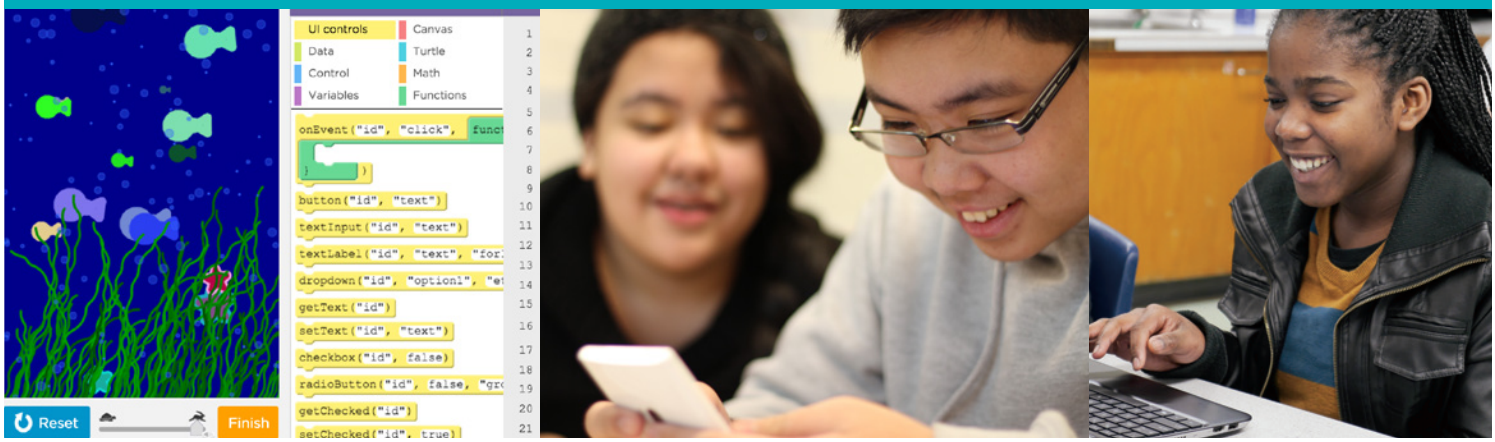
Computer Science Principles



Why Computer Science? Every 21st century student should have the opportunity to learn computer science. The basics help nurture creativity and problem-solving skills, and prepare students for any future career.

Advanced Placement Computer Science for All Students!

Code.org's Computer Science Principles (CSP) is an introductory Advanced Placement (AP®) course designed to broaden participation in computer science. The official AP® exam launches in the 2016-17 school year.

Engaging Curriculum

The curriculum is written to support students and teachers new to the discipline with inquiry-based activities, videos, assessment support, and computing tools that have built-in tutorials and student pacing guides.

Full Year Professional Development Model

Spring: Online introduction to curriculum and platform.

Summer: In-person, multi-day workshop and online follow-up

School Year: Job-embedded PD focused on implementation

Summer: Wrap-up, reflection, moving forward

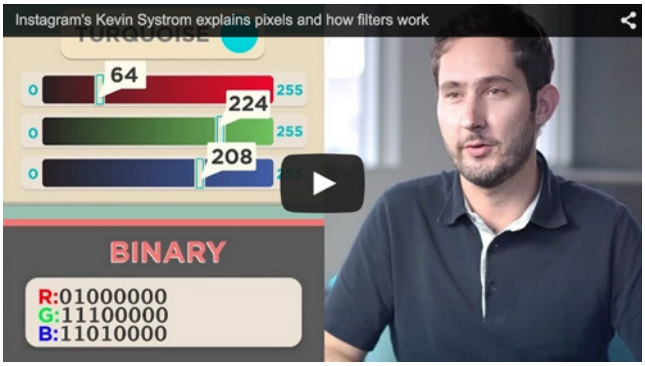
Teachers all over the nation recognize the importance of computer science.

"Pretty much every student wants to take the next CS courses we'll offer. "

"Students are going to leave with a new appreciation for CS in terms of creative thinking and its impact on everyday lives. "

What's in a workshop?

Interactive instruction from an experienced computer science facilitator, including an introduction to computer science content, pedagogy, curriculum, and practice with the learning platform and programming environment.



Curriculum Features:

- Daily instructional lesson plans that include inquiry/equity-based pedagogy and background content
- Formative and summative assessments, exemplars, rubrics
- Videos for students (tutorials, instructional) and teachers (lesson tips)
- Widgets and simulators for exploring computing concepts
- Code Studio — a learning platform with student and teacher dashboards
- App Lab — Code.org's online JavaScript programming environment

CSP Unit Overiew

Unit 1: The Digital Representation of Information	Explore the technical challenges and questions that arise from the need to represent digital information in computers and transfer it between people and computational devices.
Unit 2: The Internet	Discover the structure and design of the internet and the implications of those design decisions including the reliability of network communication, the security of data, and personal privacy.
Unit 3: Programming	Learn how to program in the JavaScript language and create small applications (apps) that live on the web with App Lab. Click and drag visual blocks or just type text, switching back and forth at will.
Unit 4: Data	Collect, analyze, and extract knowledge from data by programming and building apps. Process data imported from other sources and also pull data from live data APIs.
Unit 5: Performance Tasks	Design a project plan, then work independently and collaboratively to complete performance tasks for submission to the College Board.

For more info, visit: http://code.org/educate/csp

Currently, Code.org's CSP workshops are only available through a district partnership. For info, visit: http://code.org/educate/districts

Code.org is a 501(c)3 non-profit dedicated to expanding participation in computer science education by making it available in more schools, and increasing participation by women and underrepresented students of color. The Code.org vision is that every student in every school should have the opportunity to learn computer programming.