

Options for Schools Without CS Teachers

QUESTION

How do I start a computer science program at my school without any teachers prepared to teach it?

TOOL DESCRIPTION

This tool highlights options that school leaders should explore when computer science teachers aren't readily available in their school.

WHY DO YOU NEED TO KNOW THIS?

Great teachers are essential for a successful computer science program. However, teachers already prepared to teach computer science can be difficult to find (Wilson, 2010) and retain (Bernier, 2014).

HOW DOES THIS TOOL HELP?

In the United States, there is a lot of momentum behind increasing K-12 computer science learning opportunities for students (Wilson, 2010). However, trained K-12 computer science teachers are limited, as are coordinated professional development options for them (Century, 2013). This tool describes several options leaders can consider to "jump-start" a computer science education program when they don't already have computer science teachers on staff.

If you don't currently have teacher prepared to teach computer science in your school, consider these four options.

TOOL CONTENT

OPTION 1

Recruit computer science teachers to work in your school.

There are many different ways to recruit high school teachers of core subjects, but finding computer science teachers may require looking in unfamiliar places. The best places to begin your search are the professional associations for computer science teachers, the Computer Science Teachers Association (CSTA) and the International Society for Technology in Education (ISTE). See the **Recruiting High School Computer Science Teachers** tool for places to look to recruit computer science teachers to your school.

OPTION 2

Prepare existing teachers in your school to add computer science to the disciplines they are prepared to teach.

You may already have teachers in your school who are interested in teaching computer science, possibly in mathematics, science, career-and-technical-education, or other departments. With training, support, and resources, these teachers may make great computer science teachers.

OPTION 3 Partner with professionals in industry or higher education to provide computer science instruction at your school.

Many communities include professionals with extensive computer science content knowledge, like technicians, programmers, and university faculty. These individuals may have an interest in helping teach computer science at your school, part time. For example, the Microsoft TEALS program connects Microsoft computer scientists with classroom teachers teaching computer science (TEALS, 2014). Many universities and community colleges will partner university faculty with high school classroom teachers to offer dual credit opportunities in computer science. See the **Partnering with University Faculty** and **Partnering with Industry Professionals** tools to read more about partnering with content experts in industry and higher education.

OPTION 4 Identify and use online computer science courses for students.

Computer science can also be offered to students virtually, via a variety of online course providers. Many online course options require a face-to-face proctor (such as a homeroom teacher) to facilitate and monitor progress. For more information about online computer science course options, see the tool **Online Computer Science Learning Opportunities for High Schools**.

References

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