# Hour of Code—Bringing Research to Scale

by Cameron Wilson

**During Computer Science Education Week [3], Code.org and the National Science Foundation (NSF) announced a formal public-private partnership to meet our shared goal of providing access to K–12 computer science across the United States.**

Code.org's role in this partnership is to scale high-quality curriculum throughout the United States, while NSF will continue to support high-quality research with which we and other partners within the computer science community can continue to leverage in our programs. This was a long time coming.

In 2005, the Computer Science Teachers Association launched and put a spotlight on the issue that most students—particularly low-income students and students of color—do not have access to computer science education in K–12 schools. Two years later, NSF began a purposeful set of investments to serve as a foundation for others to build on.

The NSF-funded work out of UCLA and the University of Oregon became an introductory high school course, Exploring Computer Science (ECS), and, in partnership with the College Board and computer science education leaders, an advanced high school framework, AP Computer Science Principles (CSP). Both courses have made huge contributions to Code.org's scaling efforts, as we are bringing them to schools across the country.

NSF's impact extends beyond high school. For example, it helped Code.org work with Bootstrap [2] and Project GUTS to scale up middle school approaches [1]. The Bootstrap curriculum integrates computer science into algebra while Project GUTS integrates computer science—through modeling and simulation—into the life, physical and earth sciences in middle school.

Bolstered by NSF's initial investment, Code.org is bringing this curriculum pathway to scale. We are now partnered with more than 60 school districts around the nation to expand computer science offerings, including all seven of the top seven largest school districts [4]. We expect to prepare 1,500 teachers this year to start teaching middle and high school courses in fall 2015.

Since the NSF's mission is research-focused, Code.org is able to build on years of their funding of research and development around curriculum, in addition to capacity building within the community. NSF and Code.org collaborative projects in Chicago and Boston are already underway with NSF-funded projects working with Code.org support. We plan to expand collaboration into Los Angeles this summer. Going forward, NSF and Code.org will collaborate on evaluation so we can share learning across the different projects.

While Code.org is only a year and a half into a strategy of bringing high-quality CS education directly to districts, NSF is more than a decade into their work. Code.org simply couldn't build its programs without the foundation that NSF has laid. Our goal now is to collaborate to make sure the next decade of work by both organizations leads to widespread access to K–12 computer science education. **Ir**


**References**

[1] Bootstrap; http://www.bootstrapworld.org/. Accessed 2015 February 18.

[2] Code.org's About Us; http://code.org/about. Accessed 2015 February 18.

[3] Computer Science Education Week; http://csedweek.org. Accessed 2015 February 18.

[4] Project GUTS; http://www.projectguts.org/. Accessed 2015 February 18.



**Cameron Wilson**
Code.org
1301 5th Avenue, Suite 1225
Seattle, Washington 98101 USA
*cameron@code.org*


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