

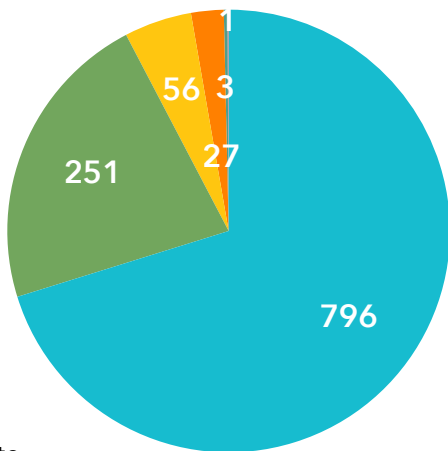
#CSforAllMN

State of Computer Science (CS) Education in Minnesota

CURRENTLY, COMPUTER SCIENCE (CS) ED IN MINNESOTA LOOKS LIKE:

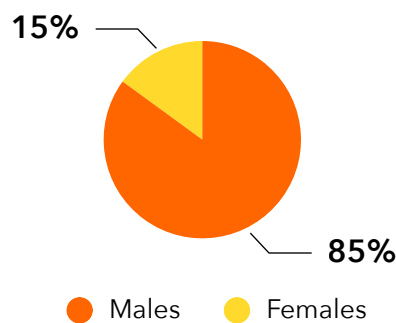
- **895** CS college graduates in 2015¹
- Compared to **3,477** open computing jobs¹
- **No** CS licensure in MN for K12 teachers¹
- **No** standards or certification pathways for CS ed¹
- **Legislation** allows districts to count CS as a math credit for high school graduation³
- **1,201** exams taken in AP CS in 2017¹
- **20%** of 2017 AP CS exams were taken by females
- **59** schools offered AP CS courses in 2016-2017 (18% of schools with AP programs)¹

2017 MN CS AP EXAM PARTICIPANTS⁵



- White
- Asian
- Hispanic or Latinx
- African American
- American Indian or Native Alaskan
- Native Hawaiian (1)

2015 MN CS COLLEGE GRADUATES¹



- Males
- Females

EXPANDING COMPUTING EDUCATION PATHWAYS ALLIANCE (ECEP)⁶

Minnesota has joined 23 other states in seeking to **increase** the number and diversity of K-16 students with access to CS.

Our **goals** include:

- ▶ Writing a **landscape report** for the state of CS Ed in MN (coming in May 2019)
- ▶ Convening a **summit** to draft a state plan & timeline for increasing access to K-16 CS education in MN
- ▶ **Create** pathways & partnerships to drive state-level CS education

Coming Soon:

- ▶ **Summit** in May, 2019

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CURRENT K12 CS ED POLICIES IN MN³:

1 State Plan	2 Standards	3 Funding
No	No	No
4 Certification	5 Preservice Teacher Prep	6 State Supervisor
No	No	No
7 Require HS to Offer	8 Core Grad Credit	9 Higher Ed Admission
No	Math	No

BARRIERS TO K12 CS ED IN MN²:

- Gap between the demand for CS ed and what is offered
- Perceived weak school board support
- Lack of K12 teachers trained in CS

Why CS in K12?⁸

Economic & Workforce Development

Citizenship & Civic Engagement

Competencies & Literacies

Technological, Social & Scientific Innovation

Equity & Social Justice

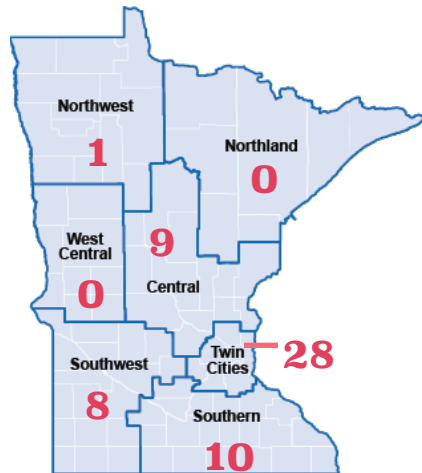
School Reform & Improvement

Personal Agency, Joy, & Fulfillment

RECOMMENDATIONS FOR K12 CS ED IN MN²:

- **Promote** broad & diverse participation
- **Expand** CS offerings
- **Integrate** CS into content areas
- **Increase** qualified CS teachers
- **Prioritize** funding

SCHOOLS OFFERING AP CS EXAMS BY REGION⁷



Students who take AP Computer Science in high school are **6x** more likely to major in CS.

- African Americans are **7x** more likely
- Hispanic students are **8.5x** more likely
- Females are **10x** more likely⁴

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🐦 @CSforAllMN

🌐 CSforAllMN.org



1 - <https://code.org/advocacy/state-facts/MN.pdf>
 2 - <http://services.google.com/fh/files/misc/cs-edu-state-reports-2017.pdf>
 3 - https://code.org/files/2018_state_of_cs.pdf (Legislation = HF 844 (2015))
 4 - <https://k12cs.org/equity-in-computer-science-education/>

5 - <https://research.collegeboard.org/programs/ap/data/archived/ap-2017>
 6 - <https://ecepalliance.org/>
 7 - <https://education.mn.gov/MDE/Data/>
 8 - <https://csforall.org/script>