This report summarizes the status of computer science (CS) education using data from 18,938 surveys collected in 2014–2015 and 2015–2016 from U.S. K–12 school principals.

These data are from a multi-year Google-Gallup study of U.S. K–12 students, parents, teachers, principals, and superintendents.

This report: goo.gl/RQ1YjA
All reports: g.co/cseduresearch

K–12 Computer Science Education
New Mexico

2017

New Mexico principals are less likely than their national peers to offer CS courses, but more likely to offer CS extracurriculars. However, their offerings less likely include programming/coding. They report higher student demand, but lower school board support for CS and less growth in CS. They more likely cite Internet connectivity as a barrier.

Background

Broadening equitable student access to computer science (CS) education is critical to our future, not only because of the increasing demand for qualified workers to fill computing-related jobs but also because it develops critical thinking to solve complex problems, creativity to foster new ideas, and skills to drive innovation. To inform the public on progress made toward ensuring broad participation in K–12 CS education, this report provides results from 2014–15 and 2015–16 Google-Gallup surveys. Topics include perceptions, opportunities, support, and infrastructure. It also offers recommendations to broaden access to CS learning for New Mexico.

Findings

Results from the 2014–15 and 2015–16 Google-Gallup surveys show that while perceptions of CS are increasingly positive, there is still inconsistent implementation of CS education for students in U.S. schools.

- Positive perceptions of CS prevail among students, parents, and educators, including 88% of New Mexico principals who believe that CS can be used in many different jobs (U.S. average 88%).
- The value of CS is high, where 63% of New Mexico principals agreed that most students should be required to take CS (U.S. average 60%).
- CS offerings are limited, with 48% of New Mexico principals reporting offering CS classes (U.S. average 57%).
- Growth in CS opportunities is anticipated by 39% of New Mexico principals by 2019 (U.S. average 53%).

To help prepare schools for CS education, the study also identifies challenges to providing CS education for all students in New Mexico.

- Parents’ demand for CS is not being heard; 91% of U.S. parents want their child to learn CS, whereas only 8% of New Mexico principals believe there is strong parent demand for CS (U.S. average 8%).
- Principals perceive weak school board support for CS in New Mexico, with 36% indicating school board commitment (U.S. average 41%).
- Focus on test preparation for other subject areas (50%), insufficient budget for a CS teacher (49%), and lack of teachers trained in CS (49%) are the greatest barriers to offering CS for New Mexico principals.

Recommendations

- Promote broad, diverse participation by taking advantage of interest and growth while integrating equity practices into CS recruitment and pedagogy.
- Expand CS offerings by connecting with communities, legislators, and organizations advocating for CS education.
- Integrate CS education offerings via flexible curricula, empowering teachers to incorporate CS into their subjects.
- Prioritize funding to meet the demand for CS education.
- Increase qualified CS teachers through incentives and support of quality teacher preparation and certification.

Values below indicate percentage point difference from the U.S. average. See back for full data tables.

Perceptions

Value of CS in schools

Image of CS careers +2

Opportunities & Participation

CS offers +2

CS includes programming

CS growth & participation

School Infrastructure

Demand for CS +2

Support for CS

State Policy as of 2017

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

1 Source: code.org/promote
The descriptive data tables below show responses by 166 New Mexico K–12 principals compared to the full sample of 18,938 surveys collected in 2014–2015 and 2015–2016 from U.S. K–12 school principals; sample size may vary by question. Percentage point differences from the U.S. for each category were calculated from the percentages bolded below. Full methodology is at goo.gl/7qwXgP.