

Computer Science Work Group

December 8, 2020, 3:30-5:00 p.m.

Notes

Jeff Weld welcomed everyone, wished everyone a Happy CSEdWeek, and introduced the Governor.

Governor Reynolds gave opening remarks.

Jeff Weld introduced co-chair Kathy Kay and then work group members introduced themselves.

Sean Roberts from Code.org presented on computer science from a national perspective. The State of CS report was released in September.

- 47% of public high schools teach at least one foundational CS course.
- lowa is doing well and might surpass Indiana.
- Leadership is key to making CS happen and lowa has it.
- Iowa will have 8/9 policies thanks to HF2629. Only 5 states have 9/9 and they are considered the leaders with CS.
- CS is bipartisan.
- Governor Reynolds is part of <u>Governors for CS</u> group.
- If you aren't leading in CS you are falling behind.
- Code.org shows that more policies correlate with more CS offered. The most effective
 policy? All high schools offer CS. The graduation requirement increases the number of
 students taking CS but also eliminates disparities. Pre-Service is the workforce pipeline PD is great but it's not enough; two states have a pre-service requirement.
- Need to address gaps even when it's offered historically underrepresented minorities don't take CS classes.

Jeff Weld prompted the group to share their preliminary thoughts on the dual charge of the group

- [One member] didn't see herself in CS classes; internships are important.
- Curriculum and endorsements have been a huge boost; starting younger has boosted HS numbers; need to go to school board meetings and talk about CS.
- Every career will have some CS component but difficult for parents and students to visualize future jobs.
- Early prep and exposure are huge; impressed by Arkansas response to CS.
- Education has to catch up to where kids already are; there is no occupation that doesn't use computers.
- Everyone won't become a software engineer, we must show there is a wide range of opportunities.
- Cannot lose talented teachers and also need to identify those that are excited.
- Microcredentials need to be considered.



Jeff Weld prompted the group to share their thoughts with the opening "If you had a magic wand what would you bring to the table for a recommendation?"

- Supporting educators; remember this is a journey
- Our students are capable but not enough students have a chance to do internships so need to get into the schools without opportunities
- Accessibility! Counselors can recommend classes but there is not equity in that
- It should be a requirement and the earlier the better; need patience and support from admin; no one has gone to school to be a CS teacher
- Quality HS CS programs; clear career pathways attract kids
- Partnerships between teachers and business community; talk to students and school board - it needs to come from more than just the CS teacher
- Computational thinking focus; teaching thought processes makes CS less scary and easier to integrate into other courses
- Is the goal to increase the number of CS professionals? What is the impact we want to have?
- Campaign component is so important
- Stress equity and defining CS; parents will buy-in when they see it in action.
- Get TAI professionals into the classrooms
- Focus on creating talented workforce not CS majors; look at life opportunities not career opportunities
- Professional development and business/community support
- Think about rural areas and how to capitalize on current initiatives.

The group agreed that future meetings will be held on 2nd Tuesday of the month, through June, from 3:30-5 p.m. (January 12, February 9, March 9, April 13, May 11, and June 8).

Kathy Kay wrapped up the meeting with the following ideas that stood out: focus on outcomes, leverage what is already happening and build on what's already out there, start young, and support teachers.

The next meeting of the Computer Science Work Group will be held on January 12, 2021 from 3:30-5 p.m.