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New Jersey CSPDWeek

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Proposed NJSLS Computer Science and Digital Literacy Standards 2027

August 2026

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CSTA Teaching Excellence Award 2023

Professional Learning Resource Designer

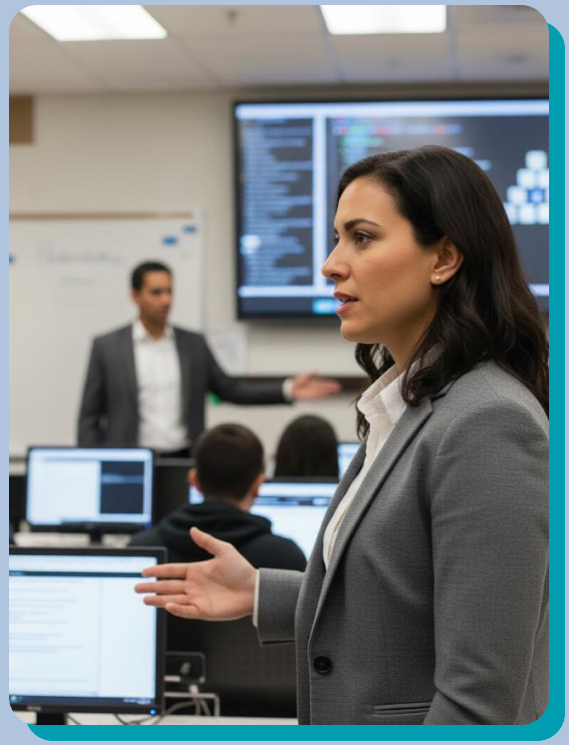
Agenda

01 New CSTA standards released July 2026

02 Proposed NJ Student Learning Standards 2027

03 Resources

04 Questions?



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Please be advised, the information we are providing is for informational purposes only

Computer Science Teachers Association (CSTA) New Standards

PreK-12 Standards

		PK/K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Middle School	High School
Algorithms & Design	Algorithmic Problem Solving	EK-ALG-PS-01: Carry out algorithms in daily activities.	E1-ALG-PS-01: Decompose a problem or task into individual parts to develop an algorithm.	E2-ALG-PS-01: Create an algorithm that includes sequence, events, and iteration to solve a problem or express an idea.	E3-ALG-PS-01: Create an algorithm that includes a combination of sequence, events, iteration, and selection to solve a problem or express an idea.	E4-ALG-PS-01: Create a written representation of an algorithm that includes a combination of sequence, events, iteration, and selection to solve a problem or express an idea.	E5-ALG-PS-01: Create a visual representation of an algorithm that includes variables and a combination of sequence, events, iteration, and selection to solve a problem or express an idea.	MS-ALG-PS-01: Design an algorithm that includes variables of multiple data types to solve a problem or express an idea. MS-ALG-PS-02: Model a given algorithm with a flowchart or pseudocode that includes a combination of control structures and procedures. MS-ALG-PS-03: Verify the accuracy of an algorithm for given inputs. MS-ALG-PS-04: Justify whether a problem is best solved using procedural instructions, rule-based logic, data-driven methods, or a combination of these approaches. MS-ALG-PS-05: Use an AI tool to generate outputs that assist in solving a computational problem.	HS-ALG-PS-01: Design an algorithm using appropriate data structures to solve a problem or express an idea. HS-ALG-PS-02: Optimize the design of an algorithm using procedural abstraction and control structures. HS-ALG-PS-03: Evaluate algorithms for efficiency, correctness, and clarity, using metrics or test cases. HS-ALG-PS-04: Describe the differences between deterministic and probabilistic algorithms. HS-ALG-PS-05: Evaluate AI-generated output to assess bias, accuracy, and potential harms.
	Machine Learning	EK-ALG-ML-02: Recognize attributes of objects to notice patterns and make decisions.	E1-ALG-ML-02: Recognize that AI systems are technologies that use patterns in data to make decisions or generate new things.	E2-ALG-ML-02: Examine how data is used to train a machine learning model.	E3-ALG-ML-02: Investigate how a machine learning model can change when new data is added to a training set.	E4-ALG-ML-02: Analyze relationships between the properties of training data and a machine learning model's output.	E5-ALG-ML-02: Train a machine learning model to make a classification or prediction.	MS-ALG-ML-06: Hypothesize how a machine learning model generates classifications or predictions. MS-ALG-ML-07: Investigate ways to improve the accuracy of a machine learning model and reduce bias by refining the quality of examples and nonexamples in the training data. MS-ALG-ML-08: Evaluate the features and limitations of a machine learning model.	HS-ALG-ML-06: Justify the selection of a type of AI algorithm to accomplish a task. HS-ALG-ML-07: Evaluate training data by examining its source, quality, representativeness, potential biases, and privacy implications. HS-ALG-ML-08: Develop a machine learning model for a chosen task using appropriate data and tools.
	Impacts of Algorithms & Design	EK-ALG-IM-03: Describe how people create algorithms to solve problems.	E1-ALG-IM-03: Explain how a change to an algorithm leads to a different outcome.	E2-ALG-IM-03: Describe how an algorithm might impact peers in varied situations.	E3-ALG-IM-03: Compare how different algorithms may affect outcomes, situations, and people with a wide range of needs.	E4-ALG-IM-03: Evaluate how different algorithms for solving the same problem produce outcomes that may benefit or disadvantage different groups of people.	E5-ALG-IM-03: Articulate how human-centered design principles are incorporated into the development of a computing technology.	MS-ALG-IM-09: Evaluate which human-centered design principles are present or missing in an existing computing technology. MS-ALG-IM-10: Examine evidence of beneficial and harmful impacts, ethical issues, and biases of algorithms encountered in daily life. MS-ALG-IM-11: Modify an algorithm to address a specific societal impact, ethical issue, or bias.	HS-ALG-IM-09: Design a computing technology using human-centered design principles. HS-ALG-IM-10: Evaluate the ethical implications, societal impacts, and potential biases of rule-based and data-driven algorithms. HS-ALG-IM-11: Articulate the values embedded in the design of an algorithmic system.

		PK/K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Middle School	High School
Programming	Program Development	EK-PRO-PD-04: Create a sequence of commands to solve a problem or express an idea.	E1-PRO-PD-04: Create code from an algorithm that includes sequence to solve a problem or express an idea.	E2-PRO-PD-04: Create code from an algorithm that includes sequence, events, and iteration to solve a problem or express an idea.	E3-PRO-PD-04: Develop code from a student-created algorithm that includes a combination of sequence, events, iteration, and selection to solve a problem or express an idea. E3-PRO-PD-05: Use constructive feedback to improve a program.	E4-PRO-PD-04: Compare different programming solutions to the same problem based on correctness and clarity. E4-PRO-PD-05: Collaborate with a team by offering a meaningful contribution to creating a program.	E5-PRO-PD-04: Create a novel program by modifying or combining elements of existing programs. E5-PRO-PD-05: Construct individual components of a program that are collaboratively assembled into a programming project.	MS-PRO-PD-12: Use a procedure to structure code for clarity and reusability. MS-PRO-PD-13: Use reference documentation in program development. MS-PRO-PD-14: Justify the importance of attribution and intellectual property when developing computing technologies. MS-PRO-PD-15: Develop a program utilizing inclusive collaboration practices.	HS-PRO-PD-12: Create a modular program that uses procedures, external libraries, or objects to improve reusability and readability. HS-PRO-PD-13: Use documentation, libraries, application programming interfaces (APIs), and other tools in program development. HS-PRO-PD-14: Apply appropriate attribution of intellectual property when developing a computing technology. HS-PRO-PD-15: Collaborate on a programming project using a defined workflow that includes design documentation and clear task roles.
	Variables & Data Storage	EK-PRO-VD-05: Identify everyday gestures and symbols that represent information people use to make choices.	E1-PRO-VD-05: Identify terms that refer to data values that change over time in everyday life.	E2-PRO-VD-05: Label different representations of information with a name and whether its value is constant or changes.	E3-PRO-VD-06: Identify the variables being stored and manipulated in a program.	E4-PRO-VD-06: Trace how data flows and changes variable values in a program.	E5-PRO-VD-06: Use variables to store, compare, and modify data within a program.	MS-PRO-VD-16: Use variables of multiple data types to store, access, and manipulate data within a program.	HS-PRO-VD-16: Create a program that uses appropriate data structures to store, access, and manipulate data.
	Reading & Documenting	EK-PRO-RD-06: Describe how a sequence of commands completes a task.	E1-PRO-RD-06: Explain the function of code that includes an event and sequence.	E2-PRO-RD-06: Explain the steps taken to create a program.	E3-PRO-RD-07: Articulate how a specific segment of code contributes to the overall purpose of a program.	E4-PRO-RD-07: Document a program to clarify its functionality.	E5-PRO-RD-07: Create embedded or external documentation for a programming project.	MS-PRO-RD-17: Analyze the roles of iteration, selection, variables, and procedures in a segment of code. MS-PRO-RD-18: Analyze AI-generated code for accuracy and usability in a programming project.	HS-PRO-RD-17: Analyze how a segment of code works, including the role of parameters, return values, and data structures. HS-PRO-RD-18: Evaluate AI-generated code for accuracy, reliability, and alignment with program requirements.
	Testing & Refinin	EK-PRO-TR-07: Identify a step in a sequence of commands that does not work as expected.	E1-PRO-TR-07: Debug a program that includes a sequence of commands.	E2-PRO-TR-07: Debug a program that includes sequence, events, and iteration.	E3-PRO-TR-08: Debug a program that includes a combination of sequence, events, iteration, and selection.	E4-PRO-TR-08: Debug a program incrementally and repeatedly throughout the development process.	E5-PRO-TR-08: Debug a program using systematic strategies.	MS-PRO-TR-19: Use systematic strategies to test, refine, and document changes to a computing technology to meet the intended purpose. MS-PRO-TR-20: Refine a computing technology based on user feedback to improve its usability and accessibility.	HS-PRO-TR-19: Evaluate a computing technology's alignment with design specifications and responsible design values, including its correctness, effectiveness, and user experience. HS-PRO-TR-20: Refine a computing technology based on user feedback, testing results, and responsible design values to improve its effectiveness and impact.

		PK/K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Middle School	High School
Data & Analysis	Data Collection & Preparation	EK-DAT-DC-08: Use collected data to help answer questions.	E1-DAT-DC-08: Use multiple methods to collect both numeric and non-numeric data to help answer questions.	E2-DAT-DC-08: Compare numeric and non-numeric types of data in terms of how they are collected and what information they provide.	E3-DAT-DC-09: Evaluate numeric and non-numeric data for accuracy and completeness.	E4-DAT-DC-09: Organize collected data into a table using a computational tool, with rows representing records and columns representing attributes.	E5-DAT-DC-09: Use computational tools to collect and organize different types of data.	MS-DAT-DC-21: Evaluate how different levels of precision and granularity in data collection affect accuracy, storage, and analysis. MS-DAT-DC-22: Explain how data and its associated metadata can be used to answer questions. MS-DAT-DC-23: Use a computational tool to sort, filter, group, and summarize structured data. MS-DAT-DC-24: Analyze options to address a data quality issue.	HS-DAT-DC-21: Use a computational tool to generate simulated data that fits certain parameters for use in a simulation. HS-DAT-DC-22: Create a data dictionary that describes the name, type, and allowable values for each attribute and the logical relationships between variables in a dataset. HS-DAT-DC-23: Use a computational tool to clean and organize text-based data. HS-DAT-DC-24: Evaluate different approaches to verifying consistency and compliance with expected data types, values, and ranges.
	Data Investigation	EK-DAT-DI-09: Investigate a question that can be answered by collecting data in students' everyday environments.	E1-DAT-DI-09: Compare a question that can be answered through a data investigation and a question that can be answered through other means.	E2-DAT-DI-09: Develop a question that can be answered with data.	E3-DAT-DI-10: Investigate a data question involving relationships between multiple attributes.	E4-DAT-DI-10: Create an explanation that includes at least one data visualization to report the process and results of a data investigation.	E5-DAT-DI-10: Analyze a dataset to identify the nature and possible sources of variability in the data.	MS-DAT-DI-25: Use a computational tool to identify relationships among variables in a dataset and make a classification or prediction. MS-DAT-DI-26: Create data visualizations to show how different design choices can impact the interpretation of the same data. MS-DAT-DI-27: Summarize a data investigation process, including potential biases, limitations, and supporting evidence.	HS-DAT-DI-25: Create a data visualization of a multivariate dataset to answer a question or make a classification or prediction. HS-DAT-DI-26: Evaluate a data simulation or visualization to answer a data question, inform decision-making, and identify potential limitations.
	Impacts of Data Science	EK-DAT-IM-10: Investigate how data can help a person make informed decisions in everyday life.	E1-DAT-IM-10: Examine a variety of data questions that address the needs of a person or community.	E2-DAT-IM-10: Distinguish between data collection approaches, including those that may lead to inaccurate or biased data.	E3-DAT-IM-11: Design a data collection process that addresses the needs of people from different backgrounds or groups.	E4-DAT-IM-11: Investigate how data collected about people may affect individuals and groups.	E5-DAT-IM-11: Analyze the benefits and risks of a computing technology that uses collected data.	MS-DAT-IM-28: Explain the benefits and risks of allowing personal data and metadata to be collected and used in datasets, including issues of data ownership, privacy, and sovereignty. MS-DAT-IM-29: Analyze how decisions made at different stages of working with data can lead to biased data, misleading conclusions, and compromised AI models.	HS-DAT-IM-27: Evaluate the societal, environmental, and ethical implications of large-scale data collection and processing, including within AI applications. HS-DAT-IM-28: Debate the efficacy of a policy or regulation to ensure responsible data use.

		PK/K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Middle School	High School
Systems & Security	Hardware & Software	EK-SYS-HW-11: Examine the use of tools to accomplish a task or solve a problem for different users.	E1-SYS-HW-11: Describe the purpose of basic hardware components of a computing system, using accurate terminology.	E2-SYS-HW-11: Explain how the basic hardware components of a computing system work together to perform input and output (I/O) operations.	E3-SYS-HW-12: Describe the role of software in a computing system to accomplish tasks or solve problems.	E4-SYS-HW-12: Apply a basic troubleshooting process to identify and fix common hardware and software issues.	E5-SYS-HW-12: Explain how hardware and software components of a computing system work together to perform input and output operations, processing, and storage.	MS-SYS-HW-30: Examine differences between computing systems based on user needs, system requirements, and potential societal, environmental, and ethical impacts. MS-SYS-HW-31: Describe computing devices used in various industries, their basic functions, and how they are used to accomplish tasks or solve problems.	HS-SYS-HW-29: Differentiate an operating system as a special type of software that manages both the hardware and other software components of a computing system, including handling memory and peripherals. HS-SYS-HW-30: Demonstrate the capabilities and limitations of a physical or simulated computing device to address a task or problem.
	Security	EK-SYS-SE-12: Differentiate between public and private information.	E1-SYS-SE-12: Describe how to keep devices and online accounts safe from unauthorized access.	E2-SYS-SE-12: Explain how online actions have real-world consequences.	E3-SYS-SE-13: Evaluate how sharing information online might reveal personally identifiable information and other details.	E4-SYS-SE-13: Distinguish between authentication and authorization in protecting devices and private information.	E5-SYS-SE-13: Describe the concepts of the CIA triad and how each component is important in protecting information.	MS-SYS-SE-32: Explain the effects of not using the CIA triad when working with data. MS-SYS-SE-33: Evaluate common types of cyber attacks and preventions.	HS-SYS-SE-31: Identify different types of cybersecurity and physical security measures and the trade-offs for users, data, and devices. HS-SYS-SE-32: Classify the causes and impacts of security breaches and social engineering attacks for individuals, industries, communities, and governments. HS-SYS-SE-33: Formulate a solution to a security flaw in a given system.
	Networks				E3-SYS-NT-14: Explain how people access the internet to gain information and communicate with each other.	E4-SYS-NT-14: Compare wired and wireless methods that computing devices use to connect to the internet.	E5-SYS-NT-14: Distinguish between the components of wired and wireless networks.	MS-SYS-NT-34: Model how information in a network is broken down into packets, transmitted between devices, and reassembled. MS-SYS-NT-35: Explain how the resilience of the internet depends on interconnected devices and their roles and functions within the network.	HS-SYS-NT-34: Diagram a network of computing systems, including hardware and software. HS-SYS-NT-35: Analyze how the internet functions as a network of networks and how it differs from other types of networks.
	Impacts of Computing Systems	EK-SYS-IM-13: Identify responsible behavior when using computing systems and digital tools.	E1-SYS-IM-13: Describe an individual's role in responsibly using computing systems and digital tools.	E2-SYS-IM-13: Describe the benefits and harms that arise from an individual's use of computing systems and digital tools.	E3-SYS-IM-15: Describe how widely used computing systems may impact an individual's life and community.	E4-SYS-IM-15: Investigate the impacts of widely used computing systems on natural resources and the environment.	E5-SYS-IM-15: Examine how computing systems impact culture and the ways people live and work.	MS-SYS-IM-36: Collaborate to improve the design of a computing system to meet the needs of diverse users. MS-SYS-IM-37: Examine how access to computing systems can vary based on personal and social factors, such as physical ability, geographic location, socioeconomic status, and age.	HS-SYS-IM-36: Evaluate the rationale behind a law or policy governing the design and use of computing systems. HS-SYS-IM-37: Investigate how computing systems and infrastructure impact society and the environment, identifying who is affected and why.

		PK/K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Middle School	High School
Computing & Society	History of Computing	EK-SOC-HI-14: Identify computing technologies used in daily life that have changed over time.	E1-SOC-HI-14: Compare how an everyday activity changed after a specific computing technology was introduced.	E2-SOC-HI-14: Analyze the ways that people from different cultures, backgrounds, and time periods have designed computing technologies to help them solve problems and express ideas.	E3-SOC-HI-16: Examine how computing innovations have changed the ways people live, work, or communicate over time.	E4-SOC-HI-16: Investigate the contributions of diverse individuals and communities in the history of computing.	E5-SOC-HI-16: Analyze how the inclusion or exclusion of diverse individuals and communities has shaped the design, development, and societal impact of computing technologies.	MS-SOC-HI-38: Compare the roles of individuals, communities, organizations, and governments in shaping computing technologies across major eras in computing history. MS-SOC-HI-39: Analyze intended and unintended impacts of a historical computing technology on society and the environment.	HS-SOC-HI-38: Analyze the historical trajectory of a specific computing technology and how its development is linked to societal and environmental factors. HS-SOC-HI-39: Propose modifications to an existing policy or piece of legislation that encourages ethical innovation and minimizes societal risks associated with technology.
	Emerging Technologies				E3-SOC-ET-17: Describe how new technologies create both benefits and risks in personal and family life.	E4-SOC-ET-17: Analyze how the limitations of existing technologies can lead to emerging technologies.	E5-SOC-ET-17: Examine how people decide whether or not to use emerging technologies.	MS-SOC-ET-40: Evaluate when it is appropriate to use AI and other emerging technologies to solve a problem based on their capabilities, limitations, and environmental impacts. MS-SOC-ET-41: Evaluate how the decisions made while designing an emerging technology influence user experiences differently across different communities. MS-SOC-ET-42: Debate ways an emerging technology impacts the social, cultural, and environmental issues in local communities.	HS-SOC-ET-40: Evaluate the fundamental technological differences between an emerging technology and established technologies and how those differences influence computing. HS-SOC-ET-41: Evaluate the societal and environmental impacts of an emerging technology, including those that lead to inequities in access and outcomes. HS-SOC-ET-42: Design a conceptual solution to a real-world problem using an emerging technology, analyzing its potential benefits and harms.
	Humans & Computing	EK-SOC-HU-15: Explain that people design and develop computing technologies.	E1-SOC-HU-15: Differentiate between activities that humans do well and activities that computing technologies do well.	E2-SOC-HU-15: Investigate situations where humans have created computing technologies to solve problems.	E3-SOC-HU-18: Examine why people design and build computing technologies.	E4-SOC-HU-18: Distinguish between human learning and machine learning processes.	E5-SOC-HU-18: Evaluate when it is appropriate to use or not use computing technologies to solve a problem.	MS-SOC-HU-43: Analyze how the decisions humans make when using computing technologies have ethical and social consequences.	HS-SOC-HU-43: Evaluate how human choices in using, designing, deploying, and regulating computing technologies have risks, benefits, and long-term impacts. HS-SOC-HU-44: Debate perspectives on differences between human and artificial intelligence and their implications for consciousness, ethics, and human responsibility.
	Career Exploration	EK-SOC-CE-16: Identify how people use digital devices at home, at school, and at work.	E1-SOC-CE-16: Describe how computing is used by people at home, at school, and in the community.	E2-SOC-CE-16: Investigate how personal interests connect to computing in different industries and careers.	E3-SOC-CE-19: Explain how people in different industries use computing technologies and skills to accomplish their work.	E4-SOC-CE-19: Investigate how the workforce adopts new computing technologies and continues to update their computing skills.	E5-SOC-CE-19: Examine how professionals collaborate while using computing technologies to solve problems.	MS-SOC-CE-44: Analyze how workers in different careers use computational thinking to solve real-world problems. MS-SOC-CE-45: Evaluate how automation in technology can create or replace jobs and change how people work.	HS-SOC-CE-45: Analyze how diverse teams of people use computational thinking and computing technologies to solve problems and express ideas. HS-SOC-CE-46: Connect computing knowledge and skills acquired to students' personal goals and career aspirations.

Specialty Standards for High School

What are Specialty Standards?

Specialty Standards define advanced, domain-specific learning beyond foundational PK–12 CS content.

The Standards are organized into two tiers (Specialty I and Specialty II) across six high school specialty areas identified through the **Reimagining CS Pathways project**

Six Specialty Areas

- **Software Development**
- **Cybersecurity**
- **Data Science**
- **Physical Computing**
- **Artificial Intelligence (AI)**
- **Game Development**

Integration (X+CS Standards)

One level of X+CS Standards has been developed to guide the integration of foundational high school CS content into other subject areas, like Journalism or Biology.

		Specialty I	Specialty II
Artificial Intelligence	Design & Development	S1-AIN-DD-01: Analyze AI systems to differentiate the types of problems they address. S1-AIN-DD-02: Modify AI system training data to improve fairness and accuracy in outputs. S1-AIN-DD-03: Create an application using a prebuilt supervised learning model to make a classification or prediction. S1-AIN-DD-04: Compare data representations and how representation choice constrains applicable algorithms. S1-AIN-DD-05: Evaluate whether an AI or non-AI computational solution is appropriate for a real-world problem.	S2-AIN-DD-01: Analyze problems that can be addressed using unsupervised learning. S2-AIN-DD-02: Optimize an AI algorithm's performance for a given problem. S2-AIN-DD-03: Create an application using a complex supervised learning model.
	Data Science for AI	S1-AIN-DS-06: Examine how data flows through a neural network structure. S1-AIN-DS-07: Apply data acquisition, cleaning, and transformation techniques to prepare data for AI analysis.	S2-AIN-DS-04: Evaluate metadata and data pipelines to support transparency in AI model selection and deployment. S2-AIN-DS-05: Transform data to meet the input requirements of an AI algorithm.
	Human Responsibility	S1-AIN-HR-08: Plan safeguards for AI systems that protect human well-being and privacy while ensuring meaningful human involvement in decision-making. S1-AIN-HR-09: Analyze the potential biases and limitations of AI systems. S1-AIN-HR-10: Analyze the environmental impacts of widespread AI adoption.	S2-AIN-HR-06: Develop a policy that promotes transparency in AI applications. S2-AIN-HR-07: Analyze how model optimization choices impact a model's performance, interpretability, and fairness.
	Professional Practice	S1-AIN-PP-11: Integrate a prebuilt AI agent into an application. S1-AIN-PP-12: Analyze how AI tools shape user experiences for people with diverse backgrounds and characteristics. S1-AIN-PP-13: Assess how unauthorized data collection has influenced the practice of training AI models. S1-AIN-PP-14: Evaluate how ethical implications of AI have changed over time.	S2-AIN-PP-08: Develop an AI agent to accomplish a defined task. S2-AIN-PP-09: Develop a professional communication artifact by interpreting technical AI results for diverse audiences. S2-AIN-PP-10: Debate aspects of AI regulatory frameworks and legislation across countries.

Sample Specialty Standards for High School

Specialty Standards for High School

Specialty I

Standards cover the **introductory** knowledge and skills essential to a chosen specialty area, serving as the first dedicated learning experience in that domain.

Specialty II

Standards describe **advanced study** within the specialty area, designed to **prepare students for college-level coursework** or **industry-level certifications**.

Student Intended Audience

Intended for students who have a particular interest in one or more specific fields, including those who wish to pursue computing-intensive postsecondary education.

NJ Proposed Standards
For September 2027

Computer Science, Innovation, & Society (CSIS)

8.1

Computer Science

Focuses on computational thinking, programming, and system analysis to build digital solutions.

8.2

Engineering Design & Tech

Previously: Design Thinking

Applies engineering design processes and technology integration to solve real-world problems.

8.3

Digital Literacy

Previously: Part of 9.4 Life Literacies & Key Skills

Develops proficiency in using digital tools, understanding network systems, and navigating information safely.

8.1 Computer Science Disciplinary Concepts

Algorithms and Programming (By the end of Grade 12)

01

Evaluation & Design

Students evaluate algorithms for efficiency and correctness.

They translate between diagrams, pseudocode, and actual code.

They design flexible computational solutions utilizing structured data.

02

Application & Logic

Students apply control structures and complex conditionals to solve core problems.

They focus on iteratively designing and testing original algorithms.

They build complete programs that serve practical, expressive, or societal purposes.

03

Deconstruction & UX

Students deconstruct larger problems into simpler procedures, modules, or objects.

They create software artifacts using existing libraries, code, or AI tools.

They collaborate actively to refine programs for usability, accessibility, and user-centered design.

8.1 Computer Science Disciplinary Concepts

Computing Systems (By the end of Grade 12)

01

System Integration

Students analyze how hardware, software, and integrated systems work together to support user tasks.

02

Abstraction & Data

Students explain how abstraction simplifies usability.

They evaluate trade-offs in organizing and storing data.

They connect binary representations to data processing.

03

Troubleshooting

Students develop and share systematic troubleshooting strategies to identify and resolve errors.

8.1 Computer Science Disciplinary Concepts

Data and Artificial Intelligence (By the end of Grade 12)

01

Data & Visualization

Students use computational tools to collect, transform, and visualize data with multiple variables.

02

AI Models & Feedback

Students explain how AI models learn through training and feedback, and propose refinements based on purpose, function, and limitations.

03

Insights & Decisions

Emphasis is placed on developing data concepts and understanding how AI systems generate insights and support decision-making.

8.1 Computer Science Disciplinary Concepts

Networks and Cybersecurity (By the end of Grade 12)

01

Data Transmission

Students explain how hardware and protocols transmit data across networks, including the Internet.

02

Security Measures

Students evaluate security measures against common threats and apply strategies to protect data both when stored and when transmitted.

03

Digital Responsibility

Students build a foundational understanding of personal and civic responsibility in safeguarding digital information.

Algorithms and Programming

Algorithms and Programming (AP): By the end of grade 12, students develop and refine computational solutions by designing, evaluating, and translating algorithms; organizing and manipulating data with variables; and applying control structures and modular design. Through iterative program development and collaboration, students create artifacts such as code, flowcharts, and documented programs that demonstrate readiness for postsecondary success in computer science and related fields.

K-2	3-5	6- 8	9-12
8.1.AP.K-2.1 Model daily processes by creating and following algorithms to complete tasks.	8.1.AP.3-5.1 Compare simple algorithms for the same task to determine which is the most appropriate.	8.1.AP.6-8.1 Depict algorithms using diagrams, pseudocode, or code. 8.1.AP.6-8.2 Determine the outcome of simple algorithms, such as those represented through diagrams, pseudocode, and program code.	8.1.AP.9-12.1 Translate algorithms from other representations, including diagrams, pseudocode, and verbal descriptions, into code. 8.1.AP.9-12.2 Evaluate algorithms for efficiency and correctness.
8.1.AP.K-2.2 Model ways different types of data can be organized.	8.1.AP.3-5.2 Create programs that use clearly named variables to store and modify data.	8.1.AP.6-8.3 Use student-developed variables of differing data types.	8.1.AP.9-12.3 Develop generalized computational solutions through the effective application of data collections.
8.1.AP.K-2.3 Use a simple conditional statement.	8.1.AP.3-5.3 Create programs that include sequences, events, loops, and/or conditionals.	8.1.AP.6-8.4 Develop programs that combine control structures, including simple loops and conditionals.	8.1.AP.9-12.4 Develop programs that combine control structures with and without compound conditionals to solve a problem. 8.1.AP.9-12.5 Iteratively develop original algorithms for personal expression, practical intent, and/or societal reform.

Algorithms and Programming

K-2	3-5	6- 8	9-12
8.1.AP.K-2.4 Break down a task into a sequence of steps.	8.1.AP.3-5.4 Break down problems into manageable sub-problems. 8.1.AP.3-5.5 Modify programs using pieces of existing code to add additional features or create a new program.	8.1.AP.6-8.5 Break down problems into smaller, manageable sub-problems to facilitate program development. 8.1.AP.6-8.6 Create procedures to organize code and make it easier to reuse.	8.1.AP.9-12.6 Deconstruct problems into smaller components using constructs such as procedures, modules, and/or objects. 8.1.AP.9-12.7 Create artifacts by using parameterized procedures, libraries, existing code, and/or AI.
8.1.AP.K-2.5 Describe a program's sequence of events, goals, and expected outcomes. 8.1.AP.K-2.6 Debug errors in an algorithm or program that includes sequences and simple loops.	8.1.AP.3-5.6 Iteratively develop a simple program to ensure it works as intended.	8.1.AP.6-8.7 Identify a solution that meets users' needs by synthesizing feedback from co-creators, testers, users, and/or AI, as applicable. 8.1.AP.6-8.8 Build programs that incorporate existing code, media, libraries, and/or AI, with appropriate attribution. 8.1.AP.6-8.9 Document programs to make them easier to follow, test, and debug.	8.1.AP.9-12.8 Collaboratively develop programs for broad audiences by incorporating feedback from users, team members, and/or AI as applicable. 8.1.AP.9-12.9 Refine programs to enhance usability, accessibility, and security. 8.1.AP.9-12.10 Present design decisions in the development of programs.

Computing Systems

Computing Systems (CS): By the end of grade 12, students understand how computing devices, software, and hardware interact within integrated systems to perform tasks and store data. They apply troubleshooting strategies and analyze trade-offs in system design, developing artifacts that demonstrate readiness for postsecondary success in technology-rich environments.

K-2	3-5	6- 8	9-12
8.1.CS.K-2.1 Describe how different computing devices perform specific functions and work together to accomplish tasks.	8.1.CS.3-5.1 Demonstrate how computing devices connect to other components to form a system.	8.1.CS.6-8.1 Rationalize choices of individual hardware and software devices that impact integrated systems.	8.1.CS.9-12.1 Describe ways in which integrated systems abstract underlying implementation details to simplify user experiences.
8.1.CS.K-2.2 Explain the functions of common software and hardware components of computing systems.	8.1.CS.3-5.2 Analyze how computer hardware and software work together as a system to complete simple tasks. 8.1.CS.3-5.3 Compare the amount of storage space required for different types of data.	8.1.CS.6-8.2 Iteratively design a system that combines hardware and software components. 8.1.CS.6-8.3 Identify the appropriate tool to access data based on its file format. 8.1.CS.6-8. Explain the difference between how a computer stores data as bits and how the data is displayed.	8.1.CS.9-12.2 Analyze how application software, system software, and hardware interact. 8.1.CS.9-12.3 Describe the trade-offs in how and where data is organized, stored, and secured. 8.1.CS.9-12.4 Translate between decimal numbers and binary numbers. 8.1.CS.9-12.5 Explain the relationship between binary numbers and the storage and use of data in a computing device.
8.1.CS.K-2.3 Describe common hardware and software issues using correct terminology. 8.1.CS.K-2.4 Apply basic troubleshooting techniques to resolve hardware and software issues.	8.1.CS.3-5.4 Troubleshoot common hardware and software problems.	8.1.CS.6-8.5 Systematically apply troubleshooting strategies to identify and resolve hardware and software problems in computing systems.	8.1.CS.9-12.6 Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.

Data and Artificial Intelligence Concepts

Data and Artificial Intelligence Concepts (DA): By the end of grade 12, students use computational tools and techniques to collect, manipulate and transform data. Students create artifacts that reflect their understanding of data-driven decision-making and readiness for postsecondary success in AI-related fields.

K-2	3-5	6- 8	9-12
8.1.DA.K-2.1 Recognize patterns that machines can use to make decisions.	8.1.DA.3-5.1 Explain how computational tools can learn from patterns in data. 8.1.DA.3-5.2 Collect different types of data using computational tools (e.g., sensors, cameras, apps). 8.1.DA.3-5.3 Create an artifact that tells a story about relationships in real-world data.	8.1.DA.6-8.1 Use computational tools to transform data to improve its usability. 8.1.DA.6-8.2 Use computational tools to manipulate data (e.g., calculating new variables or attributes from existing ones). 8.1.DA.6-8.3 Refine computational models for data analysis.	8.1.DA.9-12.1 Create simple data visualizations from large data sets using computational tools. 8.1.DA.9-12.2 Use computational tools to create data visualizations involving multiple variables.
8.1.DA.K-2.2 Investigate simple examples showing what artificial intelligence (AI) is and how people interact with it.	8.1.DA.3-5.4 Compare how people and machines use data and feedback to learn and make decisions. 8.1.DA.3-5.5 Collect data that could be used to train an AI model by considering potential impact of its use.	8.1.DA.6-8.4 Describe the purpose, function, and limitations of an AI model. 8.1.DA.6-8.5 Explain how decisions made during collection of the data used by AI systems can produce biased outputs.	8.1.DA.9-12.3 Demonstrate how AI models improve through the use of data, training, and feedback. 8.1.DA.9-12.4 Propose refinements to an AI model based on its purpose, function, and limitations.

Networks and Cybersecurity

Networks and Cybersecurity (NC): By the end of grade 12, students understand how data travels across networks and how systems are protected from unauthorized access and vulnerabilities. They explore protocols, security measures, and ethical responsibilities, developing artifacts that demonstrate readiness for postsecondary success in secure and connected digital environments.

K-2	3-5	6- 8	9-12
8.1.NC.K-2.1 Recognize that the Internet is a group of connected devices. 8.1.NC.K-2.2 Describe how the Internet enables individuals to connect with others worldwide.	8.1.NC.3-5.1 Explain the different ways data is transmitted over the Internet.	8.1.NC.6-8.1 Model how data travels across the Internet through multiple routes and devices and how that redundancy ensures reliable transmission.	8.1.NC.9-12.1 Articulate the roles of protocols and hardware in transmitting data on the Internet.
8.1.NC.K-2.3 Compare how keeping devices secure is like keeping property in the real world safe. 8.1.NC.K-2.4 Explain why access to devices needs to be secured.	8.1.NC.3-5.2 Describe physical and digital security measures for protecting sensitive personal information.	8.1.NC.6-8.2 Outline how data can be read, changed, corrupted, and restricted. 8.1.NC.6-8.3 Explain how security measures adapt in response to new digital threats.	8.1.NC.9-12.2 Secure data against unauthorized and unintended access or modification, both when it is being stored and transmitted. 8.1.NC.9-12.3 Evaluate security measures to address various common security threats.

8.2 Engineering Design and Technology Domain

Disciplinary Concepts: **Nature of Technology**

hub

Interdisciplinary Connections

Understand how technology develops in deep connection with science, mathematics, and other academic disciplines.

balance

Trade-offs & Decisions

Evaluate competing priorities and trade-offs to make highly informed, ethical decisions when core values conflict.

construction

Resource Management

Identify and systematically leverage key resources including time, people, materials, energy, and vital funding to solve complex tasks.

Target Standard: By the end of grade 12, students reflect on the interdisciplinary and practical nature of technology.

8.2 Engineering Design and Technology Domain

Disciplinary Concepts: **Interaction of Technology and Humans**

sync

Dynamic Relationship

Recognize that the relationship between technology and culture is dynamic, changing gradually or rapidly over time.

gavel

Societal Intersection

Analyze complex issues at the intersection of technology and society by applying principles such as trade-offs and unintended consequences.

public

Global Equity

Understand that access to technology varies globally due to economic, political, and cultural factors, and evaluate broader societal impacts.

Target Standard: By the end of grade 12, students analyze and evaluate the global, societal, and cultural impacts of technology.

8.2 Engineering Design and Technology Domain

Disciplinary Concepts: **Effects of Technology on the Natural World**

eco

Reducing Impact

Understand how technology can be designed and implemented to systematically reduce adverse environmental impacts.

insights

Monitoring & Design

Use environmental monitoring tools and sustainable design methodologies to protect natural ecosystems.

compare_arrows

Comparative Analysis

Actively analyze and compare the ecological footprint and environmental effects of different technologies.

Target Standard: By the end of grade 12, students understand how technology reduces environmental impacts and analyze ecological effects.

8.2 Engineering Design and Technology Domain

Disciplinary Concepts: **Engineering Design**

assignment

Define & Research

Break down large challenges, define measurable criteria and constraints, and use research to find solutions.

computer

Test & Optimize

Use mathematics and simulations to test designs under various conditions, assess trade-offs, and prioritize goals.

analytics

Evaluate Impacts

Analyze the social and environmental impacts of decisions, reflecting a comprehensive and analytical design approach.

Target Standard: By the end of grade 12, students apply engineering design to solve complex socially and globally relevant problems.

8.2 Engineering Design and Technology

Nature of Technology (NT): By the end of grade 12, students demonstrate a comprehensive understanding of tools, materials, and technological systems, including their design, function, and impact on society. Through this progression, students prepare to think critically, design innovatively, and engage responsibly as informed contributors in an increasingly technology-driven world.

K-2	3-5	6- 8	9-12
8.2.NT.K-2.1 Explore the roles of scientists and engineers and identify associated skillsets.	8.2.NT.3-5.1 Differentiate between the roles of scientists, technologists, and engineers in creating and maintaining technological systems.	8.2.NT.6-8.1 Compare and contrast the contributions of science, engineering, and technology in the development of technological systems.	8.2.NT.9-12.1 Model the interrelationships among science, technology, engineering, and mathematics in the development or innovation of technological systems.
8.2.NT.K-2.2 Organize different kinds of materials by their observable properties and consider how they may be used for different purposes.	8.2.NT.3-5.2 Using evidence, determine which materials are most suitable for a given application.	8.2.NT.6-8.2 Make observations and/or measurements of the properties of various materials to determine which would be best to use for a given application.	8.2.NT.9-12.2 Relate how civilization is affected by the development, availability, and use of tools, materials, and processes.
8.2.NT.K-2.3 Demonstrate respect for tools and how to use them safely and responsibly.	8.2.NT.3-5.3 Choose and safely use appropriate tools for accomplishing tasks.	8.2.NT.6-8.3 Safely use appropriate measuring instruments, hand tools, power tools, machines, and materials to construct a prototype.	8.2.NT.9-12.3 Safely apply appropriate methods, tools, and machines to diagnose, adjust, and repair systems to ensure proper functionality.

8.2 Engineering Design and Technology

Interaction of Technology and Humans (TH): By the end of grade 12, students demonstrate a comprehensive understanding of how technology both shapes and responds to human needs, values, and decisions. Their learning evolves from recognizing technology's role in everyday life to critically analyzing its global, cultural, and ethical dimensions. Students are able to evaluate, design, and advocate for responsible technological innovations that advance sustainability, equity, and the well-being of society.

K-2	3-5	6- 8	9-12
8.2.TH.K-2.1 Illustrate how new inventions have changed how people live, play, and do their jobs.	8.2.TH.3-5.1 Construct explanations based on evidence and reasoning for the potential positive and negative effects that the introduction of a new technology might have on a community.	8.2.TH.6-8.1 Describe and analyze positive and negative impacts on society from the introduction of a new or improved technology, including both expected and unanticipated effects.	8.2.TH.9-12.1 Choose an appropriate technology to help solve a given societal problem and justify the selection based on an analysis of criteria, constraints, available resources, trade-offs, environmental impacts, and cultural concerns.
8.2.TH.K-2.2 Share pictures, drawings, and/or writing samples to explain how tools help people.	8.2.TH.3-5.2 Evaluate evidence to compare the impact of two technologies by imagining how life would be different without each one.	8.2.TH.6-8.2 Compare the impacts of a given technology on different societies, noting factors that may make technology appropriate and sustainable in one society but not in another.	8.2.TH.9-12.2 Analyze how transferring technologies between societies can cause cultural, social, economic, or political changes, including both expected and unexpected effects.
	8.2.TH.3-5.3 Demonstrate responsible and ethical use of tools and technologies and describe how technology can positively or negatively affect others.	8.2.TH.6-8.3 Explain the importance of minimizing the negative impacts and enhancing the positive effects of technologies on communities in other regions and on future generations.	8.2.TH.9-12.3 Analyze responsibilities of individuals and groups, ranging from citizens and entrepreneurs to political and government officials, with respect to a controversial technological issue.
			8.2.TH.9-12.4 Examine the effects of ethical and unethical practices in product design, development, and use.

8.2 Engineering Design and Technology

Effects of Technology on the Natural World (TW): By the end of grade 12, students understand the interconnectedness of technology, the environment, and society. Their learning progresses from simple awareness of how materials and tools affect the world to advanced evaluation of environmental, social, and economic trade-offs. Students are prepared to analyze data, make informed decisions, and advocate for sustainable technological solutions that protect resources and promote the health of people and the planet.

K-2	3-5	6- 8	9-12
8.2.TW.K-2.1 Determine whether an item is reusable, recyclable, compostable, or disposable based on its material composition.	8.2.TW.3-5.1 Analyze the environmental impact of a technology and propose strategies to minimize harm while maximizing benefits.	8.2.TW.6-8.1 Compare the environmental impacts of two alternative technologies designed for the same purpose and justify which is the better choice, considering environmental and other relevant factors.	8.2.TW.9-12.1 Evaluate the economic, social, environmental, and geopolitical costs, risks, and benefits of designed solutions, such as resource consumption.
8.2.TW.K-2.2 Recognize ways the use of technology can have positive or negative impacts on the local environment.	8.2.TW.3-5.2 Propose solutions to reduce environmental harm through evidence-based material selection in product design.	8.2.TW.6-8.2 Conduct life cycle analyses of multiple products and assess how each product's life cycle affects human health and the environment.	8.2.TW.9-12.2 Synthesize and analyze data collected to monitor the effects of a technological product or system on the environment.

8.2 Engineering Design and Technology

Engineering Design (ED): By the end of grade 12, students demonstrate comprehensive understanding and application of the engineering design process progressing from identifying and defining problems to developing, testing, and refining optimized solutions. Their skills evolve from early experiences in simple modeling and exploration to advanced innovation that integrates data analysis, design constraints, and awareness of social, environmental, and technological impacts.

K-2	3-5	6- 8	9-12
8.2.ED.K-2.1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. (See NJSLS Science K-2-ETS1-1.)	8.2.ED.3-5.1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints. on materials, time, or cost. (See NJSLS Science 3-5-ETS1-1.)	8.2.ED.6-8.1 Create solutions for an authentic community-based problem that includes a detailed model such as a physical prototype or a graphical/technical sketch and clearly document the design process.	8.2.ED.9-12.1 Optimize a design for a real-world challenge by addressing qualitative and quantitative criteria, constraints, and societal interests.
8.2.ED.K-2.2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. (See NJSLS Science K-2-ETS1-2.)	8.2.ED.3-5.2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. (See NJSLS Science 3-5-ETS1-2.)	8.2.ED.6-8.2 Diagnose design flaws in a potential solution, considering relevant scientific principles and potential impacts on people and the natural world.	8.2.ED.9-12.2 Apply appropriate methods to diagnose, adjust and repair systems to ensure precise, safe and proper functionality.
8.2.ED.K-2.3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. (See NJSLS Science K-2-ETS1-3.)	8.2.ED.3-5.3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. (See NJSLS Science 3-5-ETS1-3.)	8.2.ED.6-8.3 Modify the design of a proposed object, tool, or process to make it more effective, using data generated from iterative testing models.	8.2.ED.9-12.3 Use various approaches to communicate with stakeholders, such as scaled engineering drawings to use, maintain, and assess technological products and/or systems.
		8.2.ED.6-8.4 Using a systematic process, evaluate competing design solutions according to the criteria and constraints of the problem.	8.2.ED.9-12.4 Interpret the results of a product or system evaluation to guide policy development.
		8.2.ED.6-8.5 Use test data to identify the best characteristics from various designs and combine into a new solution that better meets the success criteria.	8.2.ED.9-12.5 Use computer simulations to model how proposed solutions to a complex real-world problem affect interactions within and between relevant systems.

8.3 Digital Literacy Disciplinary Concepts

Strand: Digital Tools

01

Tool Fluency

By the end of grade 12, students demonstrate fluency in selecting and using digital tools, including AI, to solve real-world problems.

02

Justification

Students justify their tool choices based on features such as suitability, efficiency, accessibility, and usefulness.

03

Refinement

Through iterative refinement, they improve digital artifacts for clarity, accuracy, and fairness, and evaluate experiences for limitations or potential bias.

04

Collaboration

By collaborating to integrate diverse perspectives, students develop critical judgment, adaptability, and social responsibility in connected environments.

8.3 Digital Literacy Disciplinary Concepts

Strand: Digital Citizenship

01

Digital Footprints

Students evaluate how their online presence and digital footprints influence reputations and opportunities.

02

Online Identity

Students design intentional online identities that support healthy, safe, and respectful engagement across contexts.

03

Laws & Ethics

Students analyze how laws and regulations shape digital communication, considering ethical, legal, and societal implications.

04

Privacy & Security

Students assess risks of sharing personal data online and apply strategies to safeguard privacy and security.

8.3 Digital Literacy Disciplinary Concepts

Strand: Technology and Society

Through this strand, students learn how technology both shapes, and is shaped by, human values, equity, and sustainability.

01

Community Wellbeing

Students propose ways to use technology responsibly to support the wellbeing of local, global, and cultural communities.

02

Emerging Tech & AI

They evaluate evidence to predict potential impacts of emerging technologies such as AI on social, economic, and political structures.

03

Career Skills Gap

Students analyze the gap between personal technological skills and those required in careers of interest, identifying strategies for continuous learning.

04

Equity & Access

They assess the societal and environmental impacts of emerging technologies, including those shaped by inequitable access to resources.

8.3 Digital Literacy

Digital Tools (DT): By the end of grade 12, students explore how digital tools empower collaboration, creativity, and communication across distances and disciplines, while recognizing they also have limitations, require critical evaluation, and demand responsible, transparent use, especially in the age of AI and emerging technologies.

K-2	3-5	6- 8	9-12
8.3.DT.K-2.1 Identify basic features of digital tools, including those with artificial intelligence (AI), to help with tasks like creating, solving problems, finding information, and sharing work.	8.3.DT.3-5.1 Describe responsible digital tool use, including emerging technology such as AI, in accordance with acceptable use policies.	8.3.DT.6-8.1 Determine appropriate digital tools, including emerging technologies such as AI, to complete a real-world task.	8.3.DT.9-12.1 Support the choice of a digital tool, including emerging technology such as AI, based on its suitability, efficiency, accessibility, and usefulness for a given task.
8.3.DT.K-2.2 Demonstrate basic proficiency in using common and emerging input methods, including keyboarding, touch interfaces, voice, or other technologies, to create, edit, and share digital documents or artifacts.	8.3.DT.3-5.2 Use appropriate input methods to create an artifact while completing simple file management tasks, such as name, save, organize, and edit.	8.3.DT.6-8.2 Select appropriate digital tools to structure and present information, while crediting sources and distinguishing between student-created and AI-generated content.	8.3.DT.9-12.2 Optimize a digital artifact using an iterative refinement process using digital tools, including emerging technologies such as AI.
8.3.DT.K-2.3 Compare tasks that computers and people can both do, noting what is similar and what is different.	8.3.DT.3-5.3 Identify when technology, including AI, is useful for solving problems and when human qualities, such as creativity and emotion, are more appropriate.	8.3.DT.6-8.3 Evaluate the appropriate use of machines or other emerging technologies to complete a task, considering ethical implications, human values, and the nature of the problem.	8.3.DT.9-12.3 Describe collaborative problem-solving between humans and machines and assess the risks and opportunities of such partnerships.
8.3.DT.K-2.4 Describe how technology can be used to communicate and collaborate.	8.3.DT.3-5.4 Collaborate digitally to create and refine a shared artifact, demonstrating teamwork and collective responsibility.	8.3.DT.6-8.4 Analyze how communication strategies, such as synchronous and asynchronous collaboration, team roles, and shared digital tools, contribute to solving challenges or answering research questions.	8.3.DT.9-12.4 Prioritize various and appropriate digital tools to solve real-world problems through collaborative research, feedback, and iteration.

8.3 Digital Literacy

Digital Citizenship (DC): By the end of grade 12, students learn that digital citizenship involves understanding how online actions shape personal and professional identities, progressing from using digital tools and communities responsibly to protecting privacy, promoting safety, and contributing positively to society.

K-2	3-5	6- 8	9-12
8.3.DC.K-2.1 Explain what a digital footprint is and how it is created.	8.3.DC.3-5.1 Identify the characteristics of a positive and negative online identity and the lasting implications of online activity on privacy, reputation, and safety.	8.3.DC.6-8.1 Analyze online information to determine how individuals and/or organizations cultivate public personas.	8.3.DC.9-12.1 Evaluate how online presence and digital footprints impact personal reputation and future opportunities.
8.3.DC.K-2.2 Describe respectful and responsible ways to communicate with peers online and offline.	8.3.DC.3-5.2 Contrast respectful participation in digital environments with harmful behaviors like cyberbullying and discuss how to respond appropriately to both.	8.3.DC.6-8.2 Evaluate aspects of digital communication, including tone, safety, and audience, to differentiate between respectful online behavior and cyberbullying.	8.3.DC.9-12.2: Design an intentional online presence that supports healthy, safe, and respectful engagement in personal, academic, or professional contexts.
8.3.DC.K-2.3 Explain why someone might create or share misinformation.	8.3.DC.3-5.3 Describe how sharing unverified or misleading information might lead to unintended and/or lasting consequences.	8.3.DC.6-8.3 Assess legal and ethical concerns associated with digital communication and tools, such as deepfakes, spam, and/or clickbait.	8.3.DC.9-12.3 Analyze how laws and regulations shape digital communication and development, considering ethical, legal, and societal implications.
8.3.DC.K-2.4 Discuss the types of information that are shared in-person and online, such as personally identifiable information (PII).	8.3.DC.3-5.4 Compare risks and benefits of sharing different types of data online, including personally identifiable information (PII), and demonstrate how to protect information.	8.3.DC.6-8.4 Analyze how digital data, including personal and behavioral, can be accessed or misused, and apply strategies to verify credibility and safeguard data.	8.3.DC.9-12.4 Create plans to mitigate the impacts of sharing and accessing data online, including protecting privacy and verifying credibility and origin.

8.3 Digital Literacy

Technology and Society (TS): By the end of grade 12, students explore how technologies shape how we live, work, and connect, offering powerful tools but also introducing ethical, social, and environmental tradeoffs. By practicing digital sustainability, individuals and communities can harness technology's benefits while critically addressing its harms and ensuring equitable, responsible use.

K-2	3-5	6- 8	9-12
8.3.TS.K-2.1 Describe how using technology can affect one's body, mind, and friendships, in everyday life.	8.3.TS.3-5.1 Describe how to maintain a healthy balance between using technology and interacting with the physical world.	8.3.TS.6-8.1 Analyze how technology affects wellbeing, relationships, and community life, and suggest ways to create positive outcomes.	8.3.TS.9-12.1 Propose ways to use technology responsibly to benefit the health and wellbeing of local, global, and cultural communities.
8.3.TS.K-2.2: Identify how technology can be used in a variety of ways to meet diverse needs of users.	8.3.TS.3-5.2 Explain how technology can support people with differing abilities and/or facilitate access.	8.3.TS.6-8.2 Identify possible ways to improve the accessibility and usability of technologies to address the diverse needs of users and to reduce barriers.	8.3.TS.9-12.2 Predict the potential impacts and implications of emerging digital tools on larger social, economic, and political structures, using evidence from credible sources.
8.3.TS.K-2.3 Explain how technology is used across different career fields.	8.3.TS.3-5.3 Examine how professionals in different careers develop skills by adopting new technologies.	8.3.TS.6-8.3 Determine how professionals collaborate with various technologies to solve problems creatively, accurately, and efficiently.	8.3.TS.9-12.3 Evaluate the gap between personal and career-specific technological skills and develop strategies for continuous learning and adaptability to remain resilient for an evolving workforce.
8.3.TS.K-2.4 Compare ways that the use of digital tools positively and negatively impacts the environment.	8.3.TS.3-5.4 Investigate how digital tools can be used to plan or share ideas that support environmental sustainability in schools, neighborhoods, or local communities.	8.3.TS.6-8.4 Explain how communities use data and digital tools to develop measures to improve sustainability as well as to identify the potential impacts of technology on the environment and natural resources.	8.3.TS.9-12.4 Estimate the societal and environmental impacts of emerging technologies, such as AI, including those caused by differences in access to natural resources.

Summary of Changes to NJSLS-CSIS

Alignment with National Standards: The standards have been updated to ensure alignment with new research and widely accepted national frameworks:

Framework

CSTA

2025

Computer Science Teachers Association

Framework

ISTE

2024

International Society for Technology in Education

Framework

ITEEA

2020

International Technology and Engineering Educators Association

Summary of Changes to NJSLS-CSIS

Standard Evolution

Refined & Elevated 8.3

Building on the 2020 restructuring of Standard 8.1 (Educational Technology) which integrated into Standard 9.4.

The **2025 revisions** realign Educational Technology with Computer Science and Engineering Design to modernize the standards framework.

Foundational Impact

Digital Literacy as a Core

Recognized as a foundational component within the standards framework.

This update is **essential for supporting student success** in other academic domains such as computer science, technology, and engineering design while helping them navigate an evolving digital landscape.

Summary of Changes to NJSLS-CSIS

Terminology Alignment

Structural Reorganization

Changes in current terminology required a thoughtful structural reorganization within the standards to ensure future readiness and clarity.

Modern Language

Renaming Concepts

Updates include renaming disciplinary concepts to align with contemporary language widely used by modern educators and field practitioners.

Summary of Changes to NJSLS-CSIS

Revised Terminology

Networks and Cybersecurity

Formerly **Networks and the Internet**. Updated to emphasize modern digital security and infrastructure safety.

Evolving Concepts

Data and AI Concepts

Evolved from **Data & Analysis**. Expanded to cover modern intelligence frameworks and analytical tools.

Structural Realignment

Impacts of Computing

Reclassified into **8.3 Digital Literacy**, ensuring domain alignment with contemporary educational practices.

Summary of Changes to NJSLS-CSIS

Streamlining

Performance Expectations

The standards have been thoughtfully consolidated to allow for the scaffolding of skills and building of concepts progressively and meaningfully from K–12.

Integration

K–5 Science & Engineering

Integration of the K–5 NJSLS for Science into Engineering Design further strengthens interdisciplinary coherence and clarity.

Summary of Changes to NJSLS-CSIS

Modernization

Adaptable Language

To reflect current and emerging technologies, the revised standards incorporate adaptable language that accommodates future innovations.

Student Relevance

Real-World Skills

Ensures students engage with tools and concepts that mirror real-world applications, emphasizing critical thinking, ethical reflection, collaborative design, and adaptability.

Summary of Changes to NJSLS-CSIS

AI Integration

Growing Prominence

The standards expert and writing advisory committees recognized how Artificial Intelligence (AI) has gained prominence since the last iteration of the NJSLS – CS&DT.

Student Readiness

Conceptual & Practical

They emphasized the importance of equipping K–12 students with a conceptual understanding of AI and the ability to use it effectively.

Summary of Changes to NJSLS-CSIS

Digital Divide

Strategic Integration

The committees recognized an emerging digital divide between schools that strategically integrate AI and those that restrict or prohibit its use.

Curriculum Impact

Embedded Literacy

As a result, AI science and literacy are thoughtfully embedded in the performance expectations.

Summary of Changes to NJSLS-CSIS

National Alignment

Aligned Standards

Revised learning targets are strategically aligned to national standards.

Developmental Progressions

Scaffolded Support

Scaffolded to support developmental learning progressions.

Summary of Changes to NJSLS-CSIS

K-2 Accessibility

Unplugged Learning

The committees designed the K–2 standards to support unplugged learning, acknowledging varied technology use and developmental needs among younger students.

Equity & Engagement

Flexible Access

The broad standards allow diverse ways for students to access and demonstrate knowledge, ensuring meaningful engagement regardless of resources or learning methods.

A Note on the Inclusion of Climate Change and Sustainability

workspace_premium

First in the Nation

With the adoption of the 2020 New Jersey Student Learning Standards (NJSLS), New Jersey became the **first state** in the nation to **include climate change education** across content areas.

school

Fostering Future Leaders

The goal of implementing climate change education is to prepare generations of students who can analyze, question, think independently, and lead in jobs created by burgeoning industries of the future green economy.

A Note on the Inclusion of Climate Change and Sustainability Opportunities

computer

Future-Ready Skills

Revisions to NJSLS Standard 8, organized under the CSIS framework, highlight digital literacy, engineering design, and computer science to prepare students for civic life and the future workforce.

psychology

Systematic Thinking

The updated standards emphasize critical and systematic thinking about technology's critical role in solving urgent local and global challenges, including climate change.

A Note on the Inclusion of Climate Change and Sustainability Opportunities

analytics

Data & Modeling

Students engage with digital tools and computational systems to analyze data, model solutions, and communicate findings.

construction

Problem Solving

Engineering design and technology standards foster iterative problem-solving and innovation, while digital literacy standards ensure ethical navigation of tech environments.

groups

Future Leaders

These revisions support interdisciplinary learning and empower students to become informed creators, responsible digital citizens, and adaptive leaders.

A Note on the Inclusion of Climate Change and Sustainability Opportunities

description

Instruction Support

Accompanying the 2025 NJSLS-CSIS will be resources that identify standards that may be leveraged in support of instruction.

eco

Climate Integration

The symbol for climate change ( ) notes opportunities to integrate specific examples of climate education provided by additional resources.

school

Authentic Learning

These materials support educators in creating interdisciplinary units focused on authentic experiences integrating diverse perspectives.

Implementation Supports and Additional Resources

description

STAMP Guidance

To support the successful implementation of the 2025 NJSLS – CSIS, guidance documents will be made available on the STAMP webpage.

groups

Local Support

The guidance resources will support districts in developing a clear understanding of the new expectations and help guide curriculum development at the local level.

school

Collaboration

To ensure professional learning is responsive, New Jersey educators will collaborate with the Department to design supportive resources.

Proposed New Jersey Preschool Teaching and Learning Standards

devices

Intentional Integration

Technology must be integrated as a developmentally appropriate tool alongside hands-on materials to support curriculum goals and ensure equitable digital skills development.

schedule

Strict Limits

Screen time is limited to less than 1 hour/day for full-day and 30 minutes for half-day programs. It must never replace experiential learning or be used as a reward.

public

Digital Citizenship

Carefully selected technology fosters safe, ethical, and responsible interactions, helping young students understand key concepts of identity, rights, and communication.

https://www.nj.gov/education/earlychildhood/preschool/docs/NJPTLS_Unofficial.pdf

Proposed New Jersey Preschool Teaching and Learning Standards

extension

Appropriate Tools

Developmentally appropriate tools—such as cameras, tablets, electronic storybooks, and assistive technology—expand learning opportunities and support early skill development.

accessibility

Inclusive Impact

Thoughtfully selected digital resources empower multilingual learners and students with disabilities, ensuring all children can actively communicate and participate in classroom activities.

layers

Intentional Design

Teachers must intentionally pair digital devices with hands-on, real-world experiences and low-tech supports, while actively working to bridge the digital divide.

https://www.nj.gov/education/earlychildhood/preschool/docs/NJPTLS_Unofficial.pdf

Proposed New Jersey Preschool Teaching and Learning Standards

help_outline

Reflective Decision Making

Reflective questions can guide decisions about technology use in preschool classrooms.

By thoughtfully selecting and integrating technology, teachers ensure it complements developmentally appropriate practices and strengthens learning for all students.

track_changes

01. Purpose

What is the goal of using this device or tool?

verified

02. Alignment

Does it align with the program's mission and values?

explore

03. Value

Does it enhance exploration or understanding?

psychology

04. Impact

Will it help the student grasp a concept with which they might struggle?

https://www.nj.gov/education/earlychildhood/preschool/docs/NJPTLS_Unofficial.pdf

Computer Science, Innovation, and Society Standards

Standard: Computer Systems (CS)

Understands the basic operations and vocabulary of technology.

Preschool Learning Outcomes Students will:	**Preschool Teaching Practices** Effective preschool teachers:
PK.CS1 Identifies and names parts of a computing device (e.g., screen, mouse, keyboard) during guided exploration.	• Model and verbalize gestures and actions while using technology. • Introduce new devices during large-group activities, model proper care and use, and provide visual supports to reinforce correct handling before placing technology in learning centers. • Provide experiences where students observe and hear correct terminology and proper handling of various technological tools.
PK.CS2 Understands and uses physical technology terms such as computer, laptop, tablet, digital camera, monitor, keyboard, printer, and mouse.	• Provide experiences where students apply proper terminology and handling of technological tools and offer repeated opportunities throughout the day to reinforce these skills and terms.
PK.CS 3 Use technology tools (e.g., touchscreen, mouse, keyboard) to explore, create, and solve simple problems, identifying basic hardware and software components.	• Model proper use of technology during large and small group activities, verbalizing steps and terminology while providing opportunities for students to practice and reinforce skills in small groups. • Create lessons using technology tools that align with student interests and curriculum goals, supporting engagement and skill development (e.g., using a mouse and keyboard to create a story). • Provide opportunities to use touchscreen software. Each opportunity must support content learning, reinforce objectives, and enhance concept understanding through meaningful, engaging experiences.
PK.CS 4 Uses age-appropriate software or applications (apps) to complete a simple task (e.g., drawing, matching, or sorting).	• Utilize software to meet the needs of students. • Provide opportunities for students to work in small groups using software that supports content/skill goals/objectives. • Provide opportunities for students to use applications that reinforce skills, concepts and/or content through interactive platforms including teacher-made programs.

Standard: Interaction of Technology and Humans (ITH)

Begin to use technology/electronic devices to communicate ideas.

Preschool Learning Outcomes Students will:	**Preschool Teaching Practices** Effective preschool teachers:
PK.ITH.1 Use electronic devices to type a string of letters.	• Create opportunities for students to design keyboards with art materials, placing letters to reflect a realistic keyboard. • Use visuals to model letter placement and support students in forming words. • Provide opportunities for students to use computers, tablets, laptops, or other devices to reinforce letter recognition, writing, and inventive spelling.
PK.ITH.2 Use electronic devices to type one's own name.	• Provide opportunities for students to use computers, tablets, laptops, or other devices to type their names. • Provide visual models of students' names to support letter recognition. • Provide students with opportunities to type the letters in their name (i.e., Add tablets to learning centers for students to "sign in," typing the letters of their name to indicate their presence in a learning center). • Provide students with opportunities to type their names on a Smartboard to indicate their presence in school (attendance). • Provide materials with letters for students to arrange and then transfer to digital devices, reinforcing connections between print and technology.
PK.ITH.3 Use electronic devices or cameras to document students' own work, creations, or play.	• Maintain digital portfolios of student work to share with families. • Encourage and assist students in documenting their own work, creations, or play, including recording verbal stories, creative dance movements, or musical creations. • Use cameras to maintain digital portfolios of student work to share with families. • Provide opportunities for students to select work to document and share with families or include in work samples, fostering ownership and reflection (e.g., photographing their work for sharing). • Use digital tools to strengthen communication with families, such as creating instructional videos, sharing student work, or contacting families through email, apps, or other platforms. • Provide opportunities for students to use cameras or tablets to photograph items in the environment that match designated colors, shapes, letters, or numbers, supporting observation, classification, and early literacy/math skills.
PK.ITH.4 Use electronic devices to create or co-create stories or digital books with pictures, letters, or words.	• Encourage students to create stories using a multistep process (i.e., draw stories, use voice recording to dictate their story, and finally publish their story through print or e-share). • Design activities that promote student-adult interactions to create digital books or stories based on students' authentic writing or dictated text.

Standard: Interaction of Technology and Humans (ITH)

Begin to use technology/electronic devices to communicate ideas.

Preschool Learning Outcomes Students will:	**Preschool Teaching Practices** Effective preschool teachers:
	• Select activities that encourage cooperative learning, such as grouping students around computers, providing multiple headsets for shared electronic books, or choosing logic and problem-solving tasks that require collaboration.

Standard: Nature of Technology (NT)

Use technology and interactive programs as tools to access information, investigate, and problem-solve, ensuring they enhance rather than replace hands-on learning experiences.

Preschool Learning Outcomes Students will:	**Preschool Teaching Practices** Effective preschool teachers:
PK.NT1 With support, begin to use technology to obtain information on a topic.	• Research software and/or websites in advance by reading reviews, as you would with any other classroom materials. • Model early research skills by looking for information on a topic that interests the students. • Engage students in inquiry-based projects that use technology to explore, gather, and analyze information, supporting curiosity, problem-solving, and critical thinking skills. • Use computers to conduct Internet searches for subjects of interest. Let students participate in the process of producing search terms and allow them to view the results in a way that allows them to understand (e.g., as a set of images rather than as text). • Provide opportunities for students to work in small groups to research topics using technology, document learning through drawings, and share findings with others. Teachers take dictation to support emergent writing and may use animation tools to extend student-created work. • Use virtual field trips to expand students' access to places, experiences, and content beyond the classroom. • Invite families to participate virtually to share knowledge, experiences, or expertise related to classroom topics.
PK.NT2 With support, begin to use electronic devices cooperatively with peers.	• Introduce new interactive programs to small groups over several days, providing guided practice before making them available for students to use during choice activities. • Stock learning centers with technology aligned to content goals (e.g., electronic keyboards in music centers; digital cameras or voice recorders in writing or technology centers; calculators in the math center). Teachers model appropriate and functional use of devices during small group instruction before making them available for free play. A limited number of student-configured tablets may be placed in learning centers for guided exploration of developmentally appropriate apps and games, with clear expectations for appropriate use, time limits, and equitable access. • Provide opportunities for students to work together during large and/or small group activities on tasks such as taking photos of items in the environment that match a designated color, shape, letter, or number (e.g., a scavenger hunt), using standard cameras or tablets/smartphones. • Provide opportunities for students to take turns using a designated application within learning centers (e.g., baking apps in the dramatic play center, letter tracing in the writing center, insect matching in the science center, or building games in the block center).
PK.NT3 Use technological tools in centers to support play.	• Select developmentally appropriate technology based on each student's age, developmental needs, interests, and abilities.

Standard: Nature of Technology (NT)

Use technology and interactive programs as tools to access information, investigate, and problem-solve, ensuring they enhance rather than replace hands-on learning experiences.

Preschool Learning Outcomes Students will:	**Preschool Teaching Practices** Effective preschool teachers:
	• Provide screen-free technology-based learning experiences (e.g., listening to eBooks or music, engaging in coding and robotics activities, asking questions through digital voice assistants, and building or using simple machines). • Tools to use in learning centers: - Art: Scissors, slant boards, light/glow boards, and knob paintbrushes - Dramatic Play: Calculators, cash registers, microphones, non-wired headphones, non-working phones, and computer keyboards - Blocks: Building materials, musical instruments, cardboard boxes, hammers, blocks, and vehicles - Science: Magnifying glasses, microscopes, balances, flashlights, binoculars, and a light table - Table/Small Toy: Building toys, magnetic tiles, tongs, scales, balances, knob puzzles, and grabber toys in the Table/Small Toy area. - Book: Audio recordings of books (multiple languages), sound books, and sensory books - Sensory: Water wheels, pumps, measuring cups/spoons - Writing: Magnetic drawing boards (i.e., Etch a Sketch), letter tracing sensory pads, wiggle pens, LCD writing tablets, wireless keyboard, tabletop easel, or slant boards
PK.NT4 Explore cause and effect functions through the use of basic non-digital tools and machines.	• Create experiences that encourage students to explore cause and effect: - Use ramps with various objects (balls, shapes, cars). - Create catapults and use them with pompoms or small, soft materials. - Make pulleys with small buckets and rope to move objects. - Use outdoor slides to roll balls to compare the rate of speed. - Use outdoor equipment to compare the weight of different objects (i.e., "What will hit the ground first? Let's make predictions."). Each student selects two objects to drop from the outdoor equipment, makes a prediction, and uses higher-level thinking to explain reasoning for their prediction (e.g., "The block will hit first because it's heavier than the cup."). - Riding tricycles/ride-on toys (e.g., Pedaling, pushing feet on the ground makes the tricycle move).

Standard: Ethics and Culture (EC)

Students demonstrate competence and confidence in digital computer skills.

Preschool Learning Outcomes Students will:	**Preschool Teaching Practices** Effective preschool teachers:
PK.EC.1 Demonstrate the ability to use technology and media in safe, responsible, and effective ways.	• Model digital safety skills. • Model safe technology use. • Demonstrate logging in with help, closing apps properly, and asking for permission before clicking links. • Verbalize thinking and decision-making while using technology (e.g., "I'm checking if this game is safe for us to play") to model safe, intentional use. • Provide students with opportunities to use technology devices independently during "play," "free," or "work" time portions of the day. • Provide students opportunities to use technology devices during structured portions of the day, such as large and small group times, to support content-based objectives/goals.
PK.EC.2 With support, develop decision-making skills to engage with the digital world in ways that promote an understanding of what is appropriate and what is deemed harmful when using technology.	• Research and select developmentally appropriate tools, apps, and games that enhance learning, avoid ads or unsafe links, and use student-friendly browsers with strong safety filters. • Introduce and reinforce terms such as safe digital citizenship, and permission during technology activities through play, role-play, or puppets. • Model safe use by sitting with students during technology activities, verbalize thinking, and ask guiding questions (e.g., "Is this helping us learn? How do we know it's safe?"). • Collaborate with students to create clear rules for device use, including internet browsers and applications (e.g., an adult must be present for online use; notify an adult about prompts; ask before selecting a new game). • Provide structured choices between safe and unsafe options, asking students to identify and explain safe choices; use picture cards or other visuals to reinforce understanding. • Share strategies with families to supervise technology use at home and reinforce vocabulary and rules, such as "ask an adult first."
PK.EC.3 With support, demonstrates appropriate use of simple commands and information necessary to complete a task using age appropriate technology tools..	• Introduce coding concepts by engaging students in hands-on, active learning games that teach sequencing and directional thinking (e.g., arranging arrows to create a path for peers to follow). • Use instructional games that follow a simple sequence (i.e., a student gives directions such as "four hops, two big steps, etc." to the group on how to get to the X on the floor). • Offer developmentally appropriate tools such as robots, color-coding light boards, snap circuits, or marble runs to practice command sequences.

Standard: Ethics and Culture (EC)

Students demonstrate competence and confidence in digital computer skills.

Preschool Learning Outcomes Students will:	**Preschool Teaching Practices** Effective preschool teachers:
	• Provide opportunities for children to use technology tools with adult support to explore information, such as asking about the weather. Support children in checking the information by making real-world observations. • Help children understand that technology tools are created by people and are used to help us learn.

Content Specific Documentation (13 of 13)

Computer Science and Design Thinking (NJSLS-CS&DT)

QSAC

Indicator 17 (3 points)

- Banded: K–2, 3–5, 6–8, and 9–12
  - Performance expectations may be integrated within and across other content areas or presented as an independent course **(17b)**
- Within the K–2, 3–5, and 6–8 grade bands, all performance expectations are represented for each of the disciplines. Schools can demonstrate evidence of integration through their curricular documentation, showing:
  - Grade band appropriate standards included in curricula
  - Appropriate connections between NJSLS-CS&DT content areas and other disciplines outlined in curricular activities
  - Assessments for NJSLS-CS&DT in addition to other content areas
  - Curricular resources
  - The scope and sequence describing the vertical alignment and inclusion of K–8 standards that will prepare students for high school level courses
- Each public school enrolling students in grades nine through 12, other than a county vocational school district, shall offer a course in computer science. The course shall include, but need not be limited to, instruction in computational thinking, computer programming, the appropriate use of the Internet and development of Internet web pages, data security and the prevention of data breaches, ethical matters in computer science, and the global impact of advancements in computer science. N.J.S.A. 18A:7C-1.1

See NJSLS Computer Science and Design Thinking

Resources

Computer Science Resources for your Classroom

Through the Central New Jersey CS Education Hub, we are working to provide a wide range of resources for Computer Science teachers across the state. Using this page, you can navigate through different collections of CS resources based on student group, or find resources from our Workshops and Lending Library.

Elementary School Resources

Middle School Resources

High School Resources

Workshop Resources

Lending Library Resources

In January 2022, a team of dedicated educators came together under the leadership of Pat Morreale of the Kean CS Hub and Daryl Detrick of CS4NJ.

Mission: To develop supporting materials and examples for the effective adoption and implementation of the NJ DOE K-12 Computer Science standards. These materials will be shared and used to promote discussion with K-12 educators.

The materials were developed using the NJDOE NJSLS 2020 standards for 8.1 Computer Science and 8.2 Design Thinking as their foundation.

K-8 Resources

wakelet

Scope and Sequence PK-5
Planning Guide

Other Resources

WeTeach_CS Texas

Nextech Indiana

AI4K12

Garden State Cyber

Cyber.org

Code.org

CodeMonkey

CodeHS

Experience CS

Experience AI

New Jersey Center for Teaching and Learning

JuiceMind

AP Training with stipends
ExCITE (Exploring Computation Integrated into Technology and Engineering)

New CS + AI Guide for Parents

Plugging into Power is a project of the UCLA Center X Computer Science Equity Project, partnering with parents, community organizations, and schools to co-design resources that empower parents as advocates to advance computer science education in their schools and at home. Check out the website to **download the free guide for parents** and **accompanying webinar** about “12 Things Parents Should Know about CS and AI”, both available in English and Spanish.

GET THE GUIDE

Climate Change Hubs

Stockton University	Monmouth College	Rutgers University	Ramapo College of New Jersey
Stockton University	Monmouth College	Rutgers University	Ramapo College of New Jersey

Workshops with sub reimbursement or stipends,
Experiential Learning Opportunities, Lending Libraries and more!

Stay in the Know

Join the CS4NJ Google Group

Join the Garden State Cyber Google Group

Easy access to links!

CSTA National

CSTA New Jersey

CSPD Week Website

CS4NJ

Have CS news to share with the NJDOE?

Use #CompSciNJ when sharing on social media

#GoodNewsinNJSchools Campaign

Local educational agencies are invited to share positive news stories for possible inclusion on our social media.

Please go to our News Submissions page to submit “good news in New Jersey schools” during our campaign. The NJDOE is on Facebook, Twitter, Instagram, LinkedIn and YouTube.

Please “like” and follow us to get breaking news and information from the NJDOE and tag us @NewJerseyDOE and tag #GoodNewsinNJSchools to share great things happening in your schools.

New Jersey Department of Education @NewJerseyDOE · Oct 17

DID YOU KNOW: The **New Jersey** Student Learning Standards (SLS) include **Computer Science** and Design Thinking. Check it out here: bit.ly/3MpqyaO and stay tuned for more information on **computer science** education **in New Jersey**'s schools. #CompSciNJ

1 8 14

Don't forget to use the state's hashtag when on social media

#CompSciNJ

Questions? Comments?

Feedback Survey https://forms.gle/m9SfaacWr1sMM4Jh9

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New Jersey CSPDWeek

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