

Bring Computer Science To Your Elementary School with CS Fundamentals

Why Computer Science?

Computer Science is foundational to a liberal arts education for all careers.

CS teaches critical thinking and problem solving, fostering collaboration, curiosity and creativity. Every 21st century child should have a chance to learn about algorithms, how to make an app, or how the internet works.



CS Opens up Future Opportunities

Code.org classrooms with resourceful teachers see higher scores on English, math, and science standardized tests.

Computing jobs are the best-paying, fastest-growing, largest sector of new wages.

Close the Gender Gap

Students who have been told by parents or teachers that they would be good at computer science are 2.5-3 times more likely to be interested in learning it in the future; yet boys are more likely than girls to have been told by teachers (39% vs. 26%) and parents (46% vs. 27%) that they would be good at computer science.

A Complete Solution for elementary schools and teachers new to CS education



"Code.org is a one-stop shop for coding in schools. Most importantly, teachers don't need computer science degrees to facilitate the coursework." -Common Sense Education

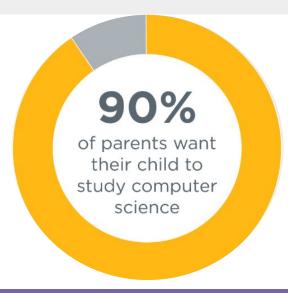


A Complete, Proven Program

Code.org provides a complete CS program combining open source K-12 curriculum with professional learning, which consistently gets high ratings from teachers.

Effective in Diverse Districts

The Code.org program has been proven effective in major urban school districts such as Dallas to small rural districts in Iowa. It is the leading K-12 CS curriculum in the U.S.



No Need to Hire

There is no need to hire specialists to teach CS. Our program is uniquely designed to support teachers new to CS while offering the flexibility to evolve lessons to fit student needs.

Local Knowledge, Support

Work with a local Code.org partner organization that understands your needs and community to bring CS to your school.



A complete solution to bring CS to your elementary school

The Code.org program has you covered from acclaimed curriculum, popular professional development workshops, to robust supports.

Complete Curriculum

Free

All Code.org curriculum resources are, and will always be, free to use under Creative Commons license. Curriculum is updated annually and available to everyone.

Connected

Created with 2017 Computer Science Teachers Association (CSTA) standards in mind, but also includes opportunities to support national Math, English Language Arts, and Science standards.

Professional Development

Introduction

Looking to get started with elementary CS education but not sure how? Sign-up for our inspiring, high-quality professional development workshops with experienced facilitators.

Deep Dive

Get a hands-on learning experience with other like-minded teachers through a deep dive into course materials, teaching practices, and strategies for continuing to teach CS Fundamentals.

Ongoing Support

Community

This isn't a one-and-done PD opportunity. Teachers can access the vibrant online teacher forum anytime to get real-time, practical suggestions and support.

Online Help

We like questions. A lot. Share your questions with us at support@code.org. You can also get questions answered through our ever-updated self-help support articles.



Short on time?

Adding CS does not mean cutting other subjects. CS Fundamentals is flexibly-designed and standards-informed so that time spent learning CS concepts can deepen academic and social skills. How it's implemented is up to you - teach CS Fundamentals as a regular part of your classroom schedule, use it to support math and language arts standards, add it to computer lab or library time once a week, or go deeper with extension activities and projects!



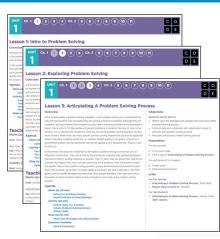
Courses for every elementary grade

Course A	Course B	Course C	Course D	Course E	Course F
Kindergarten	1st Grade	2nd Grade	3rd Grade	4th Grade	5th Grade
12 lessons	12 lessons	18 lessons	18 lessons	18 lessons	20 lessons
~12 hours to	~12 hours to	~18 hours to	~18 hours to	~18-20 hours to	~20-22 hours to
complete	complete	complete	complete	complete	complete
Concepts					
Digital CitizenshipSequencingLoopsEvents	 Digital Citizenship Sequencing Loops Impacts of Computing Events 	Digital CitizenshipSequencingBinaryLoopsEventsData	SequencingEventsLoopsConditionalsBinaryDigital Citizenship	 Sprites Digital Citizenship Impacts of Computing Nested Loops Functions 	 Variables Data For Loops Internet Sprites Digital Citizenship

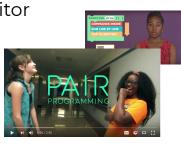
The curriculum and resources needed to set your students up for success

Resources

- Curriculum guide
- Lesson plans
- Teacher dashboard
- High-quality videos
- Extension materials
- Sprite Lab and Artist tools
- Design your own sprite editor
- Open-ended projects







Background

The oldest city school district in Alabama, Eufaula City Schools, is a rural district with approximately 3,900 K-12 students. 72% of these students are on free or reduced lunch and only 25% are reading at grade level. This district uses computer science curriculum to help bolster student success in core areas like reading and math, in addition to providing new opportunities beyond high school for students and the community alike.

Why computer science?

72% of the student body is on free or reduced lunch...

...it's important to note that this used to be in reverse; Eufaula's residents have experienced significant job loss and economic downturn in recent years. As the #1 source of new wages in the U.S., computer science could not only help students improve their problem-solving skills, but provide economic opportunity beyond school. With the belief that, "there is a need for CS no matter where you go," the Superintendent began implementing CS courses in 2015.



With limited funding, prioritization is key

Only 25% of students are reading at grade level. By combining programs from various organizations and leveraging local businesses and partnerships, Eufaula was able to blend programs to best meet the needs of their students. In some cases, this meant exposing students to CS in an effort to strengthen skills that would aid in other subjects like reading and math.

The district sends K-5 teachers to Code.org's Professional Learning workshops where they gain the tools to teach CS. The workshop empowers teachers to weave CS into their lessons plans so that all elementary students are familiar with the subject prior to entering middle school.

"One of the best trainings I've ever sat through."

- Holly Mitchell, Director of Curriculum & Instruction

Beginning in 6th grade, students are then able to choose between various CS courses including Code.org's Computer Science Discoveries. CS Discoveries is also offered in high school as well as AP CS. This has resulted in hundreds of students enrolled in CS courses at the middle and high school level each year.

Code the Night

Illustrating the importance of CS to Eufaula's residents and staff has been and continues to be crucial for successful CS implementation in its schools. The district began hosting an annual Code the Night event where students lead activities to teach CS concepts to family, friends, and the community. Each year sees increased attendance - and support - for computer science.

"This is so fun! I can't believe my kindergartener can program a robot."

-Eufaula parent attending Code the Night

Impact on Students and the Community

In the 4 years since Eufaula City Schools first began implementing CS education, interest and enrollment has steadily grown. In addition to over 1100 elementary students studying CS Fundamentals, hundreds of middle and high school students are electing to take CS. Several students are taking and passing the AP CS Principles exam, and some are going on to study CS in college.

The implementation of CS has also lead to new educational partnerships. Their drone studies partnership with the U.S. Coast Guard demonstrates to students real-world application of CS on their local agriculture industry.

And, the impact reaches beyond just the students. After attending a Code the Night event, one parent pursued and obtained a scholarship for CS courses at University of Alabama and now wants to incorporate this into her military career.