

Instructional Technology News @ AB

November 2016

A monthly newsletter for Acton-Boxborough Regional School District

Anyone Can Code!

Founded just three years ago by twin brothers Hadi and Ali Partovi, Code.org has been instrumental in expanding access to computer science for students around the world, with a strong focus on increased participation by girls and underrepresented minorities. [Watch this video](#) to hear Hadi Partovi discuss the passion for computer science he discovered as a child during the Islamic Revolution and subsequent war and unrest in Iran. Focused on a vision to provide every student in every school the opportunity to learn computer science, the non-profit Code.org, with help from donors and partners that include Facebook, Microsoft, Amazon, and Google, has developed extensive curriculum freely available to teachers and students. Code.org also organizes the annual [Hour of Code](#) campaign, which this year will be celebrated during [Computer Science Education Week](#), December 5-12. Let's join the movement!



Hadi Partovi, founder of Code.org discusses his childhood in Iran, and the promise of computer science for every child.

Hour of Code



Anytime during the week of **December 5-12**, any teacher at any grade level can easily introduce students to computer science and demystify “code” with online, interactive activities that require no teacher expertise at all. Even pre-readers and those with limited access to digital devices can participate. Simply pursue the extensive, [easy-to-follow tutorials](#), and encourage your students to try one of the self-guided, engaging activities for one hour—with themes ranging from *Frozen* to *Star Wars* to *Minecraft*, and with programming languages including Blocks, Javascript, and Python. I can't emphasize enough how impressive these free resources are, and how much your students are

certain to enjoy the experience. If you don't believe me, check out the smiling faces of Melissa Reinhardt's students during last year's Hour of Code at Merriam School. I also welcome the chance to join you and your students during Computer Science Education Week. Please contact me at pharvey@abschools.org if you would like my assistance, and if my schedule allows, I'll be there! I also have “I Did the Hour of Code” stickers to share...just let me know if you want some for your class. We will be joining over 600 Massachusetts schools, and over 200,000 schools world-wide in a truly transformative event.

Computer Science Education & PL Opportunities

75% of schools in the US still don't offer computer science, a statistic the founders of Code.org are determined to change. With that mission in mind, the Code.org team has pulled together impressive curricula suitable for elementary, middle school, and high school students and educators. Check out the [extensive content for educators](#) on Code.org to learn how to teach computer science. Along with these free online professional learning programs, which include flexible multi-unit lessons with self-paced video tutorials, there are these upcoming plans for face-to-face workshops and online professional learning programs:

- For elementary school educators: Free [Code Studio workshop for elementary educators](#), Waltham, April 8, 2017.
- For middle school educators: [The Computer Science Discoveries Professional Learning Program](#), which will launch next summer, is an intensive professional learning course available as either as a semester or full-year offering. This program is designed to prepare educators to provide high quality instruction based on the CS Discoveries curriculum, tools and approach to students in their classrooms.
- For high school, Code.org offers two years of Computer Science courses for beginners, Computer Science Discoveries, for grades 7-9, and Computer Science Principles, which is broadly available and can be implemented as an AP course or an introductory course. Code.org also recommends many third party resources in programming, game design, and more.

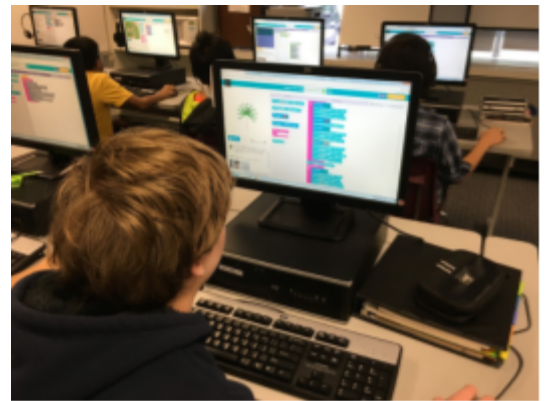
You might also consider the free Harvard University MOOC, [Introductory Computing Curriculum using Scratch](#)



Computer Science @ AB

8th-grade students in Louisa Latham's **Digital Literacy class** at **RJ Gray** have explored coding using a variety of devices and platforms. They used the new iOS [Swift Playgrounds](#) on iPads, and honed their programming skills on classroom computers with MIT's free [Scratch](#) language and [Code Studio](#). Here are just a few of their innovative projects:

- [Pinwheel](#) coded with Code Studio, by Matt
- [Telling a Joke](#) with Scratch, by Cate
- [Watch a Band Form and Grow](#) with Scratch, by Iravati



Coding in Louisa Latham's grade 8 Digital Literacy class



At **ABRHS** the student computer science and design club, **AB IdeaLab** will kick off Computer Science Education Week on December 3 by participating in a [Hackathon](#). The day-long event, organized by IdeaLab members in partnership with Major League Hacking and their club advisor, ABRHS math teacher Su Nugent, represents the first time AB, along with high school students worldwide, will join the Hackathon movement. All ABRHS students are invited to register, regardless of experience. After intensely collaborating over a 12-hour period, each team's project will be judged, with prizes for the winning team. I can't wait to see what they design!

Peggy Harvey

PK-12 Instructional Technology Specialist, ABRSD

pharvey@abschools.org