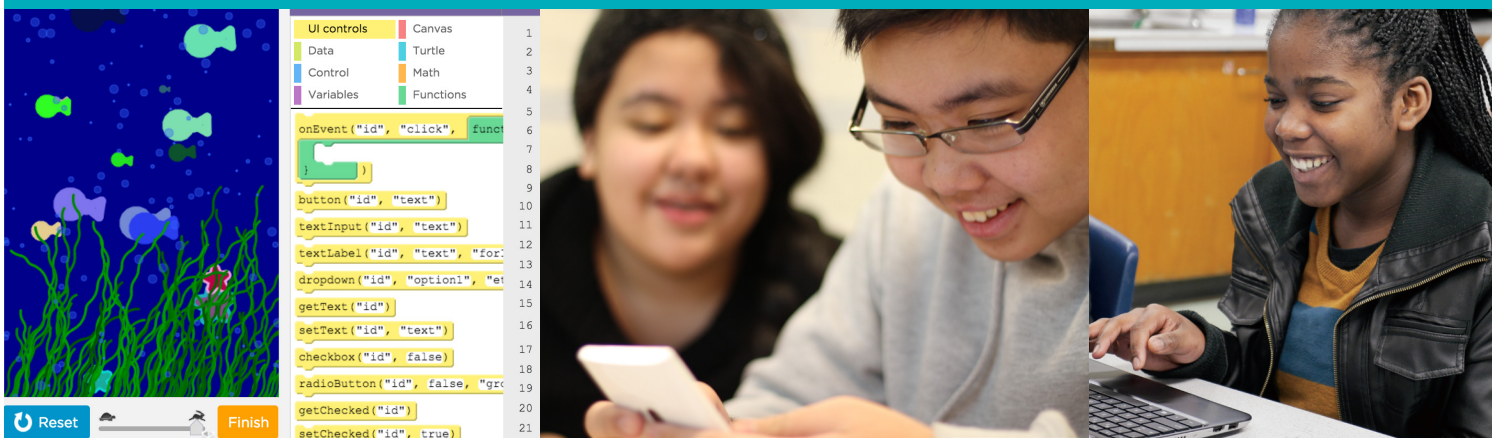
Computer Science Principles



Why Computer Science? Every 21st century student should have the opportunity to learn computer science (CS). The basics of CS help nurture creativity and problem-solving skills, and prepare students for a future in any field or 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 daily lesson plans made up of inquiry-based activities, videos, assessments, and computing tools that empower students to discover core computing concepts for themselves.

One-Year Professional Learning Program

Summer: Teachers attend a 5-day in-person, conference-style workshop designed to introduce the CS concepts from the curriculum, AP elements of the course, and core teaching practices (travel may be required).

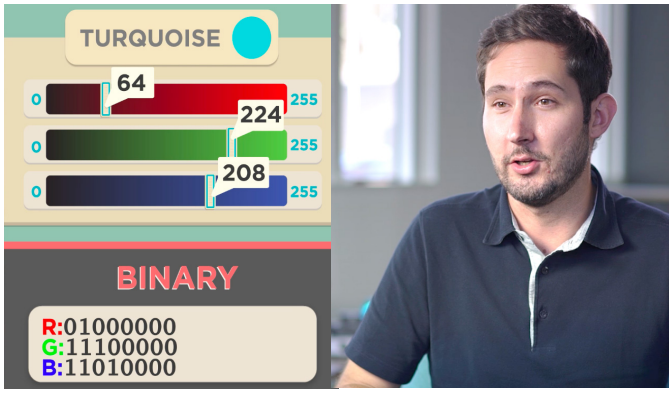
School Year: Teachers continue with job-embedded workshops and online modules focused on supporting teachers in their first year of implementation.

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."

Curriculum Features:



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

CSP Unit Overview

Unit 1: The Internet	Learn how the multi-layered systems of the Internet function as you collaboratively solve problems and puzzles about encoding and transmitting data, both 'unplugged' and using Code.org's Internet Simulator.
Unit 2: Digital Information	Use a variety of digital tools to look at, generate, clean, and manipulate data to explore the relationship between information and data. Create and use visualizations to identify patterns and trends.
Unit 3: Algorithms and Programming	Learn to program in the JavaScript language with turtle programming in Code.org's App Lab. Learn general principles of algorithms and program design that are applicable to any programming language.
Unit 4: Big Data and Privacy	Research current events around the complex questions related to public policy, law, ethics and societal impact. Learn the basics of how and why modern encryption works.
Unit 5: Building Apps	Continue learning how to program in the JavaScript language. Use Code.org's App Lab environment to create a series of applications that live on the web. Each app highlights a core concept of programming.
Unit 6: Performance Tasks	Design a project plan, then work on and complete your AP® Performance Task projects for submission to the College Board.

Apply now!
http://code.org/educate

For curriculum, videos, and support documents, visit:
http://code.org/educate/csp

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.