



Resources for Teaching Computer Science

The following list provides a number of Computer Science learning opportunities for schools. This is not an exhaustive list.

K-8

- KELP-CS – program out of UCSB that has modules for Grades 4 and 5 to introduce students to computing concepts. Grade 6 under development. <https://discover.cs.ucsb.edu/research/depict/kelpcs/>
- Hopscotch – Coding app for kids (iPads) -- <http://www.gethopscotch.com/>
- Scratch – Online program out of M.I.T. that introduces students to computer programming via a platform that allows them to make animations, stories, games, and other projects (upper elementary and junior high levels) -- <http://scratch.mit.edu/>
- CS Unplugged – resources to teach CS concepts without using computers -- <http://csunplugged.org/>
- Lego Mindstorms robots -- <http://www.lego.com/en-us/mindstorms/?domainredir=mindstorms.lego.com>
- CS-First – Google supported program that introduces students to computer science using Scratch in an after-school online format. Modules on Game Design and Music and Sound with others under development. Can also be integrated in classes. <http://www.cs-first.com/>
- Creative Computing Curriculum – a 6 unit curriculum to teach Scratch -- <http://scratched.gse.harvard.edu/guide/>
- MyCS – Middle Years Computer Science course for junior high school level students out of Harvey Mudd College -- <https://www.cs.hmc.edu/MyCS/>
- Code.org – Hour of Code, 20 hour online course, integrated Junior High Math and Science modules, and K-5 courses -- <http://code.org/educate/hoc> , <http://code.org/educate/20hr> , <http://code.org/educate/curriculum>

9-12

- Exploring Computer Science – introductory g credit course to provide students, particularly those without much of a background in CS an overview of the field -- <http://www.exploringcs.org/>
- CS Principles – new College Board designed AP CS course -- <http://apcsprinciples.org/>
- Game Design, Web Development, Programming, App Development, Computational Art, Robotics, and AP CS courses
- UC Davis C-STEM courses -- <http://c-stem.ucdavis.edu/> (Grades 4-12)

For additional questions or to collaborate on how you might bring CS learning opportunities to your school please connect with David Bernier – dbernier@sbceo.org (805) 964-4712 x5348