



Integrated Computing, Data Science, and AI

[Bootstrap](#) is a family of research-based curricula that teach CS, DS and AI in a way that can be integrated with **Grade 5-8 Math, Algebra 1, Algebra 2, Physics, Statistics, and Social Studies**

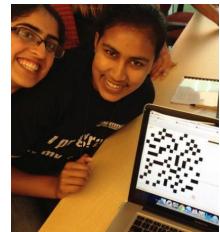
Flexible options: Not every school has money for a CS teacher or room for a CS course! Our curricula can be mixed-and-matched to form endless variations that take anywhere from 20-25 hours to a full year. Our modules build seamlessly, allowing schools to grow their CS offerings gradually, or dive straight into AP CS. Teachers without prior CS experience start comfortably and confidently after our highly-rated Professional Learning workshops.



Equitable access: Our introductory materials can be used in math, physics and social studies classes - not only computing classes. Because *all* students take these classes, our curriculum delivers rigorous and engaging computing to every student, not those who self-select. Of the 45,000 students we reach every year, 46% are African-American or Latino/a, and 43% are female.



Real Results: Algebra underlies all STEM careers. Bootstrap uses computing to help students see value and gain confidence in algebra. We assess our effectiveness using questions from state algebra exams. *Bootstrap:Algebra* has been shown to significantly improve student performance on standard, pencil-and-paper algebra tasks. Read more at [BootstrapWorld.org/impact](#).



To offer Bootstrap, a school needs:

- **A trained teacher:** Our hands-on professional learning is consistently rated as one of the best workshops teachers have attended, and we support teachers with email, monthly virtual coaching sessions, and discussion groups; on-site visits are also possible. We welcome and encourage multiple teachers from the same school.
- **Printed materials:** Schools purchase workbooks, or can print their own from our free PDFs.
- **Minimal computer access:** Not everyone has full-time access to computers! Our materials use a pedagogically-designed physical workbook, supporting teachers with limited computer access.
- **Web access:** There's nothing to install; everything runs on the Web. It works on Chromebooks, laptops, and desktops, and has support for the visually-impaired.

For more information, write to contact@BootstrapWorld.org