

The Two Codes Framework: A Toolkit for Success

Technology is the code of our economy—the Constitution the code of our democracy. Students need to master both to become confident, empowered citizens in 21st century America. College Board is working to make these Two Codes—computer science and American government—a core part of students’ school experience.

Two Codes Courses

AP Computer Science Principles

Students master core computer science concepts like creativity, abstraction, and the global impact of computing by solving real-world problems through data analysis, basic programming, and computational thinking processes. By the end of the course, students design and test programs that address issues in their lives and communities.

AP U.S. Government & Politics

Students deepen their understanding of American democracy by exploring topics like constitutionalism, liberty and order, and civic participation, through rigorous analysis of data and primary sources. Students also engage in real-world projects, from deep public policy research to public/civic sector internships, and present their findings in class.

Piloting Two Codes in Rhode Island

A new dynamic between students and technology emerged in the 2020-21 school year—and with it an urgency to integrate civics and computer science. Educators gathered by the Rhode Island Department of Education (RIDE) and College Board explored how. AP Computer Science Principles (CSP) and AP U.S. Government & Politics (GoPo) teachers identified areas of course overlap. Then, working as collaborative teams, developed materials demonstrating how technology can advance civics principles, and how civics can foster more thoughtful engagement with technology.

“Two Codes is important, making both AP CSP and AP U.S. GoPo applicable in real-world situations and creating a sense of student ownership,” says AP CSP instructor Elaine M. “Working with the GoPo teacher widened my knowledge of available resources and different approaches to the topic.”

Rhode Island educators identified key steps for creating a Two Codes framework. That work is presented here as a toolkit to help expand access to these critical courses and ensure students master critical skills to become empowered 21st century citizens.

How to Successfully Implement Two Codes

Step 1: Create a Team

- Ensure commitment and support from school principal and/or district leaders.
- Identify current or potential future AP CSP and AP U.S. GoPo teachers.
- Include AP teachers and coordinators, principals, and counselors, who will help support the Two Codes initiative and communicate it to the larger school community.

Step 2: Set Clear Goals

- Clearly identify the focus area your Two Codes initiative will address.
- Clearly define what constitutes success—and ensure there’s a clear timeline for achieving it.
- Clearly communicate goals, metrics, and strategies to the broader school community, and seek out and encourage input from stakeholders.

Step 3: Plan for Implementation

- Provide school-day planning time for Two Code teachers to collaborate, particularly on identifying and focusing on three to five areas of theme and skill overlap.
- Develop project-based lesson plans integrating civics and computers science content that address each of the chosen shared principles.
- Develop guidelines and expectations on providing appropriate and constructive feedback to colleagues in order to strengthen lesson plans and content connections.

Step 4: Recruit Diverse Students

- Hold information sessions and display student work around the school to share courses and experiences with potential students—especially those who may not see themselves in AP classes.
- Encourage teachers and current AP CSP and AP U.S. GoPo students to recruit potential students.
- Urge current AP CSP and AP U.S. GoPo students to complete the Two Codes cycle.

Policy Recommendations

Access gaps persist, but by focusing on a few key policies and actions, policymakers can ensure the most students can benefit from high-quality Two Codes learning opportunities.

- Require all students take one full-year, high-quality civics course and one full-year high-quality computer science course for graduation.
- Require all students produce a capstone project integrating their civics and computer science learning.
- Fund ongoing professional development for civics and computer science teachers.

Discover more Two Codes tools and resources at twocodes.org