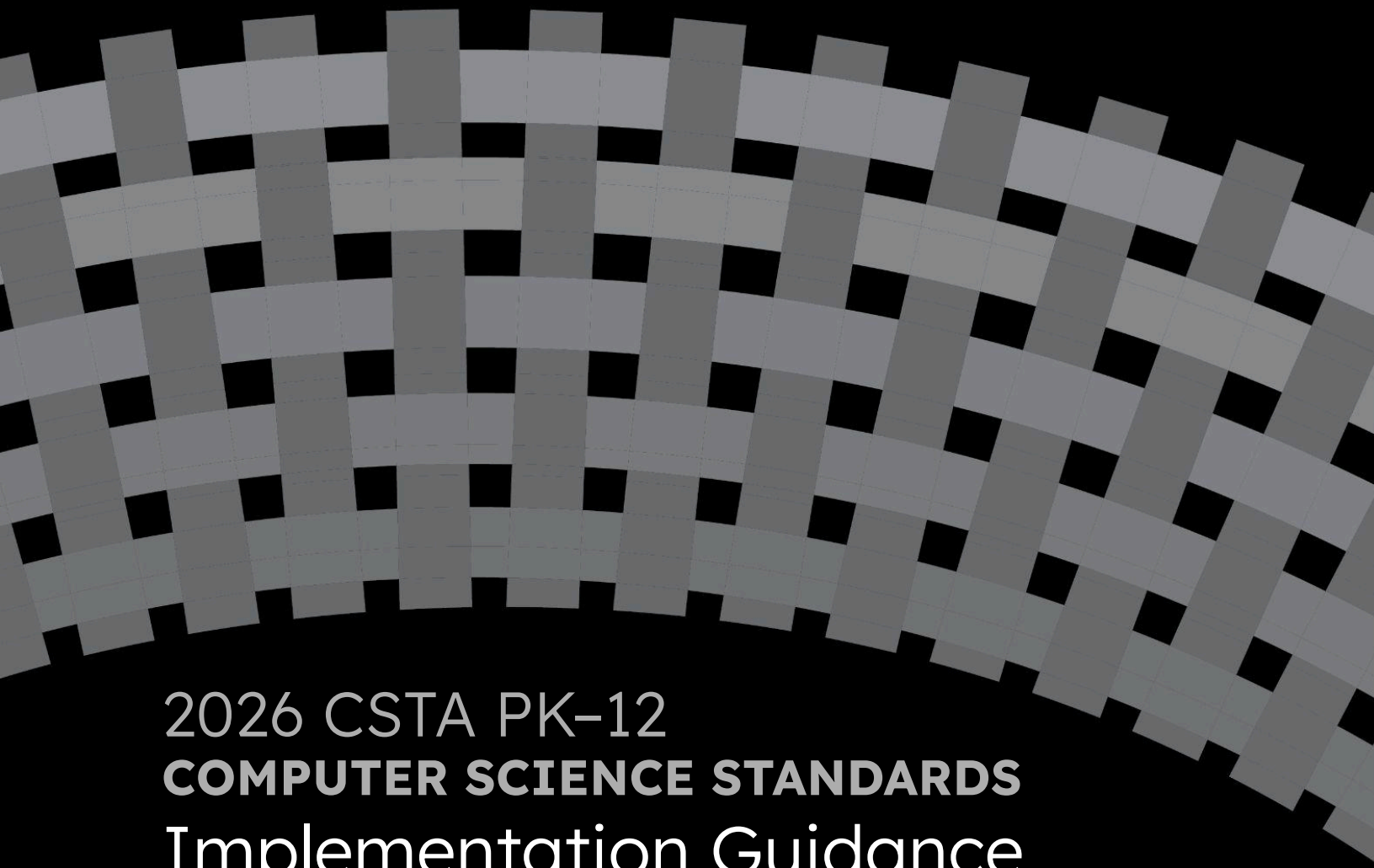


2026 CSTA PK–12
COMPUTER SCIENCE STANDARDS
Implementation Guidance for PK-12 Administrators

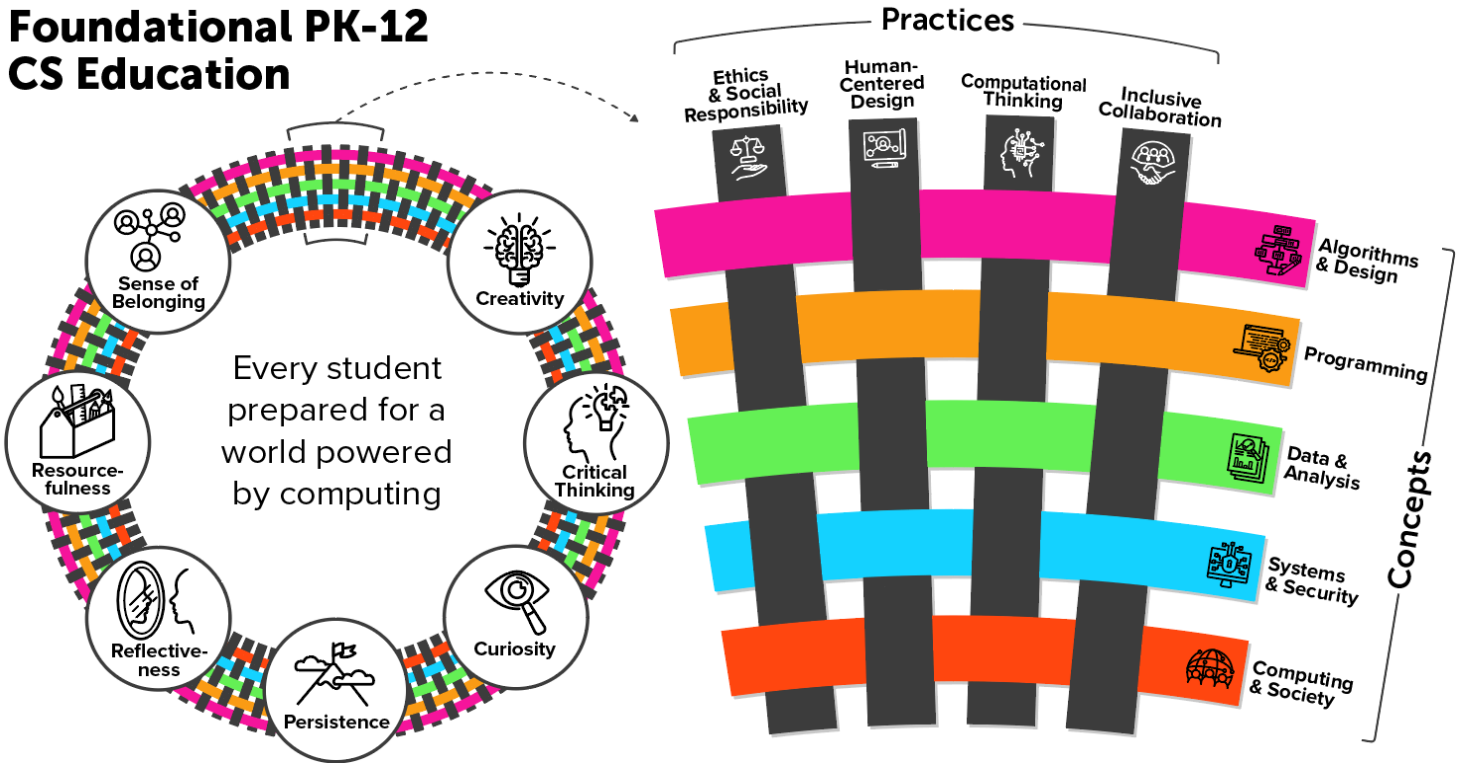
The 2026 CSTA PK-12 CS Standards

The CSTA Standards define the essential knowledge, skills, and dispositions students need to be prepared for a world powered by computing. They articulate coherent **learning progressions from pre-kindergarten through grade 12**, forming the foundation for rigorous and inclusive computer science education across diverse educational contexts. Written ***for* educators *by* educators**, the Standards are grounded in research and informed by classroom practice. They are designed to support **state and local adaptation** while promoting instructional coherence across systems, programs, and learning experiences.

Structure of the Standards

The revised Standards are organized around three interconnected elements: **concepts** (core knowledge), **practices** (crosscutting skills), and **dispositions** (habits of mind). Together, they reflect that computer science is not only about how technologies work, but also about how people design, build, and use computing to solve problems across disciplines.

The five concepts (Algorithms & Design, Programming, Data & Analysis, Systems & Security, and Computing & Society) are woven together with four categories of practices (Ethics & Social Responsibility, Human-Centered Design, Computational Thinking, and Inclusive Collaboration), reflecting that concepts and practices are integrated rather than taught in isolation. Surrounding this work are seven dispositions (creativity, critical thinking, curiosity, persistence, reflectiveness, resourcefulness, and sense of belonging) that support every student in becoming prepared for a world powered by computing.



 https://csteachers.org/pk12standards/

Key Features of the Standards

1. **Grounded in core values**: The Standards are equity-centered, community-generated, future-oriented, research-based, and flexible, designed to support multiple instructional approaches, including stand-alone and interdisciplinary learning, while connecting all students to postsecondary, career, and civic pathways.
2. **Vertically aligned by grade**: The Standards build coherent learning progressions, grade-level specific in elementary (PK–5) and organized by grade bands in middle school (6–8) and high school (9–12).
3. **AI, ethics, and other emerging priorities**: AI is a central focus, integrated across the Standards rather than taught in isolation. A strong emphasis on ethics and social responsibility ensures students engage with technology responsibly. Other elevated priorities include inclusive collaboration, human-centered design, career exploration, and the history of computing.
4. **Enhanced implementation supports**: Each standard is paired with implementation examples, interdisciplinary connections, and curated resources, accessible through a new interactive web display that lets users explore, customize, and download standards.
5. **High School Specialty Standards**: Once students have developed a strong foundation, Specialty Standards offer two levels of advanced, domain-specific study across six areas: Artificial Intelligence, Cybersecurity, Data Science, Game Development, Physical Computing, and Software Development. Additionally, X+CS standards guide the integration of foundational CS content into non-CS subjects such as journalism and biology.

Suggested Citation

Computer Science Teachers Association. (2026). *Implementation Guidance for Curriculum & PD Providers.* https://csteachers.org/pk12standards/resources

Guidance for PK-12 Administrators

District and school administrators shape how computer science is offered, who has access, and how learning experiences are supported across grade levels. Administrators use the 2026 CSTA PK–12 CS Standards to establish and support district- and school-level policies that enable implementation and increase participation. Effective implementation depends on both individual classrooms and system-level decisions about pathways, staffing, scheduling, and professional development. The Standards function as a **shared reference point** to guide these decisions, not as a mandate for specific tools, curricula, or instructional approaches.

Administrator Actions

1. Support Adoption and Transition

Adopting new standards raises questions about how they differ from previous versions and how quickly systems should transition. Clear communication and well-paced support help educators and families navigate the change.

- **Investigate the relationship** between the revised CSTA Standards and your state's CS standards, identifying where the state has adopted, adapted, or diverged from the CSTA framework.
- **Develop a local implementation plan** that aligns with the state timeline and gives teachers time to adjust instruction and align materials.
- **Consider synergies between updated standards and other priorities**, including graduation requirements, dual enrollment, CTE programs, and specialty pathways where applicable.

2. Design Coherent CS Programs and Pathways

The Standards assume coherent CS learning across grade bands. Administrator decisions determine whether students actually experience that coherence.

- **Plan for coherent pathways across grade bands** rather than isolated courses, including how elementary integration connects to middle school courses and high school options.
- **Coordinate course catalogs, master schedules, and instructional materials** between district and school levels so that pathway decisions translate into meaningful student experiences.

3. Invest in Staffing and Professional Development

Teachers carry out the work of implementation. Administrator decisions about hiring, certification, and PD shape whether they can do it well.

- **Determine staffing needs and assignments,** including how their schedules and course loads support both stand-alone CS courses and integrated CS instruction across subject areas.
- **Identify which educators need CS professional development**, including new-to-CS teachers, content-area teachers integrating CS, experienced CS teachers expanding into new specialties, paraprofessionals, counselors, and administrators.
- **Provide mentors and professional learning communities for CS teachers**, who are often isolated as the only CS educator at their school.

4. Expand Access and Address Barriers

Master schedules, prerequisites, and recruitment practices determine which students actually engage in CS learning. Administrators are closest to these structural decisions, even when the underlying data comes from district or state systems.

- **Monitor participation and enrollment data** disaggregated by student group, school, and grade level, and act on disparities in access, enrollment, and outcomes.
- **Address scheduling conflicts** between CS and other coursework, and ensure CS courses are accessible within the school day rather than relegated to before- or after-school offerings.
- **Protect CS programs**, instructional time, and teacher planning time within long-term scheduling and budget decisions to ensure program stability and consistent student access.
- **Support inclusive instructional practices**, including Universal Design for Learning (UDL), culturally responsive teaching, and supports for students with disabilities and multilingual learners.
- **Partner directly with families and community organizations** to build awareness of CS pathways and recruit students who haven't traditionally enrolled.

Reflection Questions

- Where do current schedules, prerequisites, or policies limit student access to CS learning?
- How are CS pathways communicated to students and families across grade bands?
- What system-level decisions would most improve coherence and equity in your district or school?
- How do you support teachers across varying levels of CS experience?
- What data do you use to monitor participation and outcomes, and how do you act on it?

Next Steps and Partnership

Implementing the revised CSTA Standards is a multi-year, multi-partner effort. CSTA welcomes the opportunity to work alongside district and school administrators, supporting transition planning, professional development, and equitable access strategies.

Tools to Support Implementation

- **2017 → 2026 Crosswalk** – Compare the revised standards with previous versions.
- **Progressions Charts** – Visualize how concepts develop across grade levels.
- **Interactive Web Display** – Search, filter, explore progressions, and access supports (e.g., interdisciplinary connections, example lesson plans) with customizable, downloadable views.
- **Implementation Guidance** – Resources for flexible implementation at each grade band.
- **Accredited PD** – CSTA curates quality professional learning opportunities for PK–12 CS teachers.
- **CS Coaching Toolkit** – Resources to help teachers plan, implement, and reflect on CS instruction.
- **Look-for Tool** – Observation tool to recognize evidence of effective CS teaching.

Have any additional questions? Contact: standards@csteachers.org

