

K-12 Education

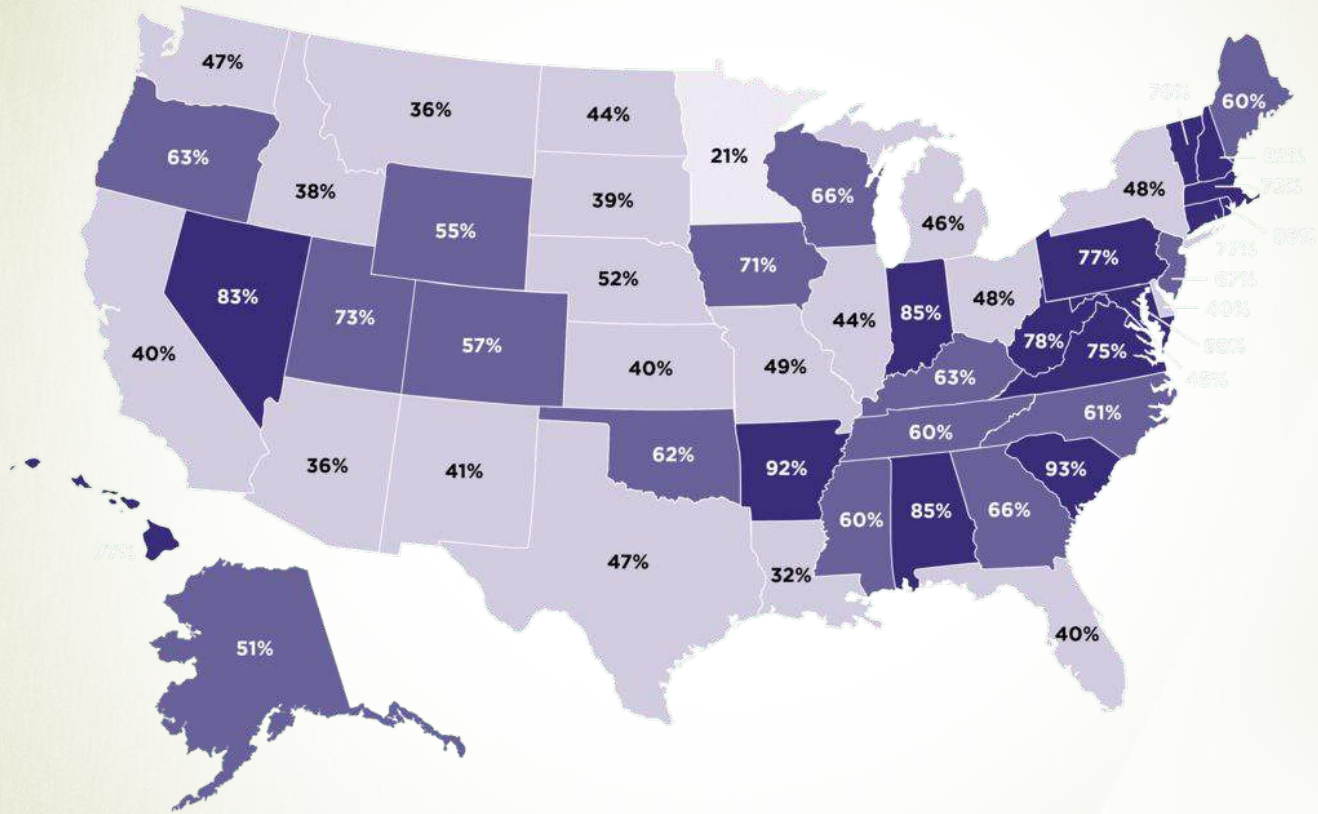
Samantha Dahlby
NewBoCo





Which states are leading in CS education?





Iowa House File 2629

<https://www.legis.iowa.gov/legislation/BillBook?ga=88&ba=hf2629>

- The board of directors of each public school district and the authorities in charge of each nonpublic school shall develop and **implement a kindergarten through grade twelve computer science plan** by **July 1, 2022**, which incorporates the standards
- One-half unit of computer science commencing with the school year beginning **July 1, 2022**.
- Computer science instruction incorporating the standards ..., shall be offered in at least one grade level in grades 1–6 and at least one grade level in grades 7–8 commencing with the school year beginning **July 1, 2023**.

Computing Jobs

<https://code.org/promote/ia>

The average salary for a computing occupation in IA is **\$91,730**.

Iowa

4,262

Open computing jobs
(2.0x the state average demand rate)
with an average salary of **\$91,730**




71%

of public high schools teach a CS class

844

Computer science graduates

Policy Environment ([rubric](#)):

-  **Dedicated state funding for CS PD**
-  **Requires all high schools to offer CS**
-  **K-12 CS curriculum standards**

NewBoCo Student Programs

Tiny Techies



CoderDojo



Future City



Girls Who Code



NewBoCo Educator Programs

Teacher Professional Development

Preschool

Elementary school

Middle School

High School

3

4

5

K

1

2

3

4

5

6

7

8

9

10

11

12

K–12 Introduction to AI

Tiny Techies

CS Fundamentals Courses A-F

Project GUTS

CS Discoveries

AP CS Principles

Tiny Techies



CS Fundamentals



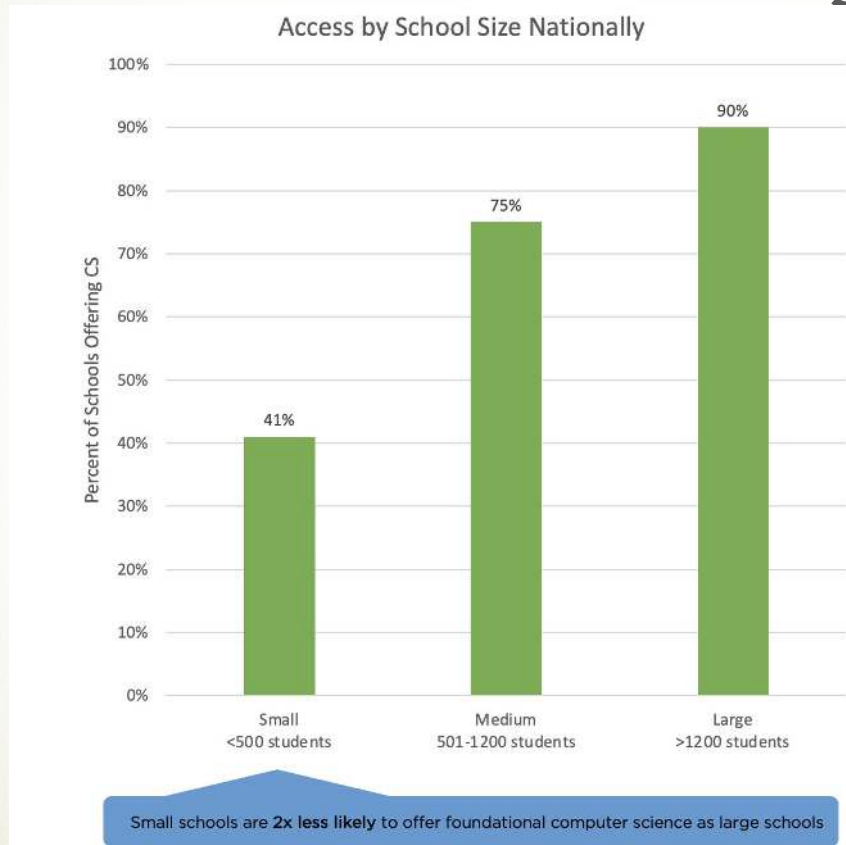
CS Discoveries

CS Principles

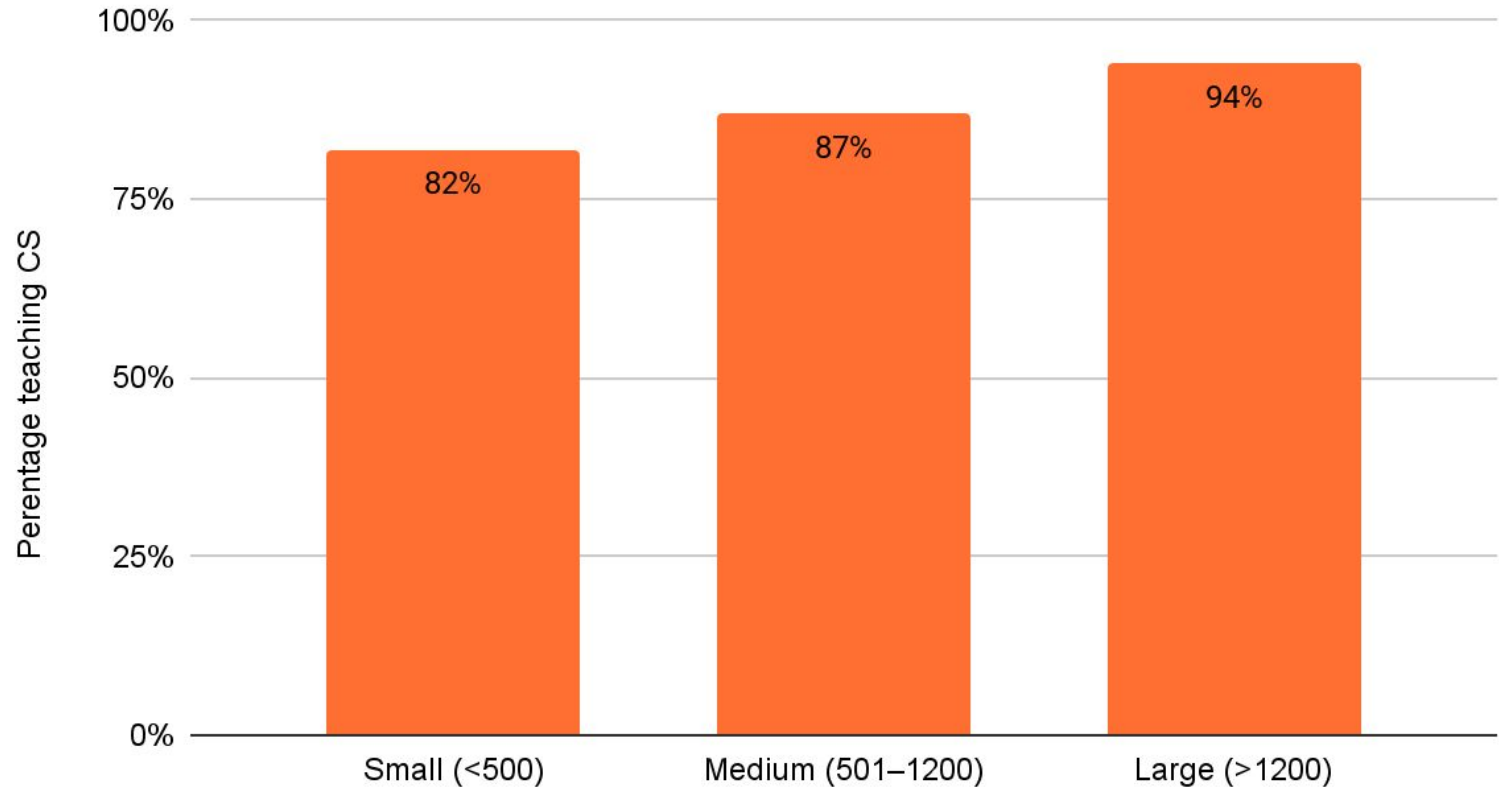
CS A



Size as a Predictor of CS in High Schools



Percentage teaching CS vs. School Size



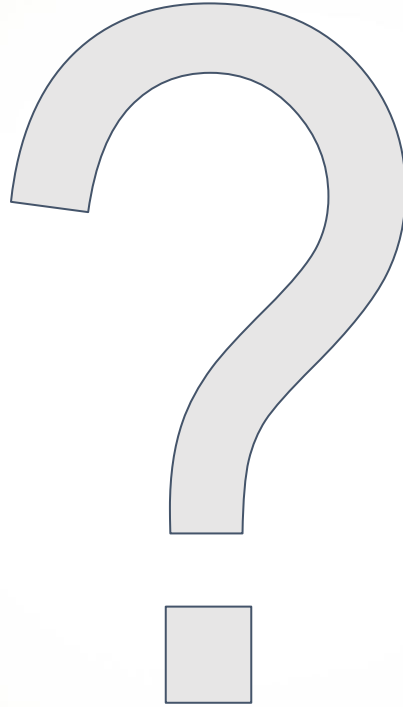
Challenges

- Capacity
- Student recruitment
- Planning
- Buy-In
- Funding process
- Plethora of choices
- Community



Partnerships

- School Districts
- Iowa STEM Council
- Department of Education
- Local Companies
- Area Education Agencies (AEAs)
- Parents/Guardians
- Other Nonprofits



Thank you!

Samantha@NewBo.Co