

## **UTeach**CS Principles





## WHY COMPUTER SCIENCE?

Open doors for students

- **CS is the future.** 67% of all new STEM\* jobs are in computer science. Computing jobs are growing at twice the national average. And technology skills are increasingly required in fields outside STEM.
- CS is more than coding. It develops logical thinking, problem solving, and creativity in students skills that are critical in ALL subjects.
- **CS education is a priority**. Demand for computer science education is high. 90% of parents say they want their children to learn computer science.

## WHAT IS UTEACH CS PRINCIPLES?

A Computer Science Principles course for all students

- UTeach CS Principles (CSP) is a complete high school curriculum—designed by University of Texas
  at Austin computer scientists and experienced high school computer science teachers—that
  introduces students to the big ideas in the field of computer science through inquiry- and projectbased learning approaches.
- UTeach CSP is designed to engage students from diverse backgrounds and those who are new to computing. The course has been refined over four years of field testing with more than 700 students in 40+ classrooms.
- UTeach CSP is endorsed by the College Board and prepares students to take the new AP Computer Science Principles exam.
- UTeach CSP engages all students in authentic, project-based learning to develop computational thinking through:
  - Collaborative problem solving
  - Creative design of unique solutions
     Data representation through
  - modeling and simulations
     Algorithmic reasoning

Computational Thinking =
Critical Thinking +
The Power Of Computing

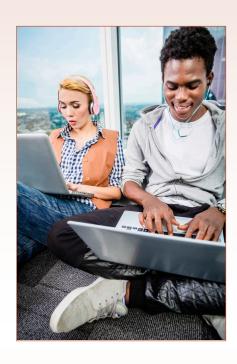


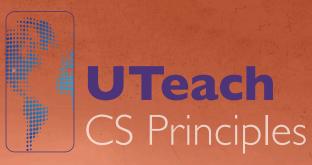
<sup>\*</sup>STEM=Science, Technology, Engineering, Mathematics.

## HOW DO I EXPAND COMPUTER SCIENCE AT MY SCHOOL OR DISTRICT?

Build, develop, connect

- Build a computer science program that engages ALL students. UTeach CSP is designed to involve students in thinking about big ideas and prepare them to be successful in advanced computing courses.
- Develop a corps of computer science teachers. UTeach—the
  nationally acclaimed STEM teacher preparation program—
  provides training and year-round support to teachers with any
  content background or level of experience who have an interest
  in teaching computer science.
  - Intensive five-day professional learning workshops to prepare teachers to teach the *UTeach CSP* course.
  - Remote micro-workshops to help teachers prepare for each unit before it begins.
  - Personalized email and phone support provided by a teacher with experience implementing the curriculum in high school classrooms.
  - A web-based community of practice that encourages UTeach CS educators nationwide to share resources and suggestions.
- Connect students to CS. UTeach provides resources and ongoing support to district and school
  administrators, school counselors, teachers, and parents that enable ALL students to take computer
  science.
  - Information on the demand for computer science skills and postsecondary and career opportunities.
  - Information sessions, training, and advising materials to help counselors and teachers recruit and support students.





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