

July 2015

Dear Teachers,

Computer Science (CS) is transforming our lives, changing how we communicate, play, and work. CS is highly creative, fun, and interactive. It empowers us to change our world.

The National Science Foundation (NSF) has led a national effort to bring engaging, rigorous CS courses to all high school students. Teachers and university faculty, with NSF support, have created the AP® Computer Science Principles framework and a range of aligned course curricula. These courses have earned enthusiastic support from teachers and students alike.

There are several opportunities for professional development for many of these courses; no prior CS experience required. This fall, NSF expects to announce even more opportunities for professional development. Join our mailing list at [csteachers-subscribe-request@listserv.nsf.gov](mailto:csteachers-subscribe-request@listserv.nsf.gov) or check [csprinciples.org](http://csprinciples.org) for more information.

We at NSF look forward to helping you bring AP CS Principles to your students.

Thanks!

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# COMPUTER SCIENCE PRINCIPLES



COMPUTER SCIENCE IS FOR **EVERY** STUDENT!

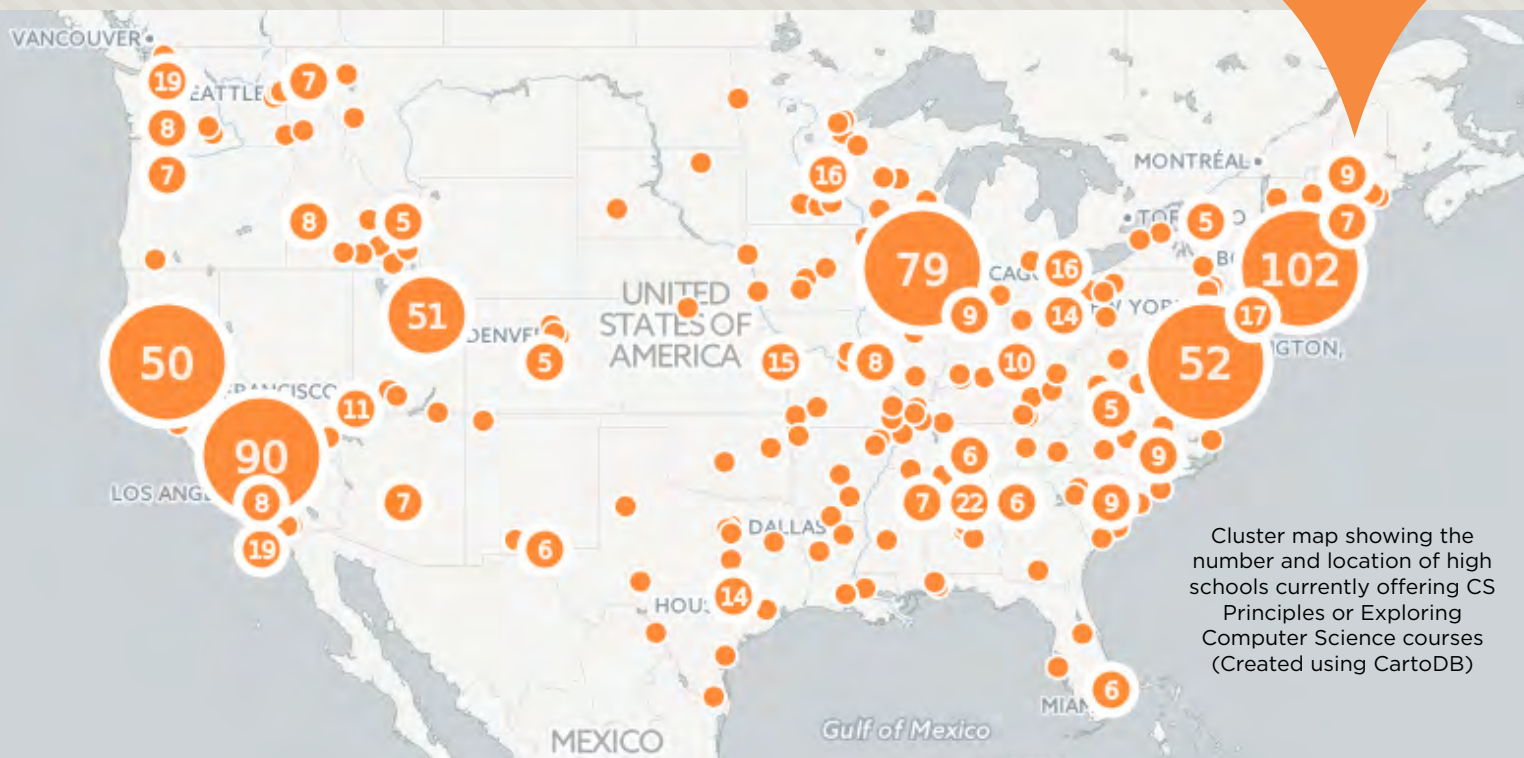


NATIONAL SCIENCE FOUNDATION

**Computer Science Principles** is a new Advanced Placement® course developed through a collaboration spanning the National Science Foundation (NSF), the College Board, and teachers and university faculty from across the country. It will become an official AP offering in the 2016-17 academic year. A number of aligned curricula, course resources, professional development opportunities, and an online community of practice have been developed. See [csprinciples.org](http://csprinciples.org) for more information.



JOIN THOUSANDS OF TEACHERS ACROSS THE NATION  
NO CODING EXPERIENCE REQUIRED!



Cluster map showing the number and location of high schools currently offering CS Principles or Exploring Computer Science courses (Created using CartoDB)

Here are a few of the course options you can bring to your school. Each has corresponding teacher development in which you can participate!

New courses have been developed by leading teachers and computer scientists, supported by NSF. These engaging computer science curricula have increased the number and diversity of students taking computer science.

THREE COURSES TO BE ENDORSED BY THE COLLEGE BOARD FOR AP COMPUTER SCIENCE PRINCIPLES (MORE COMING SOON)



## THE BEAUTY AND JOY OF COMPUTING

BJC, created at the University of California, Berkeley, serves as an introduction to computer science for the non-computer-scientist. It includes an emphasis on the social implications of computing and emphasizes technology's connection to society.

I fell in love with computing.

— BJC Student | Berkeley, CA

[bjc.berkeley.edu](http://bjc.berkeley.edu)



## MOBILE COMPUTER SCIENCE PRINCIPLES

Mobile CSP was developed at Trinity College in Connecticut to build socially useful mobile applications. It provides a programming-based introduction to computational thinking and emphasizes writing, communication, collaboration, and creativity.

From the beginning, the kids thought it was really fun. My enrollment tripled from last year to this year.

— Mobile CSP Teacher | Milford, CT

[mobile-csp.org](http://mobile-csp.org)



THRIVING  
— IN OUR —  
DIGITAL WORLD

## THRIVING IN OUR DIGITAL WORLD

TODW was designed at the University of Texas at Austin. It uses project-based learning to introduce students to the big ideas in computer science that exist across disciplinary boundaries, including digital manipulation, big data, and artificial intelligence.

I've taken a coding course before, but I've never taken any sort of real computer science... I have a better understanding of what I'm actually doing and the concepts behind this.

— TODW Student | Austin, TX

[cs.utexas.edu/~engage](http://cs.utexas.edu/~engage)

NOT READY FOR AP?



## EXPLORING COMPUTER SCIENCE

ECS, developed at UCLA and the University of Oregon, introduces students to computer science through hands-on projects, inquiry, and collaborative problem solving. ECS is committed to engaging the interest of all students, with a special focus on girls and students of color.

I've been teaching CS for probably 30 years now and this class blows my mind...it will change the way I teach from now on.

— ECS Professional Development Participant

[exploringcs.org](http://exploringcs.org)