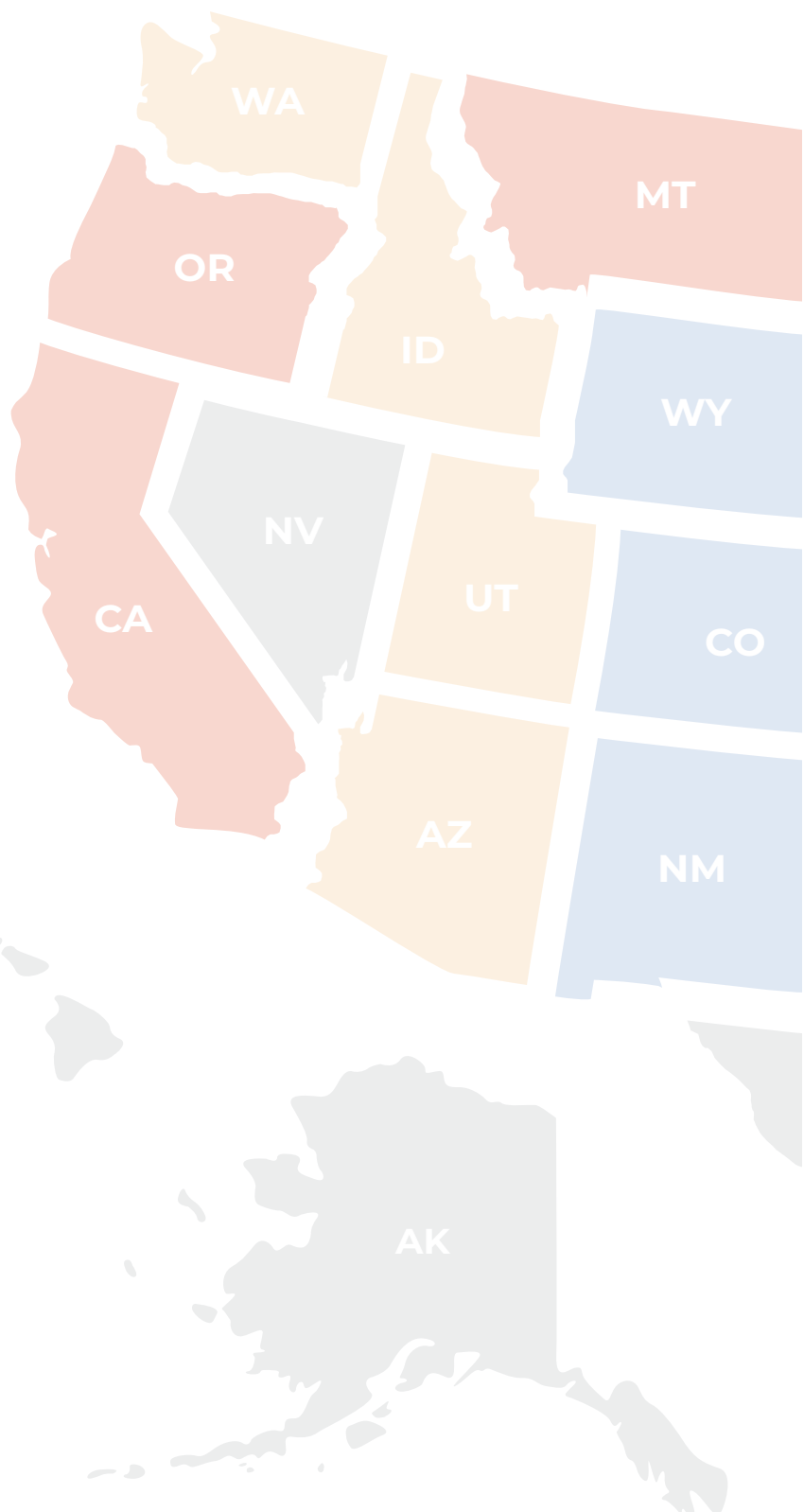


TIER 3: LEARNING STANDARDS AND FRAMEWORKS

Tier 3 states have adopted data science learning standards/frameworks, or they have integrated data science as an explicit topic into the learning standards/frameworks of a different subject.

Learning standards describe what students should know or be able to do in a specific subject at a specific grade level. They are usually adopted by state boards of education, and the process for revision varies significantly by state but often involves review by administrators, educators, specialists, and the public. Year-to-year changes tend to be minor, and significant revisions or complete redrafts of core subjects such as mathematics can take several years.

Learning frameworks provide guidance on instructional practices that help teachers ensure students are able to meet learning standards in each subject and grade level. They often include teaching strategies and techniques that teachers can implement in the classroom. For our purposes, we track frameworks that have regulatory or otherwise significant implications on the curriculum taught in schools. In contrast, while the Texas Education Agency has created a guide for integrating [Data Literacy in STEM](#), the guidelines are only suggestions and are not yet grade-specific. Learning standards and **learning frameworks** are linked by learning progressions, which provide a roadmap of the concepts that students are expected to learn. 📊



FIVE THEMES OF DEDICATED DATA SCIENCE COURSES



FIVE THEMES OF DEDICATED SCIENCE COURSES

A major objective of our work at Data Science 4 Everyone is to understand how and where students are receiving data science education in US K-12 schools. Our approach considers three modes by which classroom students receive instruction in data science: by **integration** of data science concepts with other subjects; by supplemental instruction via **content modules**, such as a unit on data science, in non-data science courses; and by a **dedicated course** on data science. When we consider which students in the US are taking a dedicated data science course in K-12, we want to count courses that teach students a full range of introductory data science skills, but omit courses such as programming, where students learn a few data science concepts or skills in a way that is detached from the interdisciplinary nature of the field.

A high school student interested in developing a foundational understanding of data science is very different from an undergraduate data science major, and not every high school student who takes a data science course will pursue a career in data science. Nevertheless, we believe developing **data intuition** and **data literacy** are important milestones for every student on the road to developing crucial data science skills. These skills are not developed only by pursuing advanced topics such as Python, regression analysis, or calculus. For that reason, we developed **five broad but essential themes** to guide our decisions about what to include and what to omit from our count of data science course enrollment at public schools across the US. This is what we believe should be included in learning standards, frameworks, dedicated data science courses, or content modules:

1. **Inquiry-based and iterative investigation.** This investigation should require students to think critically about applications of data collection, sampling, and analysis centered on motivating investigatory questions. This process must allow room for iteration within the analysis and assumes some form of an investigation cycle.
2. **Integration of technology.** This includes programming languages or computer-based data analysis programs for data manipulation and visualization.
3. **Multivariate datasets.** These must be complex enough for students to develop and test their own hypotheses about the relationship between several variables.
4. **Mathematical modeling.** The modeling should involve the application of algebraic functions, statistics and probability, and simple algorithms to the analysis of data.
5. **Ethical communication with data.** This communication must teach students to create and critique visualizations and other stories about data without misleading their audience.



FIVE THEMES OF DEDICATED DATA SCIENCE COURSES



These themes are not exhaustive, nor should they be used for guiding curriculum design. They are instead a criteria set to define boundaries for this landscape report. While we are concerned with more than just how we prepare secondary school students for undergraduate programs in data science, we also believe that it is imperative to establish a robust connection between K-12, tertiary education, and the workforce.

The cornerstone of university-level data science education is a natural progression of skills and understanding that begins in elementary school and that is relevant to all students, no matter where they go after K-12. At the earliest stages, education must develop students' **data intuition**: the capacity to make sense of data without relying on advanced mathematical modeling or statistical analysis. Data intuition is about the way we identify patterns,

trends, and ideas of chance. We develop a “feel” for data and our curiosity pushes us to instinctively organize data by time or category, look for clusters, and wonder about anomalies in the earliest grade-levels. Data intuition complements and can reinforce early number-sense.

Data intuition is itself necessary for the development of **data literacy**: the ability to read, understand, interpret, and communicate data or claims derived from data. In the context of K-12 education, data literacy involves teaching students how to iteratively and critically question data and representations of data, including understanding their origins, limitations, and potential biases. It also involves teaching students how to communicate data effectively through visualizations and other means. ■■



DATA SCIENCE LEARNING PROGRESSIONS

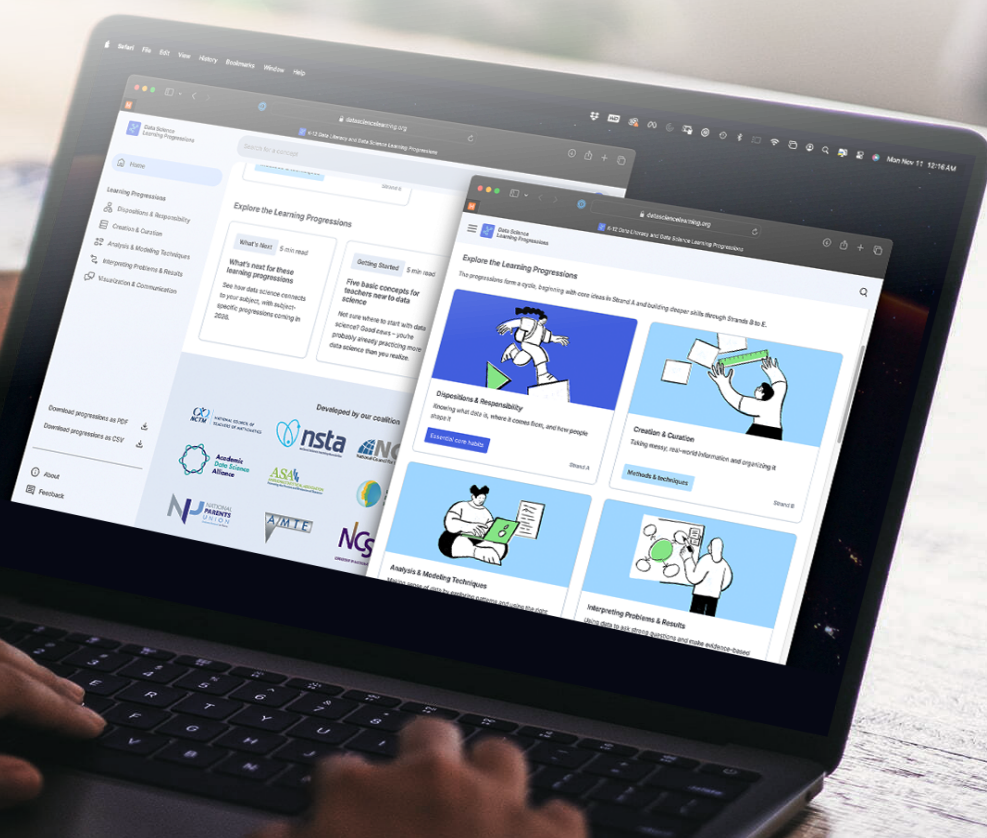
DATA SCIENCE LEARNING PROGRESSIONS

In order to bring data science education to classrooms across the US, K–12 educators will need a roadmap of the concepts that students are expected to learn. Data Science 4 Everyone is leading a nationwide effort to develop learning progressions for K–12 data science education. **Learning progressions** describe the way that students are expected to think about a topic or apply skills in successively more complex and advanced ways throughout their education, and they are a crucial link between learning standards, frameworks, and curricula. Learning progressions are typically created via a top-down process where a group of experts unilaterally decides on the most important concepts and expectations for students. Data Science 4 Everyone has reenvisioned this process with a community-driven, grassroots approach that is both democratic and transparent, promoting wide adoption among the many groups with stakes in K–12 student learning outcomes.

Beginning in early 2024, Data Science 4 Everyone coordinated **11 focus groups of over 100** math, science, computer science, and social studies K–12 educators; higher education faculty across multiple fields; directors of university data science education programs; state policymakers; teacher educators; curriculum designers; industry professionals; and students. Our focus group participants were 55% female; 5% nonbinary; and 38% Black, Indigenous,

and People of Color. They came from 33 US states, Canada, and rural, urban, and suburban communities. We asked participants to answer the question, **“What should students know about data by 2030?”** This sparked discussions on the frontiers of data science, data literacy, artificial intelligence, and statistics. Focus groups generated **326 draft learning outcomes**, from which a top 25 were selected through several rounds of iterative synthesis and voting.

On June 28, 2024, we convened representatives from each focus group in Chicago, Illinois, to present the learning priorities that they had developed together over the previous six months. Then, on August 29, we invited members of the public – including K–12 educators, students, and parents – to shape the future of data science education; they were asked to prioritize the top 25 data science learning outcomes created by those focus groups and identify learning outcomes we missed via our [#ChartTheCourse](#) voting platform. During February 17–19, 2025, we presented the first-ever set of K–12 data science learning progressions at the [Data Science Education K–12 Research to Practice Conference](#).

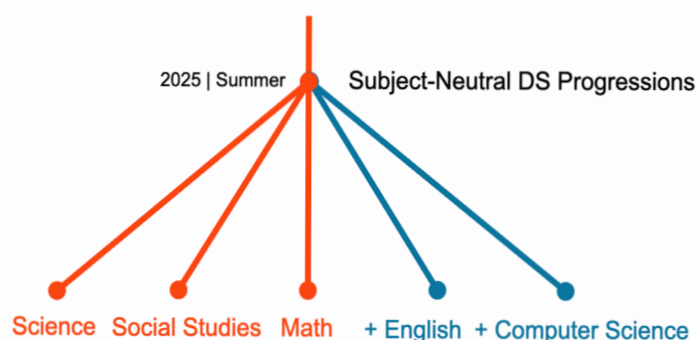


DATA SCIENCE LEARNING PROGRESSIONS

The [K-12 Data Literacy and Data Science Learning Progressions \(DSLSP\)](#) provide an independent but flexible framework for education leaders – including curriculum providers, state educational agencies (SEAs), school districts, and instructional coaches – to design data-related learning opportunities that engage and educate students. The progressions reflect four important lenses:

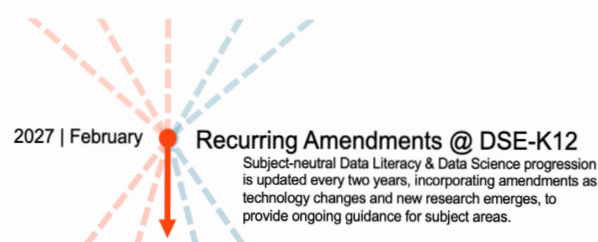
- **The Data Cycle:** The process of working with data is sometimes cyclic, and never linear. This process should become more sophisticated over time, whether students are analyzing scientific experiments or historical trends.
- **Role of Technology (Tools + AI):** Technology is an intricate component of data work across all disciplines - from analyzing literature trends to modeling scientific phenomena. Tools (including AI) should enhance, not replace, critical thinking about data.
- **Questioning and Critiquing:** Asking questions of and with data should be infused in every step and process, whether examining social media metrics or health studies. These questions should address the context, purpose, nature, and misuse – as well as the potential value and power – of data. Questioning and second-guessing should become regular habits.
- **Social and Cultural Impact:** The socio-political aspect of data, an understanding of data ethics, and the role of data-related technology in our daily lives are important at all levels and stages of working with data.

The DSLSP project recognizes the need for subject-specific guidance that provides clear, actionable steps for each discipline. We will focus on subject-specific progressions for integrating data science into three school subjects: **Mathematics, Science, and Social Studies**. Work in **Computer Science and English** will align additional techniques, with Computer Science providing an even deeper technology toolkit and English Language Arts providing deep engagement with clearer communication techniques for technical or quantitative ideas. Between now and December 2026, working groups representing each school subject will meet to select priority DSLSP concepts for their discipline, add any missing topics from the base subject-neutral version, and articulate grade-by-grade learning targets. This process will mirror the development of the initial subject-neutral version of DSLSP and is taking place in collaboration with the National Council of Teachers of Mathematics, the National Council for the Social Studies, the National Science Teaching Association, the National Council of Teachers of English, the Computer Science Teachers Association, and other K-12 associations. The DSLSP project will introduce a recurring amendment process so that the K-12 Learning Progressions become a “living document.” Our goal is to implement smaller but more frequent changes over time; we intend to modify roughly 10% to 15% of the learning progressions every few years, as needed and as research dictates. 



Aligned DS Learning Progressions | through 2026

Progressions for K-12 Data Science & Data Literacy are developed and integrated into existing frameworks for each relevant school subject, for use by state education agencies and school districts when revising education standards and course offerings.



DATA SCIENCE STUDENT ENROLLMENT



METHODOLOGY

In 2024, Data Science 4 Everyone developed a data collection, collation, and reporting system to count the number of K–12 students who receive instruction in data science. Our goal was to develop a resource that can be used for long-term implementation tracking, and to establish a robust process through which student enrollment data are collected from state education agencies and learning content providers. This is **fundamentally different from an estimation**: we want to answer longitudinal questions about student enrollment, demography, and educational outcomes with as much precision as possible. Our methodology **undercounts** the true number of students receiving a data science education and is focused instead on the characteristics of the students, schools, and districts that we do count.

We gather student enrollment data from state education agencies (SEA) and organizations that participate in Data Science 4 Everyone's Content Partner Network (CPN). Data Science 4 Everyone coordinates the national CPN with the goal of building equitable access and participation in data science and data literacy learning experiences. We work directly with curriculum developers and other learning content providers who offer a wide variety of core and supplemental activities, lessons, data analysis and visualization tools and technologies, instructional units for teachers of all subjects and grade bands, and dedicated data science courses for high school.

SEAs collect and provide us with information about students enrolled in **dedicated data science courses** with state-level course codes. Some curriculum developers are able to help us identify students enrolled in dedicated data science courses without state-level course codes, and students enrolled in courses in other subjects that implement data science content modules. Data Science 4 Everyone collates enrollment data from both types of sources to produce counts of **data science student enrollment**: students enrolled in a dedicated data science course or a course that included a data science content module.

Data Science 4 Everyone is grateful for the collaboration and assistance of [Code.org](https://code.org) in soliciting state education agencies across the US for information on student enrollment in dedicated data science courses.

LIMITATIONS

While our counts of data science student enrollment are designed to be as comprehensive as possible, this method comes with certain limitations that make it challenging to capture the true number of students who receive instruction in data science:

- Course codes only identify students enrolled in dedicated data science courses; they cannot be used to count students receiving an integrated data science education or a data science content module in a course that is not explicitly about data science.
- Course catalog practices vary by state but are generally most relevant for general secondary school education; they may not include students enrolled in dedicated data science courses via career and technical education programs, in a dual-enrollment program, or in K–8 (the vast majority of data science courses we identified are offered in grades 9–12).
- SEAs do not typically receive student enrollment data from every K–12 education institution in their respective states and may not report data science student enrollment from private and charter schools, or other specialized yet formal learning environments.
- SEAs sometimes mask student enrollment counts by reporting enrollment in ranges (we include this data by taking the minimum of the range) or omit student demographic information entirely.
- Schools, school districts, and SEAs often maintain discrete student information systems, and nonmatching elements generate data fidelity loss that can lead to an undercount of students, such as when a local education agency's "data science" course is recoded as "statistics and probability" when reported to the SEA's student information system.
- Several SEAs do not maintain any statewide course catalog and others were unresponsive to solicitations for student enrollment data.

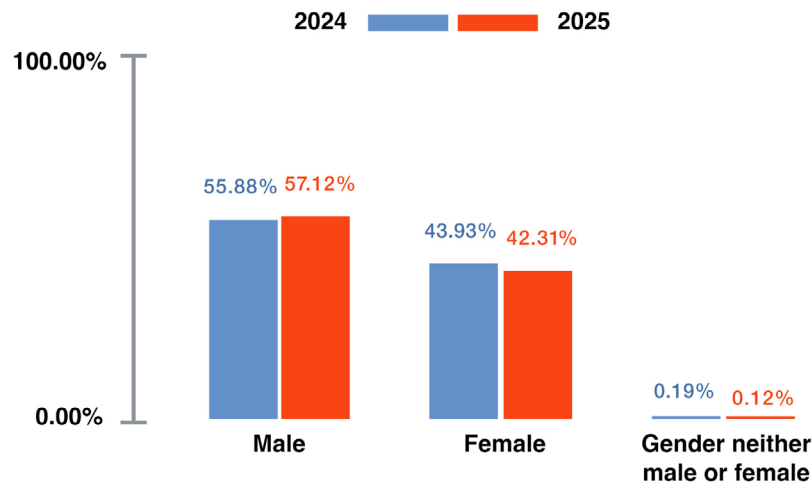
DATA SCIENCE STUDENT ENROLLMENT

METHODOLOGY CHANGES FROM 2024 TO 2025

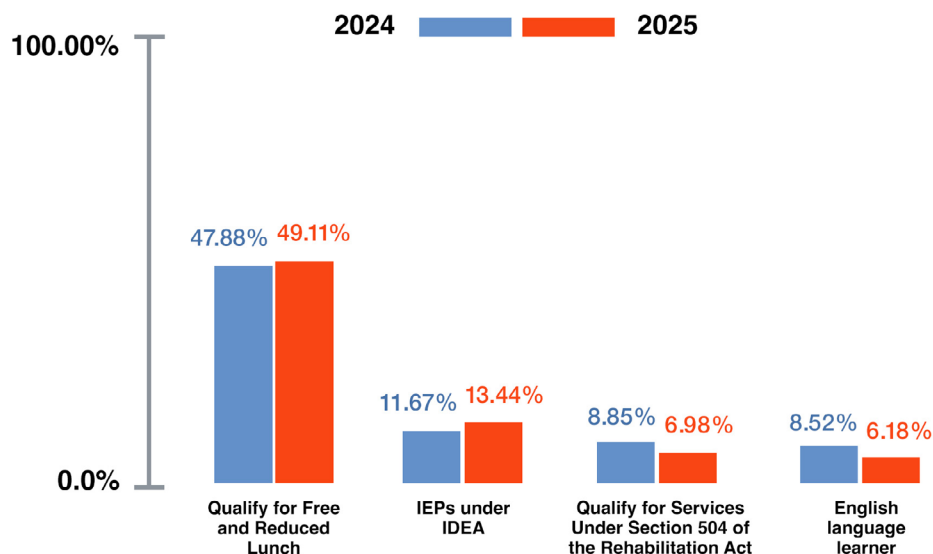
Due to significant changes in our process for data collection and collation – namely, more restrictions on student counts – we are reporting fewer students enrolled in data science education this year than we did last year. In particular, this year we required CPN organizations to report only students for whom the state of enrollment is known. We additionally required CPN

organizations to establish whether reported students were enrolled in dedicated data science classes or in data science content modules. Finally, our count of students enrolled in data science education is subject to reporting by SEAs, some of which reported data for only one year. Due to these changes, counts of student enrollment in 2025 are not comparable to the counts that we reported in 2024. We anticipate fewer methodological changes – and the possibility of year-over-year comparison of data – in future years.

Aggregated SEA-Reported Gender by Year



Aggregated SEA-Reported Status by Year



DATA SCIENCE STUDENT ENROLLMENT

NATIONAL STUDENT ENROLLMENT
AND TEACHER PROFESSIONAL
DEVELOPMENT

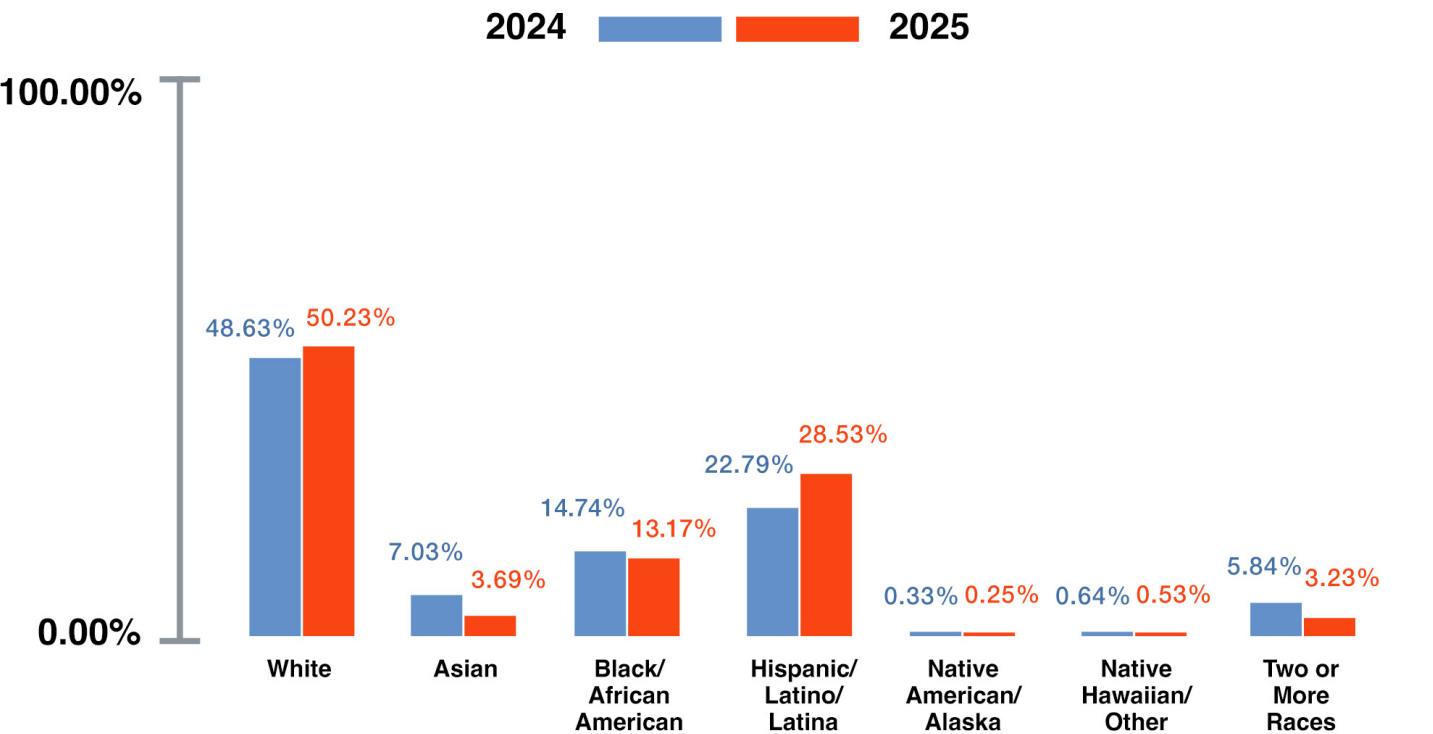
During the most recent school year with data available, CPN organizations and SEAs reported a combined **70,190 students** enrolled in data science classes or content modules. 33,548 students were enrolled in dedicated data science classes; 36,110 students were enrolled in classes that included data science content modules (532 students across 13 schools were not classified as enrolled in either dedicated classes or content modules).

CPN organizations and SEAs also reported a combined **958 schools**, including 880 public schools across 630 school districts. These counts include 78 private schools and 157 public school districts with district-level student enrollment.

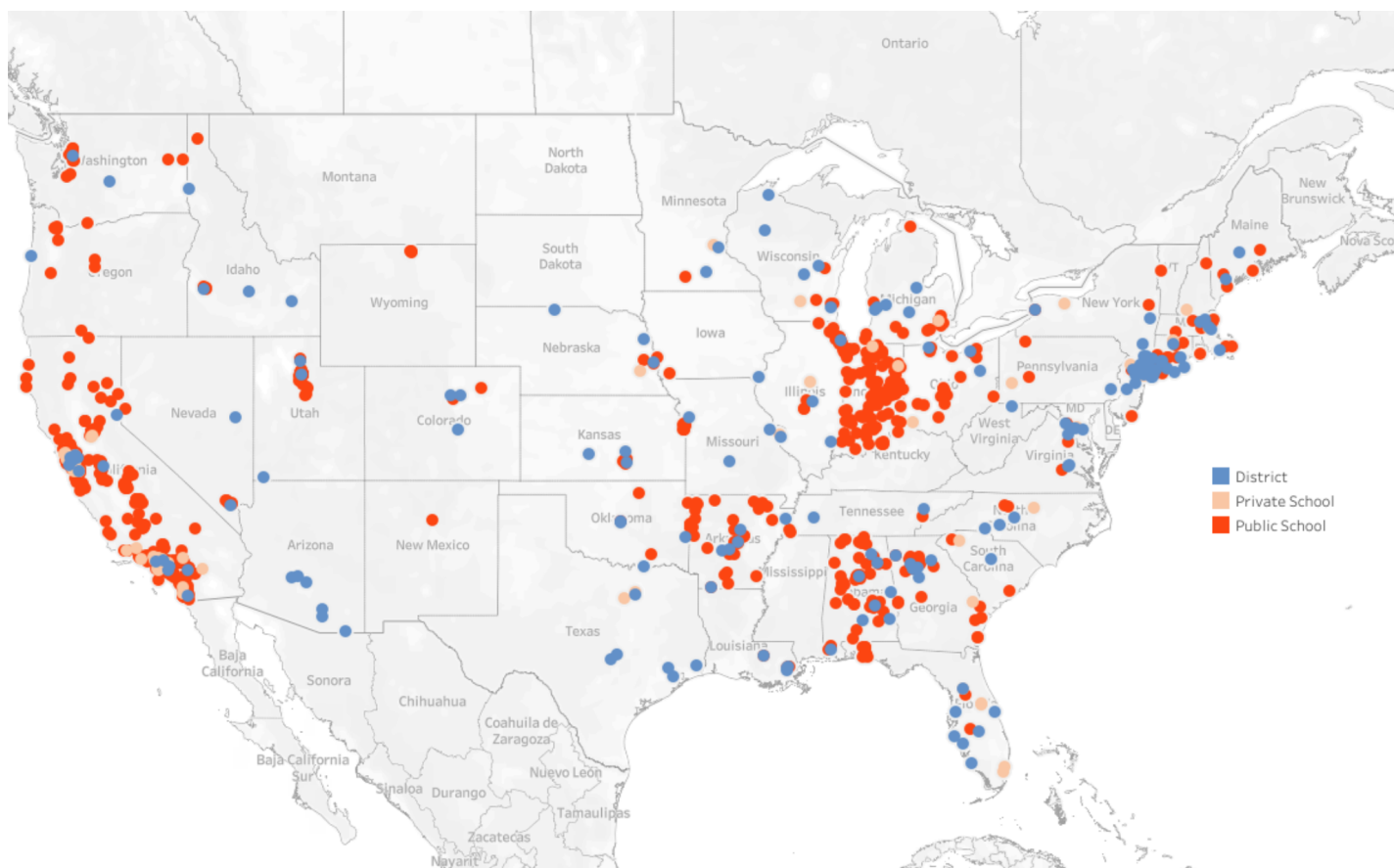
Finally, CPN organizations reported a combined 3,091 teachers nationwide who participated in an estimated total of **23,121 data science professional development hours**.

Disaggregations of data science student enrollment by state can be found in the State Summaries section of this report. 

Aggregated SEA-Reported Race/Ethnicity by Year



DATA SCIENCE STUDENT ENROLLMENT



Location of schools and districts reported to Data Science 4 Everyone in 2025

NATIONAL DEMOGRAPHY

Eleven SEAs reported aggregated demographic characteristics of a combined 5,632 students. This represents a significant increase from last year, when six SEAs reported on the demographic characteristics of 3,615 students. Unlike our counts of student enrollment between 2024 and 2025, these demographic data are suitable for year-over-year comparison. The demographic characteristics of students enrolled in data science classes reported by SEAs remained consistent between 2024 and 2025, with only minor variations reported by gender, race/ethnicity, and student status.

While this sample is only a fraction of the student populations of those states, we are hopeful that we will continue to see positive student enrollment trends in dedicated data science courses in public schools. Policymakers and educators have long struggled to establish access parity and expand opportunities for underrepresented communities across education in STEM disciplines. **Data science in K-12 is still nascent, but we are encouraged by early indicators of equity in participation** and committed to ensuring that all K-12 students have access to an education in data science, no matter who they are or where they go to school.

IMPLEMENTATION CASE STUDIES GENESEE INTERMEDIATE SCHOOL DISTRICT



Flint,
Michigan

**ALMA
COOPER**
KNIGHT-HENNESSY
SCHOLAR, MISS USA,
STANFORD UNIVERSITY

"Growing up in Michigan, I thoroughly enjoyed attending STEM camps at Michigan State and the University of Michigan. It's great to see data science growing amongst youth in Michigan. It is so important for the field's growth to include diversity of thought, skills and perspective. I'm thrilled to see so many young minds contributing to this vast and expanding field of study!"

GENESEE INTERMEDIATE SCHOOL DISTRICT

Genesee Intermediate School District (GISD) is an education service agency based in Flint, Michigan, that serves 21 neighboring school districts and 14 public school academies. Most students in GISD score below the state average on math exams, prompting Amber Zavicar, Genesee Intermediate School District's Math Specialist, to seek an intervention, specifically to improve Algebra 2 outcomes. In January 2024, Amber received a scholarship to attend [YouCubed's Mathematics Leadership Summit](#) at Stanford University. When she returned, Amber was inspired to apply for a grant through [section 23h of the 2023-2024 Michigan School Aid Bill](#), which provided for \$25 million to support mathematics education. In September 2024, GISD was awarded \$108,993 by the Michigan Department of Education to support the implementation of a new course – Algebra II: Data Science.

Algebra II: Data Science was designed to ensure high expectations, learning content relevant to students' lived experiences, and a multilayered support system for teachers. The initial set of eight units, which were inspired by YouCubed curricular materials, will be supplemented by an additional four units aligned to learning standards. Districts will have the flexibility to implement the course as data science or computer science, or to fulfill students' fourth-year math requirement.

Amber laid the groundwork to ensure the grant would have buy-in across GISD: six districts committed to teach at least one section of Algebra II: Data Science and to support professional development for at least two teachers and one administrator. Amber also secured partnerships with the nearby University of Michigan-Flint Institute of Data Engineering, Analytics, and Science; YouCubed; and the research and business divisions of GISD. Additionally, Amber received \$36,000 in funding from , which works to "advance PK-12 STEM education" and is an office of the Michigan Department of Labor and Economic Opportunity. Funding from MiSTEM covered an initial round of teacher professional development, while the section 23h grant provided funding for further professional development, teacher and administrator stipends, and reimbursements to districts for substitute teachers.

During the 2024-2025 school year, the first year of Algebra II: Data Science, 21 educators attended professional development facilitated by YouCubed, and about 200 students enrolled in the course across five school districts. The program targeted seniors who were unsuccessful in a traditional Algebra II classroom, as well as juniors anticipated to be unsuccessful; in future years the program will target any student looking for an alternative to a traditional Algebra II course. The first year of the course culminated in Data Science Day, where 150 students participated in sessions on AI, data science, and cybersecurity at the University of Michigan-Flint. Attendees included representatives from the offices of several elected officials and 2024 Miss USA pageant winner Alma Cooper, a Michigan native, West Point graduate, and US Army First Lieutenant who is pursuing a master's degree in data science at Stanford University. Students also received no-strings-attached scholarships providing for a free data science course at the University of Michigan-Flint. 📊



IMPLEMENTATION CASE STUDIES KIPP NYC



MISHA JEMISON
KIPP NYC
DIRECTOR OF
SOCIAL STUDIES

"Our desire to incorporate data literacy and analysis into Social Studies curricula is directly related to the need to cultivate an informed and connected citizenry."

KIPP NYC

In April 2019, KIPP NYC, an organization of 18 tuition-free public charter schools in New York City, was awarded a \$750,000, three-year grant by the Robin Hood Foundation to embed computational thinking and data literacy in K-5 classrooms. Though interrupted by the COVID-19 pandemic, KIPP NYC's program successfully implemented computational thinking instruction across eight schools, and over 500 fifth-grade students completed a social studies course that includes at least one unit on data science. Many of the curricular resources developed through the project are [freely available via KIPP NYC](#), and more are available upon request.

The beginning of the work in 2019 was led by Chéla Wallace, then-Director of Science, Technology and Engineering of KIPP NYC; Leslie Kim, Chief Academic Officer of KIPP NYC; and Hilah Barbot, then-Director of Science, Technology and Engineering for the KIPP Foundation. Misha Jemison was one the pilot teachers in 2019 and became the Director of Social Studies in 2021. The addition of Misha to the academic team allowed KIPP NYC to continue the expansion of the data science vision.

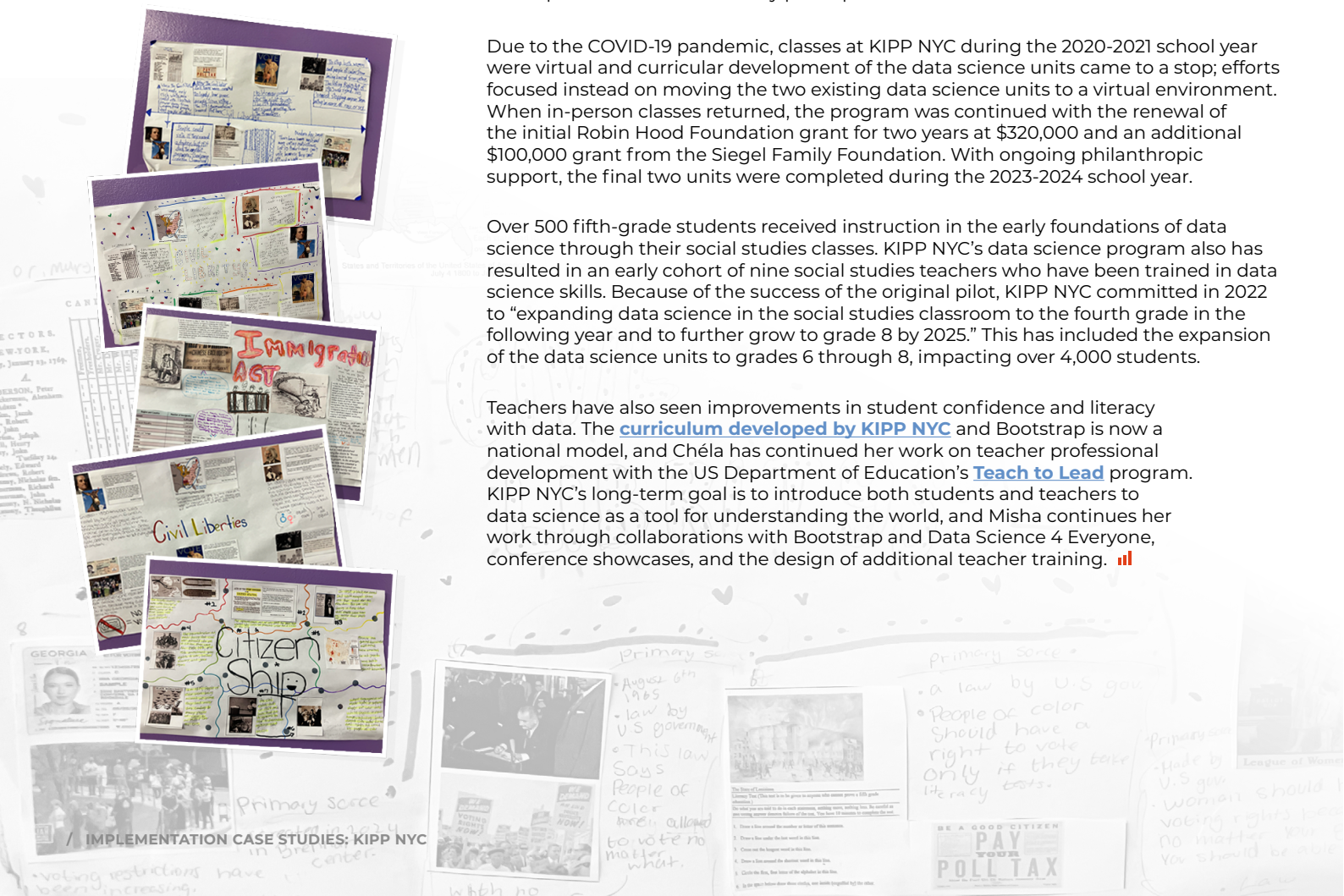
The initial award of the Robin Hood Foundation grant provided funding for a four-unit, low-code data science pilot for fifth graders that utilized Google Sheets for data manipulation and visualization. Each unit provides 10 to 15 hours of instruction. KIPP NYC chose to implement the data science pilot in social studies due to its lack of standardized testing in middle school classrooms, making it ideal for classroom innovation and experimentation. Chéla further points out that "we so rarely talk about the way social scientists use data to explore and explain the world, and here we had the opportunity to turn students into social scientists." And because students began receiving instruction in computational thinking in earlier grades, future cohorts would begin their first data science projects with some familiarity with coding.

During the summer of 2019, KIPP NYC partnered with Kathi Fisler and Nancy Pfenning of [Bootstrap](#) to write the first two data science units – each consisting of 10 lessons – with the intention of piloting them during Fall 2019 and Spring 2020. Bootstrap provided unit-based storylines, datasets, and workbooks. KIPP NYC worked with Bootstrap to refine the resources and to develop the curriculum guide for teachers, including lesson plans and guidance on unit projects. The inaugural unit was designed around the sudden collapse of the Maya civilization; students use data to explore questions such as, "What can past civilizations teach us about the environment's role in a society's survival?" The pilot began in October 2019 with five teachers who received a two-day, Bootstrap-led professional development course where they participated in all 10 lessons as students.

Due to the COVID-19 pandemic, classes at KIPP NYC during the 2020-2021 school year were virtual and curricular development of the data science units came to a stop; efforts focused instead on moving the two existing data science units to a virtual environment. When in-person classes returned, the program was continued with the renewal of the initial Robin Hood Foundation grant for two years at \$320,000 and an additional \$100,000 grant from the Siegel Family Foundation. With ongoing philanthropic support, the final two units were completed during the 2023-2024 school year.

Over 500 fifth-grade students received instruction in the early foundations of data science through their social studies classes. KIPP NYC's data science program also has resulted in an early cohort of nine social studies teachers who have been trained in data science skills. Because of the success of the original pilot, KIPP NYC committed in 2022 to "expanding data science in the social studies classroom to the fourth grade in the following year and to further grow to grade 8 by 2025." This has included the expansion of the data science units to grades 6 through 8, impacting over 4,000 students.

Teachers have also seen improvements in student confidence and literacy with data. The [curriculum developed by KIPP NYC](#) and Bootstrap is now a national model, and Chéla has continued her work on teacher professional development with the US Department of Education's [Teach to Lead](#) program. KIPP NYC's long-term goal is to introduce both students and teachers to data science as a tool for understanding the world, and Misha continues her work through collaborations with Bootstrap and Data Science 4 Everyone, conference showcases, and the design of additional teacher training. 



IMPLEMENTATION CASE STUDIES EVANSTON TOWNSHIP HIGH SCHOOL



Evanston
Township,
Illinois

JAKE MILLS

EVANSTON TOWNSHIP
HIGH SCHOOL MATH
DEPARTMENT CHAIR

"Data science education at the K-12 level develops critical thinking skills essential for navigating our data-driven world, teaching students to ask better questions, evaluate evidence rigorously, and communicate insights effectively through collaborative group projects that mirror real-world teamwork."

EVANSTON TOWNSHIP HIGH SCHOOL

Evanston Township High School (ETHS) is a large and well-resourced public school serving a diverse population of over 3,500 students in the suburbs of Chicago. ETHS has rapidly grown its year-long data science course from three sections and 75 students in the 2022-2023 school year to six sections and 150 students in the 2025-2026 school year. Data science at ETHS is grounded in a school culture that has historically supported innovation in mathematics education: ETHS has previously introduced courses like Geometry and Construction, Algebra in Entrepreneurship, Algebra and Coding, and STEAM Design Thinking and Innovation (developed in partnership with Northwestern University). ETHS' size, internal resources, and culture of administrative support have all contributed to the ongoing success of its data science program, which is funded without reliance on external grants.

Originally spearheaded by Dale Leibforth, ETHS Director of Early College and Career Experiences and former Mathematics Department Chair, the course was designed by adapting and expanding on YouCubed curricular resources. (Data science at ETHS is now overseen by Jake Mills, the current Math Department Chair.) Dale initially recruited just three math teachers – Sarah Apfelbaum, Neva Curry, and Erin Slade – who had an interest in teaching and learning data science, and worked with them to design a course "that is accessible and interesting to all of our students." Teacher support has included professional development provided by YouCubed, a dedicated planning block, full autonomy over the course's curriculum and lesson planning, and coding assistance and instruction provided by ETHS' instructional technology team. Classroom technology for the course features Google Sheets, Python, EduBlocks, Google Colab, DESMOS, and [CODAP](#); Tableau and R are being considered for future cohorts.

Data science at ETHS is different from a traditional math course and functions as a detracked "pathway to honors," where all students are exposed to honors-level content. Each unit is a self-contained project built around solving real-world problems. Students have explored topics including Evanston's sustainability policies and AI's impact on the job market through projects in this course. Projects are based on iterative investigations using data, with students required to formulate investigative questions, collect and consider data, perform modeling and analysis, and communicate their findings to classmates. Teachers deliberately avoid giving students prepackaged narratives, rather encouraging students to explore data, draw their own conclusions, and work in groups to develop durable communication and collaboration skills. Student projects often address community concerns: students' data analysis presentations to school administrators have resulted in changes to ETHS' lunch period, tardy policy, and academic study center. ETHS's data science teachers say that the course's project-based approach helps them gauge student understanding of course material better than traditional tests.

ETHS's goal is for every student to experience some form of data science during their high school career. The data science team sees the course not as a replacement for all traditional math, but as a critical and modern option, especially for students less served by the ACA-to-calculus pathway. College credit recognition has been a barrier to wider recognition of the course. The University of Illinois Urbana-Champaign currently does not recognize data science as a math course, and ETHS is working to advocate for the course at regional colleges and universities. Progress has already been made at the state level: ETHS's data science program has helped create a data science course code at the Illinois State Board of Education and secured its inclusion as a College and Career Readiness Benchmark.

To educators and administrators interested in implementing a data science course at their own schools, the ETHS data science team says, "You don't have to be an expert. Use what you have by leveraging your school's community and existing staff, and seek out external resources, too. There are people out there who want to help. You won't regret taking the leap." 



IMPLEMENTATION CASE STUDIES LOUDOUN COUNTY PUBLIC SCHOOLS



Loudoun
County,
Virginia



**DR. STEPHEN
BURTON**
SCIENCE CONTENT
SPECIALIST
LCPS

LCPS' focus on empowering teacher-led, grassroots adoption has been key in overcoming initial discomfort among teachers uncomfortable with data or statistics, and Burton and Timothy have seen a district-wide shift from lecture-based to data-based instruction in science classrooms.

LOUDOUN COUNTY PUBLIC SCHOOLS

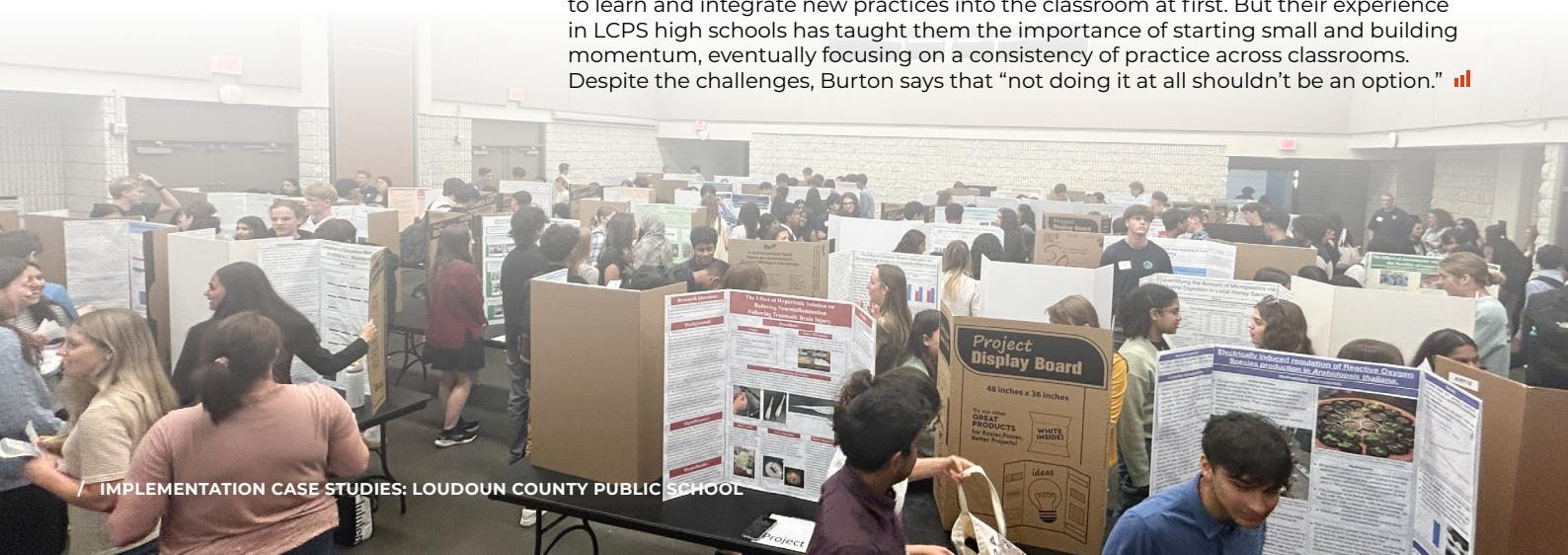
Loudoun County Public Schools (LCPS), one of the largest and fastest-growing school districts in Virginia, partnered with [DataClassroom](#) in 2019 to bring data science to high school science classrooms. Loudoun's multi-year implementation combined professional development, student research, and optional teacher adoption into a robust program that has students and teachers using advanced tools for data collection, manipulation, and analysis. Currently, LCPS maintains over 4,000 student and nearly 150 teacher accounts with the new data science program. LCPS' implementation was also featured in a 2024 Data Science 4 Everyone [blog post](#).

Instead of designing new courses dedicated to data science learning, LCPS' implementation of DataClassroom emphasizes the integration of data science concepts into existing science courses. Dr. Stephen Burton was hired in 2010 as a Science Content Specialist to bring authentic science experiences into classrooms where teachers had little experience with data. He was joined in 2023 by Darielle Timothy, when she became Science Supervisor after years of teaching at LCPS. Existing science standards in Virginia already call for the independent application of skills related to data analysis and interpretation and the communication of results. Burton and Timothy's integrated approach to data science integration, however, recognizes that the resources and urgency to enact authentic student experiences and skill-building in digital data analysis were still lacking.

Collaboration and partnerships have been an essential component of LCPS' success. Timothy recommends connecting with local institutions to pursue funding opportunities: staffing, teacher professional development, and curriculum development for the program have been funded in part by a grant from a nearby science research institution. Dr. Aaron Reedy, CEO of DataClassroom, sees LCPS' implementation as a thoughtful model that prioritizes long-term success over short-term metrics; though adoption by teachers is optional and was initially limited, the results have been robust and sustainable. For example, while early professional development sessions were led by Reedy, ongoing training is now provided by teacher-leaders. LCPS' focus on empowering teacher-led, grassroots adoption has been key in overcoming initial discomfort among teachers uncomfortable with data or statistics, and Burton and Timothy have seen a district-wide shift from lecture-based to data-based instruction in science classrooms.

Among the earliest adopters of DataClassroom were teachers of science research honors classes: Research Earth Science Honors, Research Biology Honors, and Research Chemistry Honors. Instruction in these courses emphasizes the development of expertise to conduct in-depth scientific research, and teachers were quick to recognize the importance of advanced tools for inferential statistics and data management. Students use DataClassroom to record, analyze, and visualize the data that they collect as part of their research projects, and students' work is sometimes selected for inclusion in the competitive [Loudoun County Regional Science and Engineering Fair](#). Teachers of traditional science courses have also incorporated DataClassroom into lessons and labs, using it as a supplemental resource for phenomenon-based instruction built around the examination of a natural occurrence or process. For example, students might use datasets on cancer rates available within DataClassroom's platform to understand mitosis and learn about data practices while simultaneously covering core curricular content.

The next area of focus is an expansion into middle schools. LCPS recently began offering middle school teachers access to DataClassroom, and Timothy and Burton are working to convince them that you don't need to be a "math person" to teach students about data science. Statistical and quantitative methods can be added carefully to unlock additional conceptual depth of the material slowly over time. Timothy and Burton recognize that there's a significant time commitment for teachers to learn and integrate new practices into the classroom at first. But their experience in LCPS high schools has taught them the importance of starting small and building momentum, eventually focusing on a consistency of practice across classrooms. Despite the challenges, Burton says that "not doing it at all shouldn't be an option." 



IMPLEMENTATION CASE STUDIES ALABAMA STATE DEPARTMENT OF EDUCATION



Montgomery,
Alabama

**KERI
RICHBURG**
AMSTI MATHEMATICS
ADMINISTRATOR

"Good things take time and are worth fighting for, and this work is providing opportunities for students and teachers to succeed."

ALABAMA STATE DEPARTMENT OF EDUCATION

Quanthub, a Birmingham-based educational technology platform, is driving a statewide effort to integrate data and AI literacy into Alabama's K-12 system by blending professional development, career readiness certifications, and standards-aligned learning for students and teachers. What began as a school-level pilot program has rapidly evolved into a state-supported initiative, and Quanthub works with over 125 schools and districts across Alabama and beyond. Quanthub's partnership with the Alabama State Department of Education (ALSDE) was also featured in a 2024 Data Science 4 Everyone [blog post](#), and Quanthub was named as a State Educational Technology Directors Association [Emerging Partner](#) in 2024.

Quanthub has been working with teachers to integrate data literacy into Alabama classrooms since the 2021-2022 school year. Early adopters such as Destiny Langford Ramey, a computer science teacher, were taken with Quanthub's individualized and gamified approach to student learning. Destiny now serves as a Quanthub Data Ambassador and provides peer-support to other teachers. To anyone intimidated by the prospect of bringing data literacy into their own classroom, Destiny says, "Do it! Data literacy will prepare your students for a world that is changing fast."

Quanthub's partnership with the ALSDE began with a pilot program in the 2022-2023 school year, when the platform was integrated into classrooms across 16 schools. The program was expanded in the 2024-2025 school year, when Quanthub began offering [two dedicated courses](#): Data Analytics as a Career and Technical Education course, and Applied Data Science as an advanced high school math course. Quanthub's dedicated courses are currently offered in seven Alabama schools. Additionally, Quanthub professional development services are made available to teachers across Alabama through the ALSDE's Alabama Math, Science, and Technology Initiative (AMSTI). AMSTI operates regional inservice centers that provide free instructional support and materials to Alabama STEM educators, and Quanthub services are available at all 11 of AMSTI's inservice centers. In the 2024-2025 school year, 1,122 teachers received professional development certifications through Quanthub. Regarding their successful partnership, Keri Richburg, AMSTI Mathematics Administrator, says, "Good things take time and are worth fighting for, and this work is providing opportunities for students and teachers to succeed."

Keri also says that the ALSDE's partnership with Quanthub has been especially opportune: Alabama's mathematics standards were revised in 2019, and the platform provides premade lesson plans, assessments, and real-world datasets that are aligned both to the new standards and to the ACT. Quanthub also offers student certifications and microcredentials that qualify as Alabama Career and Technical Education Career Readiness Indicators. During the 2024-2025 school year, nearly 5,000 students were certified via Quanthub.

Quanthub also works to provide students with career opportunities outside of the classroom through its Data Scholars internship program, which is operated in [partnership with Innovate Alabama](#). Launched in 2024, the program pairs 11th and 12th graders with paid summer internships. Internships may be virtual, hybrid, or in-person, and include professional development and mentorship in addition to the students' work projects. At the end of the program, students are required to present to a panel of industry experts. Forty-three Data Scholars are participating in the 2025 program, which has expanded to include two- and four-year college students.

Since Quanthub's introduction into Alabama classrooms, teachers have reported both stronger confidence teaching data-heavy standards and more engaged students, especially those less motivated by traditional classroom instruction. Students earning certifications through the platform have also seen increased possibilities for the future of their education and careers. Quanthub and AMSTI hope to see further expansion into Alabama classrooms, and Quanthub is working to implement its platform across nonprofits, governments, and libraries. Dr. Veronique Brown, Quanthub's Manager of K-12 Outreach, says that she wants students, teachers, and employers to "stop thinking about data literacy as an adjunct to education, and to recognize that this is a primary skill that we all need to succeed." 



DS4E STUDENT VOICES



**NANCY
OROZCO ROSALES**
RAMAPO COLLEGE OF
NEW JERSEY
DATA SCIENCE MAJOR
MINOR IN PUBLIC HEALTH

"My undergraduate courses in data science have inspired me to play an active role in building a world where opportunity doesn't depend on where you are born, what you look like, or how much money you have."

HARNESS THE POWER OF DATA

Receiving my formal education in an urban, socioeconomically disadvantaged community opened my eyes to countless systemic injustices and left me with more questions than answers. My educational and life experiences have made me realize that the society that we operate in is oftentimes one-sided – one that habitually does not favor already marginalized communities. Statistically speaking, being the daughter of immigrants who was raised in a single parent low-income household, I was never supposed to access higher education to begin with - it was those same statistics that literally saved me. As a burgeoning high school senior, I enrolled in AP Statistics, where I was exposed to a plethora of topics - gerrymandering, medicine, online dating, sports, technology, and more - and the way in which humanity can harness the power of data to make our world a better place.

The critical challenge to impact the future by cultivating the present is compounded when you factor in the realities that are presented in urban, socioeconomically impacted communities. Researchers at Harvard University have uncovered evidence that growing up in a poorer neighborhood or distressing and traumatic environments can physiologically change the brain. A quality education in data science is vital because of the data-driven era we exist in — raw data, graphs, charts, rates, percentages, probabilities, averages, forecasts, and trend lines have become an inescapable part of our everyday lives. As consumers of goods, services, and members of society, it is imperative that children develop the statistical capacity to make intelligent, data-informed decisions. For me, data science is much more than a career path - it is a mechanism by which we can dismantle centuries of systemic inequity that have marginalized and oppressed people of color.

Being a first-generation Latina working towards a degree in data science is no easy feat and more often than not, I feel overwhelmed, anxious, and downright confused. But then I remember why I am doing this. Fueled by the desire to be the person I needed when I was younger, every opportunity I am blessed to experience in this space provides a stark reminder of how access can change the trajectory of an individual's life and influence the overall direction of our society. My undergraduate courses in data science have inspired me to play an active role in building a world where opportunity doesn't depend on where you are born, what you look like, or how much money you have. Despite many issues seemingly not resolvable in our lifetime, fighting for equality and opening doors for humans who have not yet been born doesn't make the struggle irrelevant, it makes it that much more important.

To educators and policymakers around the world, underrepresented and historically marginalized students often lack the cultural capital to navigate and access data science opportunities in today's global society. Design learning environments and opportunities that stoke your students' intellectual curiosity by allowing them to experience a range of real world applications of statistics so they may access spaces they may not know exist. Today's students are tomorrow's voters – empower your students to leverage their cultural experiences, insights, and data science expertise – their voice – to make their communities and our world that much of a better place. Data, at its core, is equity and power – teach your students how to leverage and drive data, rather than being driven by it.

Nancy Orozco Rosales attends Ramapo College Of New Jersey and is majoring in Data Science with a minor in Public Health. ▮▮



DS4E STUDENT VOICES



AUDREY YOUNG

HIGH SCHOOL SENIOR
WOMAN OF DATA SCIENCE
AMBASSADOR, HOST OF
CARPE DATUM PODCAST

"I considered gender representation in data science. Simply saying there's a gap conveys the idea, but highlighting a real statistic (only 15% of the data science field is women) makes the story tangible and hard to ignore."

I DIDN'T START OUT INTERESTED IN DATA SCIENCE.

I didn't start out interested in data science. In fact, I used to avoid STEM altogether. Math felt like a series of formulas to memorize. That changed completely in my AP Statistics class, where I discovered that math could be a tool to understand the world. One example that stuck with me was learning about Bayes' Theorem and its application in search-and-rescue operations. Suddenly, I saw that math and statistics weren't just abstract concepts, they could solve real problems. This realization shifted my perspective, and I began to see data as a language for understanding uncertainty and making sense of the world.

That perspective became even clearer when I conducted research on the correlation between mental and physical health in older adults. I found a positive correlation between the two. While it wasn't a groundbreaking finding, it showed me how powerful data can be: it can take an idea that might otherwise be overlooked and make it concrete to prompt action.

This lesson became especially clear when I considered gender representation in data science. Simply saying there's a gap conveys the idea, but highlighting a real statistic (only 15% of the data science field is women) makes the story tangible and hard to ignore. Recognizing this, along with the growing need for data literacy in a data-driven world, inspired me to become a Women in Data Science Ambassador and launch Carpe Datum, a podcast that brings data science to life in ways people can relate to and understand.

Inspired by these experiences, I began sharing what I was learning with others. As a peer tutor for the new class Explorations in Data Science, I got to see students' excitement as they uncovered patterns, asked thoughtful questions, and realized how these skills could apply to issues they care about. Working with data taught me that it's not just about numbers, it's about communicating insights in a way that others can grasp and act on, and helping people feel confident in exploring and using data themselves.

These experiences have shown me why data science education in K-12 is so important. It helps students think critically about the world and use evidence to make sense of the patterns and problems around them. By learning how to use data early, students gain the skills and confidence to approach real problems, challenge assumptions, and make meaningful contributions in both STEM and the communities they care about.

Audrey is a high school senior and aspiring data scientist who combines her creativity with data-driven thinking to make complex concepts accessible. As a Women in Data Science (WiDS) Ambassador and host of the Carpe Datum podcast, she champions diversity in STEM through datathons, community initiatives, and science communication. 

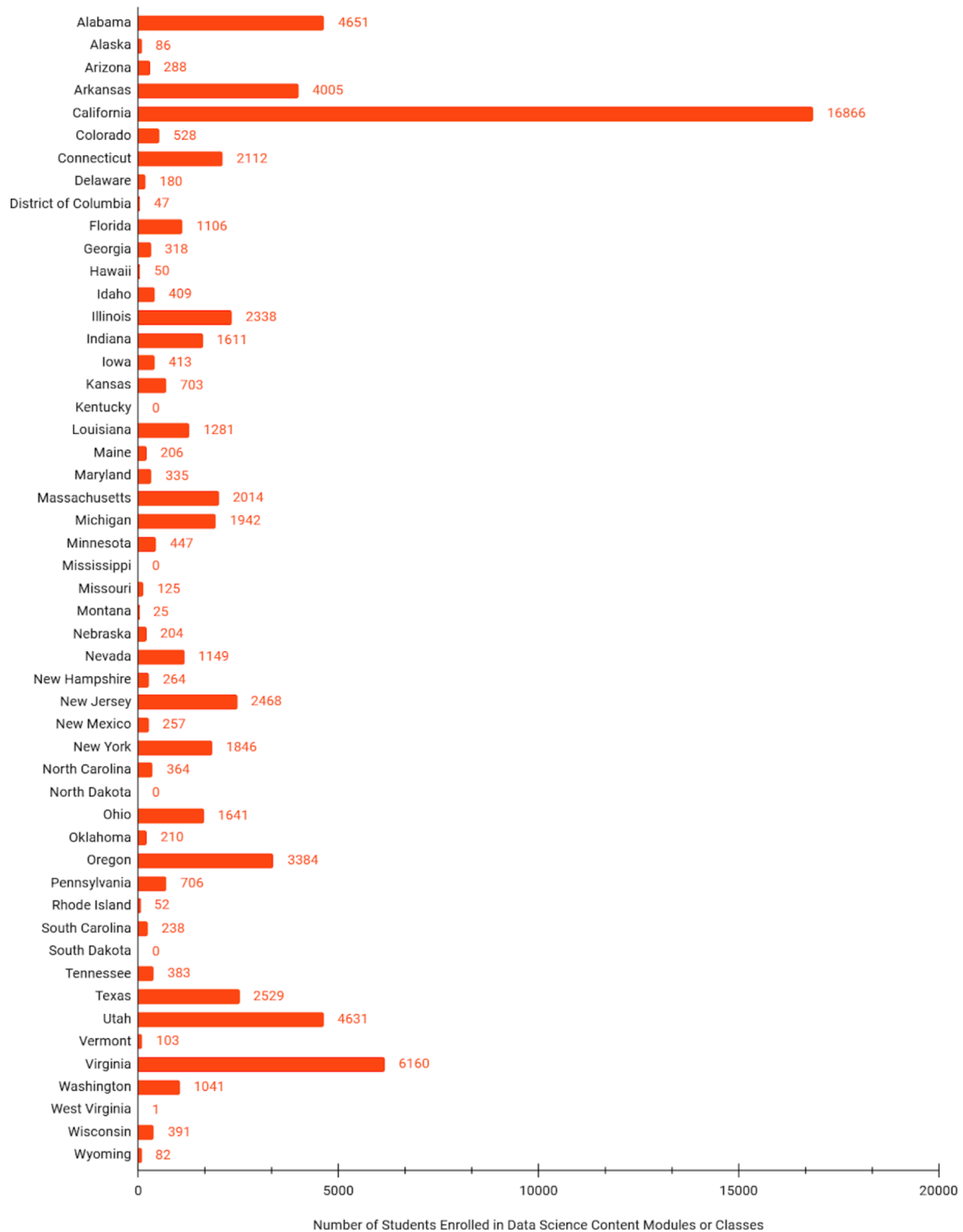


STATE SUMMARIES

STUDENT ENROLLMENT BY STATE: 2024-2025



Student Enrollment by State: School Year 2024 - 2025

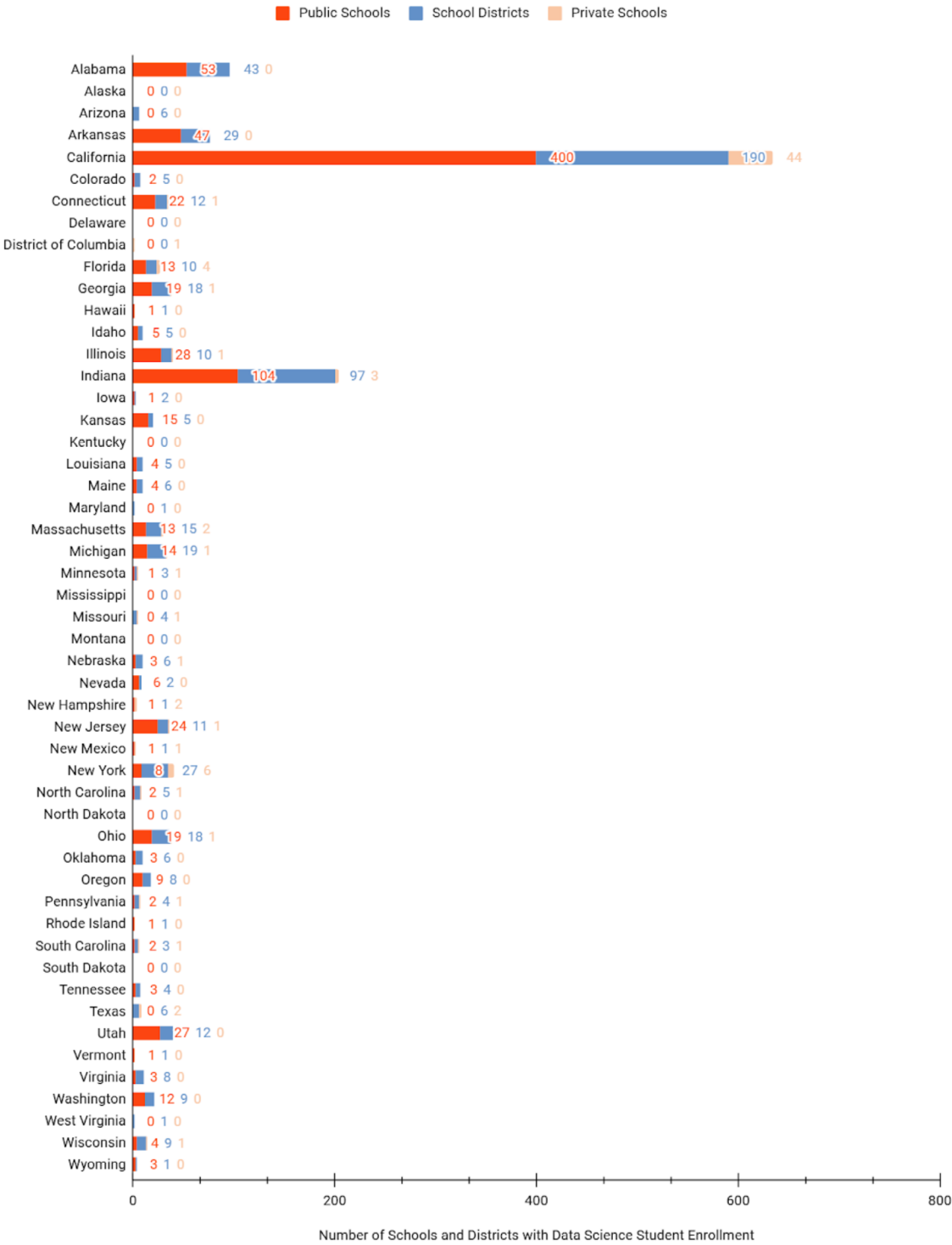


STATE SUMMARIES

SCHOOLS AND DISTRICTS BY STATE: 2024-2025



Schools and Districts by State: School Year 2024 - 2025

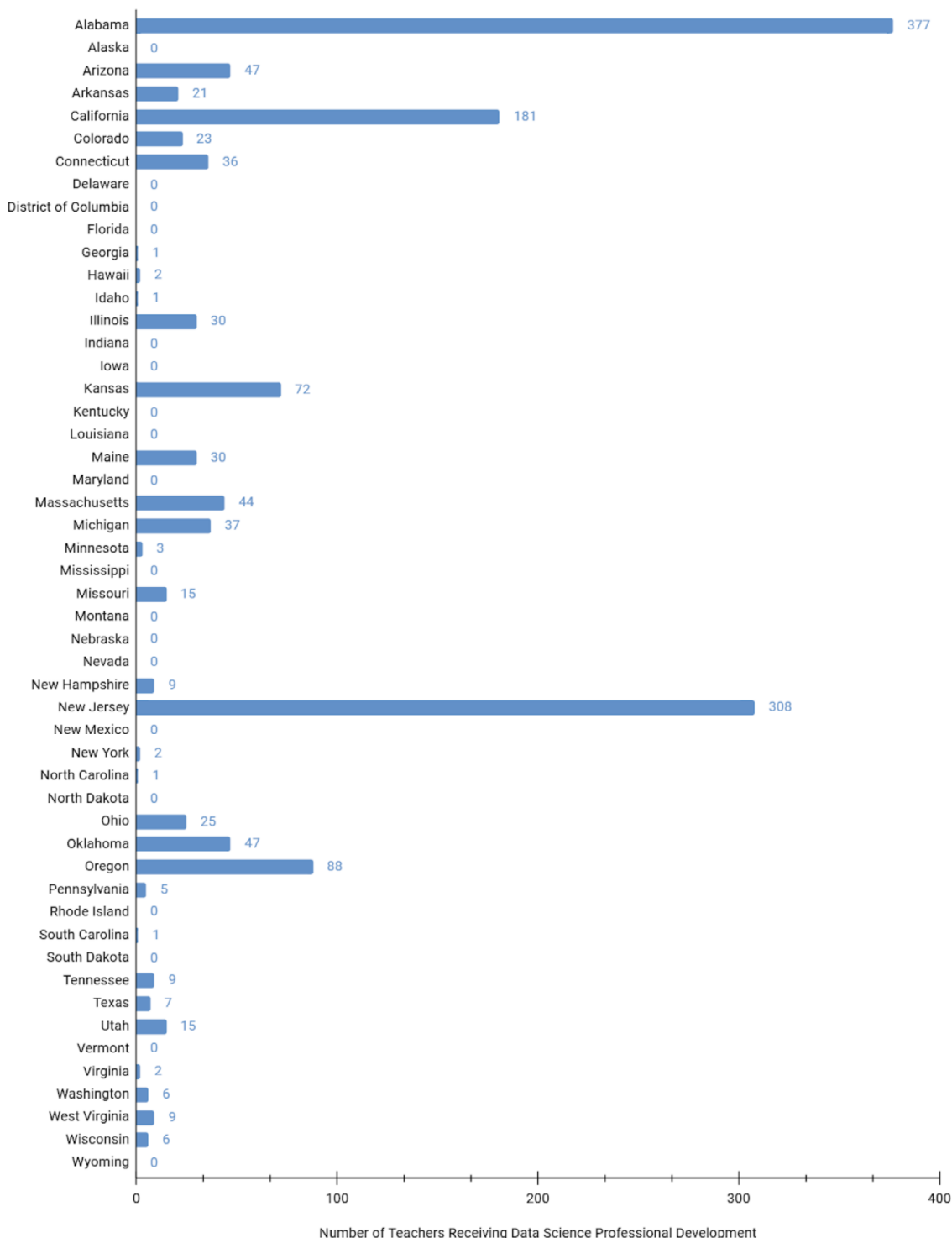


STATE SUMMARIES

TEACHERS RECEIVING PROFESSIONAL DEVELOPMENT BY STATE



Teachers Receiving Professional Development by State: School Year 2024 - 2025



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

ALABAMA

Data Science Courses in Course Catalog

25053G1000	QuantHub Applied Data Science (Pilot): 1.00 Credit
25053G0500	QuantHub Applied Data Science (Pilot): 0.50 Credits

Student Enrollment

104	Students in dedicated data science classes
4,547	Students in classes with data science content modules

Schools and Districts

53	Public schools with data science student enrollment
43	Public school districts with data science student enrollment
0	Private schools with data science student enrollment

Teacher Professional Development:

377	Teachers receiving professional development in data science
6,000	Estimated number of teacher professional development hours

In 2022, the Alabama State Department of Education **partnered** with and funded curriculum provider and assessment educational technology company **QuantHub** through ESSER II set-asides, building data literacy modules for integration across K-12 school subjects that included math, computer science, and Career and Technical Education. The pilot was initially implemented in 16 schools.

The Alabama State Department of Education expanded its partnership with QuantHub in the 2024-2025 school year to include two dedicated data science courses: Data Analytics as a Career and Technical Education course, and Applied Data Science as an advanced high school math course. QuantHub’s platform is additionally offered as a free resource to students and teachers through the Department’s Alabama Math, Science, and Technology Initiative.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

ALASKA

Data Science Courses in Course Catalog

Alaska does not maintain a publicly available statewide course catalog; school districts are not required to be SCED-compliant.

Student Enrollment

- 86
- Students in dedicated data science classes
- 0
- Students in classes with data science content modules

Schools and Districts

- 0
- Public schools with data science student enrollment
- 0
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours

Data science is included among Alaska’s Computer Science Special Topics courses

AK



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

ARIZONA

Data Science Courses in Course Catalog

AZ02091 - Data Science

Arizona's course catalog also includes several courses on artificial intelligence that map to SCED code 25052 - Data Science.

Student Enrollment

60	Students in dedicated data science classes
228	Students in classes with data science content modules

Schools and Districts

53	Public schools with data science student enrollment
43	Public school districts with data science student enrollment
0	Private schools with data science student enrollment

Teacher Professional Development:

47	Teachers receiving professional development in data science
126	Estimated number of teacher professional development hours

In 2022, the Arizona Department of Education organized a statewide educator training cohort for integrated data science content creation with K-12 curriculum provider **Bootstrap**. The voluntary teacher professional development program **continues in 2025**.

Data Science 4 Everyone hosted the **2024 Arizona Data Convening** in Phoenix to further ongoing statewide discussions on the future trajectory of mathematics education for Arizona students.

The Arizona Department of Education has partnered with Arizona State University to establish a **Data Sciences Academy** to support the professional development of K-14 teachers.

Arizona was selected by WestEd as a participant in the Integrated Statistics and Quantitative Reasoning (ISQR) Early Exploration Project, which investigates what would be necessary for schools and districts to pilot a new rigorous high school math course designed to integrate quantitative, algebraic, statistical, geometric, and data literacy concepts and strategies



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

ARKANSAS

Data Science Courses in Course Catalog

- 465710 Data Science - Year 1
- 465720 Data Science - Year 2
- 465730 Data Science - Advanced Year 3 / Weighted Credit
- 539090 Data Science - Applied Data Science

Arkansas's course catalog also includes several courses on artificial intelligence that map to SCED code 25052 - Data Science.

Student Enrollment

- 756 Students in dedicated data science classes
- 3249 Students in classes with data science content modules

Schools and Districts

- 47 Public schools with data science student enrollment
- 29 Public school districts with data science student enrollment
- 0 Private schools with data science student enrollment

Teacher Professional Development:

- 21 Teachers receiving professional development in data science
- 37 Estimated number of teacher professional development hours

In 2019, the Arkansas Department of Education developed a [three-course high school sequence for data science](#) that concurrently fulfilled Career and Technical Education and mathematics credit. The sequence was designed through a partnership between the Arkansas Department of Education, the University of Arkansas, and local industry to have strong alignment to local workforce needs. Several districts have since implemented the sequence, and the Department of Education has dedicated additional funding for teacher professional development. The sequence is currently an elective option, and is being revised for the 2025-2026 school year. Algebraic, statistical, geometric, and data literacy concepts and strategies



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 3

Standards or

Framework Adoption

CALIFORNIA

Data Science Courses in Course Catalog

California's statewide course catalog does not include a discrete course code for data science. Data science courses reported by local education agencies are instead coded in the California Longitudinal Pupil Achievement Data System as 9259 - Probability and Statistics (Non-Advanced Placement).

Schools offering data science that have an articulation agreement with the University of California can be found via the [A-G Course List search](#)

Student Enrollment

12963	Students in dedicated data science classes
3636	Students in classes with data science content modules

Schools and Districts

400	Public schools with data science student enrollment
190	Public school districts with data science student enrollment
44	Private schools with data science student enrollment

Teacher Professional Development:

181	Teachers receiving professional development in data science
4098.5	Estimated number of teacher professional development hours

In 2023, the California Board of Education approved a revision of their [statewide mathematics framework](#) that provided opt-in guidance to schools and districts for designing mathematics content progressions and course opportunities. The framework included a new [chapter dedicated to data science](#) that recommends both a capstone high school course and an integrated thread of K-12 content that expands upon traditional data analysis and statistics curricula.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

COLORADO

Data Science Courses in Course Catalog

Colorado's course catalog is SCED 12.0-compliant and includes the following courses:

25051	Data Literacy
25052	Data Science
25053	Data Science Applications

Student Enrollment

528	Students in dedicated data science classes
114	Students in classes with data science content modules

Schools and Districts

2	Public schools with data science student enrollment
5	Public school districts with data science student enrollment
0	Private schools with data science student enrollment

Teacher Professional Development:

23	Teachers receiving professional development in data science
443	Estimated number of teacher professional development hours

Colorado has been selected by Data Science 4 Everyone for a Call To Action event, which is planned for summer 2026.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

CONNECTICUT

Data Science Courses in Course Catalog

Connecticut’s course catalog is SCED 12.0-compliant and includes the following courses:

- 25051

Data Literacy
- 25052

Data Science
- 25053

Data Science Applications

Student Enrollment

- 419

Students in dedicated data science classes
- 1693

Students in classes with data science content modules

Schools and Districts

- 22

Public schools with data science student enrollment
- 12

Public school districts with data science student enrollment
- 1

Private schools with data science student enrollment

Teacher Professional Development:

- 36

Teachers receiving professional development in data science
- 55

Estimated number of teacher professional development hours

CT



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

DELAWARE

Data Science Courses in Course Catalog

Delaware does not maintain a publicly available statewide course catalog; school districts are required to be SCED-compliant.

Student Enrollment

180

0

Students in dedicated data science classes

Students in classes with data science content modules

Schools and Districts

0

0

0

Public schools with data science student enrollment

Public school districts with data science student enrollment

Private schools with data science student enrollment

Teacher Professional Development:

0

0

Teachers receiving professional development in data science

Estimated number of teacher professional development hours

DE



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

DISTRICT OF COLUMBIA

Data Science Courses in Course Catalog

The District of Columbia's course catalog is SCED 12.0-compliant and includes the following courses:

- 25051Data Literacy
- 25052Data Science
- 25053Data Science Applications

Student Enrollment

- 12Students in dedicated data science classes
- 35Students in classes with data science content modules

Schools and Districts

- 0Public schools with data science student enrollment
- 0Public school districts with data science student enrollment
- 1Private schools with data science student enrollment

Teacher Professional Development:

- 0Teachers receiving professional development in data science
- 0Estimated number of teacher professional development hours

DC



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

FLORIDA

Data Science Courses in Course Catalog

9003100	Fundamentals of Data Science
9007700	Data Science and Machine Learning
9007710	Foundations of Programming for Data Science and Artificial Intelligence, Level 3

Student Enrollment

662	Students in dedicated data science classes
444	Students in classes with data science content modules

Schools and Districts

13	Public schools with data science student enrollment
10	Public school districts with data science student enrollment
4	Private schools with data science student enrollment

Teacher Professional Development:

0	Teachers receiving professional development in data science
0	Estimated number of teacher professional development hours

Data Science courses, degrees, and certifications are included among the **curriculum frameworks** of Florida’s Career and Technical Education **Information Technology career cluster**.

HB 1105 requires the Florida Department of Education to establish competencies for a mathematics endorsement aligned with instructional strategies that include data analysis and probability by August 1, 2026.

FL



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

GEORGIA

Data Science Courses in Course Catalog

11.08100	Data Science I
11.08200	Data Science II

Student Enrollment

111	Students in dedicated data science classes
207	Students in classes with data science content modules

Schools and Districts

19	Public schools with data science student enrollment
18	Public school districts with data science student enrollment
1	Private schools with data science student enrollment

Teacher Professional Development:

1	Teachers receiving professional development in data science
5	Estimated number of teacher professional development hours

GA



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 0

None

HAWAII

Data Science Courses in Course Catalog

None

Student Enrollment

50

Students in dedicated data science classes

0

Students in classes with data science content modules

Schools and Districts

1

Public schools with data science student enrollment

1

Public school districts with data science student enrollment

0

Private schools with data science student enrollment

Teacher Professional Development:

2

Teachers receiving professional development in data science

12

Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

IDAHO

Data Science Courses in Course Catalog

None

Student Enrollment

- 135
- Students in dedicated data science classes
- 274
- Students in classes with data science content modules

Schools and Districts

- 5
- Public schools with data science student enrollment
- 5
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 1
- Teachers receiving professional development in data science
- 24
- Estimated number of teacher professional development hours

The Idaho Department of Education has partnered with Data Science 4 Everyone to create the Idaho Data Science Teaching Collaborative for secondary school teachers.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

ILLINOIS

Data Science Courses in Course Catalog

22161A000	Data Science
22162A000	Data Science Applications

Student Enrollment

1800	Students in dedicated data science classes
538	Students in classes with data science content modules

Schools and Districts

28	Public schools with data science student enrollment
10	Public school districts with data science student enrollment
1	Private schools with data science student enrollment

Teacher Professional Development:

30	Teachers receiving professional development in data science
962	Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 0

None

INDIANA

Data Science Courses in Course Catalog

None

Student Enrollment

242

Students in dedicated data science classes

1369

Students in classes with data science content modules

Schools and Districts

104

Public schools with data science student enrollment

97

Public school districts with data science student enrollment

3

Private schools with data science student enrollment

Teacher Professional Development:

0

Teachers receiving professional development in data science

0

Estimated number of teacher professional development hours

HB 1243 requires the Indiana Department of Education to consider integrating data science and data literacy when revising and updating academic standards.

The Indiana Department of Education established a workgroup in March 2025 to consider the integration of data science into the state's K-12 system.

Indiana has been selected by Data Science 4 Everyone for a Call To Action event, which is planned for late 2025.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

IOWA

Data Science Courses in Course Catalog

Iowa's course catalog is SCED 12.0-compliant and includes the following courses:

- 25051
- Data Literacy
- 25052
- Data Science
- 25053
- Data Science Applications

Student Enrollment

- 70
- Students in dedicated data science classes
- 343
- Students in classes with data science content modules

Schools and Districts

- 1
- Public schools with data science student enrollment
- 2
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 0

None

KANSAS

Data Science Courses in Course Catalog

None

Student Enrollment

425

Students in dedicated data science classes

278

Students in classes with data science content modules

Schools and Districts

15

Public schools with data science student enrollment

5

Public school districts with data science student enrollment

0

Private schools with data science student enrollment

Teacher Professional Development:

72

Teachers receiving professional development in data science

704.5

Estimated number of teacher professional development hours



2025
STATE
SUMMARY



IMPLEMENTATION
TIER 1
State Course Code

KENTUCKY

Data Science Courses in Course Catalog

270601 Data and Measurement

Student Enrollment

- 0
- Students in dedicated data science classes
- 0
- Students in classes with data science content modules

Schools and Districts

- 0
- Public schools with data science student enrollment
- 0
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours

KY



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

LOUISIANA

Data Science Courses in Course Catalog

None

Student Enrollment

1280

Students in dedicated data science classes

1

Students in classes with data science content modules

Schools and Districts

4

Public schools with data science student enrollment

5

Public school districts with data science student enrollment

0

Private schools with data science student enrollment

Teacher Professional Development:

0

Teachers receiving professional development in data science

0

Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

MAINE

Data Science Courses in Course Catalog

None

Student Enrollment

26

Students in dedicated data science classes

180

Students in classes with data science content modules

Schools and Districts

4

Public schools with data science student enrollment

6

Public school districts with data science student enrollment

0

Private schools with data science student enrollment

Teacher Professional Development:

30

Teachers receiving professional development in data science

575

Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

MARYLAND

Data Science Courses in Course Catalog

Maryland does not maintain a publicly available statewide course catalog; school districts are required to be SCED-compliant.

Student Enrollment

330

Students in dedicated data science classes

5

Students in classes with data science content modules

Schools and Districts

0

Public schools with data science student enrollment

1

Public school districts with data science student enrollment

0

Private schools with data science student enrollment

Teacher Professional Development:

0

Teachers receiving professional development in data science

0

Estimated number of teacher professional development hours

The Maryland State Department of Education is developing a Data Science course approved by the University System of Maryland as fulfilling the state's post-Algebra 2 fourth-year mathematics requirement.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

MASSACHUSETTS

Data Science Courses in Course Catalog

Massachusetts does not maintain a publicly available statewide course catalog; school districts are required to be SCED-compliant.

Student Enrollment

223	Students in dedicated data science classes
1781	Students in classes with data science content modules

Schools and Districts

13	Public schools with data science student enrollment
15	Public school districts with data science student enrollment
1	Private schools with data science student enrollment

Teacher Professional Development:

44	Teachers receiving professional development in data science
1012	Estimated number of teacher professional development hours

The Massachusetts Department of Elementary and Secondary Education participated in a National Science Foundation-funded partnership to develop and institutionalize an [Innovation Pathway to Data Careers](#) option for high school students.

Massachusetts maintains Digital Literacy and Computer Science Standards.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

MICHIGAN

Data Science Courses in Course Catalog

Michigan does not maintain a publicly available statewide course catalog; school districts are required to be SCED-compliant.

Student Enrollment

1036	Students in dedicated data science classes
641	Students in classes with data science content modules

Schools and Districts

14	Public schools with data science student enrollment
19	Public school districts with data science student enrollment
1	Private schools with data science student enrollment

Teacher Professional Development:

37	Teachers receiving professional development in data science
1401	Estimated number of teacher professional development hours

In July 2022, the Michigan Department of Education organized a statewide educator training cohort for integrated data science content creation with K-12 curriculum provider [Bootstrap](#).

In September 2024, Genesee Intermediate School District was awarded a grant by the Michigan Department of Education to support the implementation of an Algebra II: Data Science course pilot.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 3

Standards or
Framework Adoption

MINNESOTA

Data Science Courses in Course Catalog

Minnesota's course catalog is SCED 10.0-compliant and includes the following courses:

- 22160
- Data Literacy
- 22161
- Data Science
- 22162
- Data Science Applications

Student Enrollment

- 278
- Students in dedicated data science classes
- 169
- Students in classes with data science content modules

Schools and Districts

- 1
- Public schools with data science student enrollment
- 3
- Public school districts with data science student enrollment
- 1
- Private schools with data science student enrollment

Teacher Professional Development:

- 3
- Teachers receiving professional development in data science
- 9
- Estimated number of teacher professional development hours

In April 2024, the Minnesota Department of Education released new mathematics content standards, including an updated Data Analysis thread for grades 1-8 and a dedicated Data Sciences thread for grades 9-11. The new standards are required to be implemented by the 2027-2028 school year.

MN



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

MISSISSIPPI

Data Science Courses in Course Catalog

None

Student Enrollment

- 0
- Students in dedicated data science classes
- 0
- Students in classes with data science content modules

Schools and Districts

- 0
- Public schools with data science student enrollment
- 0
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

MISSOURI

Data Science Courses in Course Catalog

None

Student Enrollment

22

Students in dedicated data science classes

103

Students in classes with data science content modules

Schools and Districts

0

Public schools with data science student enrollment

4

Public school districts with data science student enrollment

1

Private schools with data science student enrollment

Teacher Professional Development:

15

Teachers receiving professional development in data science

300

Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 3

Standards or
Framework Adoption

MONTANA

Data Science Courses in Course Catalog

Montana's course catalog is SCED 12.0-compliant and includes the following courses:

- 25051
- Data Literacy
- 25052
- Data Science
- 25053
- Data Science Applications

Student Enrollment

- 25
- Students in dedicated data science classes
- 0
- Students in classes with data science content modules

Schools and Districts

- 0
- Public schools with data science student enrollment
- 0
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours

Montana's **Career and Technical Education standards**, effective July 2021, encompass concepts related to data fluency across the K-12 spectrum

Montana's new math standards, revised in 2024, include concepts relating to data literacy and data science. Data Science 4 Everyone has partnered with the Montana Office of Public Instruction to provide monthly webinars around data science and these updated standards.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

NEBRASKA

Data Science Courses in Course Catalog

- 270413 Introduction To Data Science
- 270414 Data Literacy And Visualization

Student Enrollment

- 105 Students in dedicated data science classes
- 99 Students in classes with data science content modules

Schools and Districts

- 3 Public schools with data science student enrollment
- 6 Public school districts with data science student enrollment
- 1 Private schools with data science student enrollment

Teacher Professional Development:

- 0 Teachers receiving professional development in data science
- 0 Estimated number of teacher professional development hours

In 2021, the Nebraska Department of Education approved a three-course Career and Technical Education sequence for Data Analytics and Management. The sequence was designed through input from career professionals, industry experts, and departmental representatives.

NE



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

NEVADA

Data Science Courses in Course Catalog

None

Student Enrollment

1073

Students in dedicated data science classes

76

Students in classes with data science content modules

Schools and Districts

6

Public schools with data science student enrollment

2

Public school districts with data science student enrollment

0

Private schools with data science student enrollment

Teacher Professional Development:

0

Teachers receiving professional development in data science

0

Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

NEW HAMPSHIRE

Data Science Courses in Course Catalog

New Hampshire does not maintain a publicly available statewide course catalog; school districts are required to be SCED-compliant.

Student Enrollment

186	Students in dedicated data science classes
78	Students in classes with data science content modules

Schools and Districts

1	Public schools with data science student enrollment
1	Public school districts with data science student enrollment
2	Private schools with data science student enrollment

Teacher Professional Development:

9	Teachers receiving professional development in data science
54	Estimated number of teacher professional development hours

In October 2024, Data Science 4 Everyone partnered with the New Hampshire Department of Education to host the inaugural **Northeastern K-12 Data Science Summit**.

In December 2024, the New Hampshire State Board of Education adopted new graduation requirements for mathematics, including at least 1/2 credit in statistics or data analysis.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 3

Standards or
Framework Adoption

NEW JERSEY

Data Science Courses in Course Catalog

New Jersey’s course catalog is SCED 10.0-compliant and includes the following courses:

- 22160
- Data Literacy
- 22161
- Data Science
- 22162
- Data Science Applications

Student Enrollment

- 1408
- Students in dedicated data science classes
- 1060
- Students in classes with data science content modules

Schools and Districts

- 24
- Public schools with data science student enrollment
- 11
- Public school districts with data science student enrollment
- 1
- Private schools with data science student enrollment

Teacher Professional Development:

- 308
- Teachers receiving professional development in data science
- 744
- Estimated number of teacher professional development hours

New Jersey’s mathematics standards were revised in October 2023 to include K-5 Data Literacy Standards.



2025
STATE
SUMMARY



IMPLEMENTATION
TIER 1
State Course Code

NEW MEXICO

Data Science Courses in Course Catalog

2079 Data Science

Student Enrollment

83 Students in dedicated data science classes
174 Students in classes with data science content modules

Schools and Districts

1 Public schools with data science student enrollment
1 Public school districts with data science student enrollment
1 Private schools with data science student enrollment

Teacher Professional Development:

0 Teachers receiving professional development in data science
0 Estimated number of teacher professional development hours

NM



2025
STATE
SUMMARY



IMPLEMENTATION
TIER 1
State Course Code

NEW YORK

Data Science Courses in Course Catalog

10050 Data Analytics

Student Enrollment

850 Students in dedicated data science classes
996 Students in classes with data science content modules

Schools and Districts

8 Public schools with data science student enrollment
27 Public school districts with data science student enrollment
6 Private schools with data science student enrollment

Teacher Professional Development:

2 Teachers receiving professional development in data science
22 Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

NORTH CAROLINA

Data Science Courses in Course Catalog

CS302X0	Introduction To Data Science
CS302X0	Introduction To Data Science
CS305X0	Introduction To Data Science Honors

Student Enrollment

343	Students in dedicated data science classes
21	Students in classes with data science content modules

Schools and Districts

2	Public schools with data science student enrollment
5	Public school districts with data science student enrollment
1	Private schools with data science student enrollment

Teacher Professional Development:

1	Teachers receiving professional development in data science
20	Estimated number of teacher professional development hours

North Carolina’s Department of Education featured data science professional development opportunities for statistics teachers beginning in May 2025.

NC



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

NORTH DAKOTA

Data Science Courses in Course Catalog

None

Student Enrollment

- 0
- Students in dedicated data science classes
- 0
- Students in classes with data science content modules

Schools and Districts

- 0
- Public schools with data science student enrollment
- 0
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours

ND



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

OHIO

Data Science Courses in Course Catalog

119980

Data Science Foundations

Student Enrollment

1228

Students in dedicated data science classes

413

Students in classes with data science content modules

Schools and Districts

19

Public schools with data science student enrollment

18

Public school districts with data science student enrollment

1

Private schools with data science student enrollment

Teacher Professional Development:

25

Teachers receiving professional development in data science

557.5

Estimated number of teacher professional development hours

In 2018, Ohio began a **high school data science course** pilot using the **Introduction to Data Science (IDS)** curriculum.

OH



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

OKLAHOMA

Data Science Courses in Course Catalog

None

Student Enrollment

0

Students in dedicated data science classes

210

Students in classes with data science content modules

Schools and Districts

3

Public schools with data science student enrollment

6

Public school districts with data science student enrollment

0

Private schools with data science student enrollment

Teacher Professional Development:

47

Teachers receiving professional development in data science

1175

Estimated number of teacher professional development hours

In 2022, the Oklahoma Department of Education organized a statewide educator training cohort for integrated data science content creation with K-12 curriculum provider [Bootstrap](#).



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 3

Standards or
Framework Adoption

OREGON

Data Science Courses in Course Catalog

Oregon's course catalog is SCED 10.0-compliant and includes the following courses:

- 22160
- Data Literacy
- 22161
- Data Science
- 22162
- Data Science Applications

Student Enrollment

- 2940
- Students in dedicated data science classes
- 444
- Students in classes with data science content modules

Schools and Districts

- 9
- Public schools with data science student enrollment
- 8
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 88
- Teachers receiving professional development in data science
- 1034
- Estimated number of teacher professional development hours

In 2022, the Oregon Math Project's 2+1 Model was released as an official update to state standards and learning guidelines for districts statewide. The model specifies that all students learn a full year of Algebra, a semester of Geometry, and a semester of Data Analysis before 10th grade. In 11th and 12th grade, students are able to select from multiple mathematics course sequences, which include a two-course pathway for data science and statistics and/or AP Statistics. The state also approved a \$2 million program for curriculum support, educator training, and other technical assistance to local schools and districts for implementing the new standards.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

PENNSYLVANIA

Data Science Courses in Course Catalog

Pennsylvania's course catalog is SCED 10.0-compliant and includes the following courses:

- 22160
- Data Literacy
- 22161
- Data Science
- 22162
- Data Science Applications

Student Enrollment

- 432
- Students in dedicated data science classes
- 274
- Students in classes with data science content modules

Schools and Districts

- 2
- Public schools with data science student enrollment
- 4
- Public school districts with data science student enrollment
- 1
- Private schools with data science student enrollment

Teacher Professional Development:

- 5
- Teachers receiving professional development in data science
- 100
- Estimated number of teacher professional development hours

Pennsylvania has been selected by Data Science 4 Everyone for a future Call To Action event.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

RHODE ISLAND

Data Science Courses in Course Catalog

Rhode Island does not maintain a publicly available statewide course catalog; school districts are required to be SCED-compliant.

Student Enrollment

- 7
- Students in dedicated data science classes
- 45
- Students in classes with data science content modules

Schools and Districts

- 1
- Public schools with data science student enrollment
- 1
- Public school districts with data science student enrollment
- 1
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

SOUTH CAROLINA

Data Science Courses in Course Catalog

None

Student Enrollment

66

Students in dedicated data science classes

172

Students in classes with data science content modules

Schools and Districts

2

Public schools with data science student enrollment

3

Public school districts with data science student enrollment

1

Private schools with data science student enrollment

Teacher Professional Development:

1

Teachers receiving professional development in data science

20

Estimated number of teacher professional development hours



2025
STATE
SUMMARY



IMPLEMENTATION
TIER 1
State Course Code

SOUTH DAKOTA

Data Science Courses in Course Catalog

02209 Data Science Foundations

Student Enrollment

- 0
- Students in dedicated data science classes
- 0
- Students in classes with data science content modules

Schools and Districts

- 0
- Public schools with data science student enrollment
- 0
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

TENNESSEE

Data Science Courses in Course Catalog

C10H73	Data Science I
C10H74	Data Science II
C10H75	Data Science III
C10H76	Data Science Career Practicum

Student Enrollment

97	Students in dedicated data science classes
286	Students in classes with data science content modules

Schools and Districts

3	Public schools with data science student enrollment
4	Public school districts with data science student enrollment
0	Private schools with data science student enrollment

Teacher Professional Development:

9	Teachers receiving professional development in data science
9	Estimated number of teacher professional development hours

TN



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

TEXAS

Data Science Courses in Course Catalog

None

Student Enrollment

- 138
- Students in dedicated data science classes
- 2391
- Students in classes with data science content modules

Schools and Districts

- 0
- Public schools with data science student enrollment
- 6
- Public school districts with data science student enrollment
- 2
- Private schools with data science student enrollment

Teacher Professional Development:

- 7
- Teachers receiving professional development in data science
- 50
- Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

UTAH

Data Science Courses in Course Catalog

7060000015

Data Science / Mathematical Modeling

Student Enrollment

1760

Students in dedicated data science classes

2871

Students in classes with data science content modules

Schools and Districts

27

Public schools with data science student enrollment

12

Public school districts with data science student enrollment

0

Private schools with data science student enrollment

Teacher Professional Development:

15

Teachers receiving professional development in data science

300

Estimated number of teacher professional development hours

In 2022, the Utah State Board of Education launched a micro-credential for high school teachers to learn data science techniques and teaching practices.

In 2023, the Utah State Board of Education launched a pilot program testing four high school data science course programs as advanced mathematics course options in 11th and 12th grade.

In September 2023, the Utah State Board of Education partnered with Data Science 4 Everyone to host a **Data Science Education Summit**.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER

None

VERMONT

Data Science Courses in Course Catalog

None

Student Enrollment

- 9
- Students in dedicated data science classes
- 94
- Students in classes with data science content modules

Schools and Districts

- 1
- Public schools with data science student enrollment
- 1
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 0
- Teachers receiving professional development in data science
- 0
- Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 3

Standards or Frameworks Adoption

VIRGINIA

Data Science Courses in Course Catalog

02911 Data Science

Student Enrollment

321 Students in dedicated data science classes
5839 Students in classes with data science content modules

Schools and Districts

3 Public schools with data science student enrollment
8 Public school districts with data science student enrollment
0 Private schools with data science student enrollment

Teacher Professional Development:

2 Teachers receiving professional development in data science
4 Estimated number of teacher professional development hours

In 2022, Virginia became the first state in the country to develop dedicated standards for a K-12 data science high school course. The standards were created during a multi-year collaboration between the Virginia Department of Education, local school districts, state industry partners, higher education partners, and other stakeholders.

Virginia implemented a full-year course pilot for a high school data science course beginning with the 2022-2023 school year, and the state continues to facilitate educator professional learning cohorts.

VA



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 2

State Course Pilot,
Course Sequence, or
Teacher Professional
Development Program

WASHINGTON

Data Science Courses in Course Catalog

Washington’s course catalog is SCED 12.0-compliant and includes the following courses:

- 25051
- Data Literacy
- 25052
- Data Science
- 25053
- Data Science Applications

Student Enrollment

- 911
- Students in dedicated data science classes
- 130
- Students in classes with data science content modules

Schools and Districts

- 12
- Public schools with data science student enrollment
- 9
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 6
- Teachers receiving professional development in data science
- 120
- Estimated number of teacher professional development hours

In 2022, the Washington Office of Superintendent of Public Instruction (OSPI) began work to design a modernized Algebra 2 course that would integrate data science, mathematical modeling, and financial literacy into the standard content for all students. The course design was informed by a collaboration between OSPI, state higher-education partners, and local industry. The pilot began with the 2023-2024 school year.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 3

Standards or Framework Adoption

WEST VIRGINIA

Data Science Courses in Course Catalog

None

Student Enrollment

- 0
- Students in dedicated data science classes
- 1
- Students in classes with data science content modules

Schools and Districts

- 0
- Public schools with data science student enrollment
- 0
- Public school districts with data science student enrollment
- 0
- Private schools with data science student enrollment

Teacher Professional Development:

- 9
- Teachers receiving professional development in data science
- 180
- Estimated number of teacher professional development hours

In 2024, West Virginia adopted standards for a dedicated data science course.



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

WISCONSIN

Data Science Courses in Course Catalog

16320	Data Literacy
16325	Data Science
16330	Data Science Applications

Student Enrollment

162	Students in dedicated data science classes
229	Students in classes with data science content modules

Schools and Districts

4	Public schools with data science student enrollment
9	Public school districts with data science student enrollment
1	Private schools with data science student enrollment

Teacher Professional Development:

6	Teachers receiving professional development in data science
100	Estimated number of teacher professional development hours



2025

STATE

SUMMARY



IMPLEMENTATION

TIER 1

State Course Code

WYOMING

Data Science Courses in Course Catalog

25051	Data Literacy
25052	Data Science
25053	Data Science Applications

Student Enrollment

10	Students in dedicated data science classes
72	Students in classes with data science content modules

Schools and Districts

3	Public schools with data science student enrollment
1	Public school districts with data science student enrollment
0	Private schools with data science student enrollment

Teacher Professional Development:

0	Teachers receiving professional development in data science
0	Estimated number of teacher professional development hours

WY

