

Morning prep

- Parking lot
- Parent survey – want to know

Print outs:

1. SMART one pager
2. Note Catcher
3. ODE answers

Email: word document of scenarios. Request to bring a laptop.

SCCS

STATE COMMITTEE ON COMPUTER SCIENCE

IN PARTNERSHIP WITH THE OHIO DEPARTMENT OF EDUCATION AND OHIO DEPARTMENT OF HIGHER EDUCATION

Making  Ohio a National Leader in Computer Science Education

Organizational Meeting

Committee Facilitator Kelly Gaier Evans - Battelle

Chair: Mike Duffey, Ohio Department of Higher Education

Vice Chair: John Wiseman, Ohio Department of Education

March 9, 2022 from 9:30-12:30 p.m.

Approval of Minutes

Chair, Mike Duffey

- February 16, 2022

Need:

- Motion to approve minutes
- Second

Updates and Announcements



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CS Standards update

- Chelsey Cook Kohn



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Parent Survey

1. As a parent, would you be interested in your child/student having access (or more access) to computer science courses if your current school system does not offer them (or enough)? Yes/No
2. Of the following, which aspect of computer science courses appeals most to you as a parent? Multiple choice/multiple selection:
 - a) Potential for a stable, high paying career
 - b) Could provide a well rounded educational experience
 - c) General interest in apps, games, networking, IT, cyber, etc.
 - d) Does not appeal to me
3. Do you feel your school currently offers enough computer science options for your student? Yes/No
4. [Open ended, fill in the blank] As a parent, my feelings about the State of Ohio working toward offering more computer science to students in general are as follow (please provide 2-3 sentences or more on your thoughts): _____



Framing our time

Our work today

- 9:30 -9:50 a.m. Welcome and recap
- Approval of minutes (February)
 - Updates/Announcements
 - Frame our Time Together and overview of the agenda
 - Recap the charge and our progress (data, challenges)
- 9:50-10:50 a.m. Revisions based on feedback
- 10:50-11:00 a.m. Coffee and stretch break
- 11:00-12:00 Presentations and discussions
- 12:00-12:20 Consensus
- 12:20-12:30 Homework and Wrap up

Upcoming Work

March 30th and
April 20th

- Intel update and industry panel
- Revisit operationalizing CS in K-12
- Discuss/plan recs for challenges preventing districts from offering CS including CS teacher supply
- HW: feedback
- All recs revised & shared
- Discussion to include or not to include in state plan

April 11th
and June 1st

- Discuss/plan recs for challenges in the k-12 to workforce CS pipeline.
- Discuss/plan recs on how to measure and report on post-secondary CS education
- HW: feedback
- All recs revised & shared
- Discussion to include or not to include in state plan

June 1st - 2nd

- Retreat
- Review and vote on entire set of recs
- Review and revise drafted state plan

From discussion to state plan

1. After all recommendations are shared and discussed in each part 2 meeting, we'll circle back to each recommendation and ask:
 - A. Are you in favor of including this recommendation in the plan (by show of hands)?
 - B. For this non-official consensus vote, if not a 2/3rds majority, ask is there any opposition to including in the plan? If yes, please share concerns and thoughts on how this could be mitigated.
 - C. If we have a majority consensus in the part 2 meeting which says to include, we will add this recommendation to the plan and add all notes on the concerns including any recommendations on how to mitigate for identified concern.
2. All recommendations will receive a formal vote during our June 1-2 retreat.
 - A. Recommendations with concerns will be revisited prior to a formal vote.

Norms

- We all have different filters, share yours
- Always assume positive intent
- Be curious and ask questions
- Be here now
- Communicate respectfully
- Safe space to contribute ideas (disagree w/content not the person)
- Treat everyone with courtesy and respect
- Embrace data, where it is and isn't available
- Come to meetings fully prepared which includes any homework or review of materials sent prior**

Identified challenges



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Challenge:

The state has not prioritized Computer Science Education with resources.

① Problem: no dedicated office for CS	
Why not?	OH doesn't prioritize CS ed. ↓ (see the next problem) ↓
② Problem: Ohio doesn't prioritize CS Education with Funding	
Why?	If hasn't been a problem until now
Why not?	It's not a traditional K-12 field / not required
Why hasn't it been addressed yet?	OH hasn't prioritized matching curriculum to workforce
Why not?	CS standards in OH are only 3 years old
Why hasn't it been prioritized yet?	CS field evolves rapidly in industry, the system can't keep up / disconnected We're not involved with each other (ed + industry)
	No one at the state level bringing everyone together until now, no intricate involvement by industry

Possible recommendations

Solution one

*Creation of an
Office of
Computer Science
Education*

*Debbie, Courtney, Katie,
Mike, and Jake*


Solution two

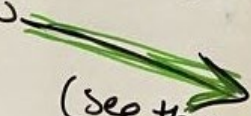
*“One for CS”
State of Ohio
1% K-12 funding
investment in CS
education*

Tom, Kelli, Lisa, John

Challenge:

The state has not made Computer Science a requirement in K-12 education.

③ Problem:	not all schools have funding for CS (teacher development, curriculum, equipment)
why?	students/parents aren't demanding CS courses
why not?	They haven't had CS instruction, don't know what it is, or have a perception it's not interesting or they think they'll be behind
why?	They didn't have it in K-8
why?	It's not required
why?	OH doesn't require it at the state level  K-12 (for schools or students)
why?	It wasn't hasn't been a problem until now


(see the next problem!)

Possible recommendations

Solution one

*Creation of a
Student's Right
to Access CS*

*Brent, Bryan, Ted and
Mike*

Solution two

*Establishment
of CS as
Graduation
Requirement*

Bekah, Kristi, Paula, Pat

Committee homework overview

	Yes: this solution and implementation plan effectively solves the challenge	As written, I would recommend including this proposal in Ohio's State Plan for Computer Science
SCENARIO 1: Creation of an Office of Computer Science Education (OCSE)	73.33%	64.29%
SCENARIO 2: "One for CS" - State of Ohio 1% Goal for K-12 funding in CS education	66.67%	64.29%

Note: 13 responses were submitted

Committee homework overview

	Yes: this solution and implementation plan effectively solves the challenge	As written, I would recommend including this proposal in Ohio's State Plan for Computer Science
SCENARIO 3: Creation of a statutory “Student’s Right to Access CS”	73.33%	50.00%
SCENARIO 4: Establishment of CS as Graduation Requirement	73.33%	50.00%

Note: 13 responses were submitted

Take-aways

- Recommendations need to be more detailed.
 - What is the timeline? Is this dependent upon another recommendation? What are the resources required?
- What is the balance between pushing for CS access and building CS interest?
- These buckets are the right ones to work on in conjunction, however there are other topics such as teacher certification that also need to be addressed as part of ensuring success
- Time should be spent on understanding potential unintended consequences to plan ahead

Ohio as a leader in Computer Science education

February 16th & March 9th

The state has not prioritized Computer Science Education with resources.

The state has not made Computer Science a requirement in K-12 education.

There is widespread disagreement and confusion on what is Computer Science is and is not.

Schools and districts are offering CS

March 30th and April 20th

Schools do not have the support they need to implement Computer Science.

Students do not choose to enroll in CS courses.

There is a low supply of credentialed CS teachers.

Computer Science Student to Career Pipeline

April 11th and June 1st

It's hard to find clear pathways for a Computer Science career.

Not all students have early access (prior to high school) to computer science courses.

Need connection between what skills industries are looking for and what is being taught in the classroom

S M A R T

Specific

- Who is involved?
- What will be accomplished?
- Where will this take place?
- What are the requirements and constraints?
- What are the resources needed?
- What are some of the short term and long-term fiscal impacts?
- Why: Provide the specific benefits of accomplishing this goal.

Measurable

- What would the unique metrics of success be for this solution?
- What additional metrics might be pulled in from other solutions?
- What are benchmarks that would need to be in place to ensure progress is on track?

Attainable

- Is this recommendation achievable?
- What are potential barriers or unintended consequences?
- Outline any steps that should be taken to mitigate these barriers/ consequences.
- Is this recommendation dependent upon another recommendation? How so?

Relevant

- Does this recommendation solve the challenge identified by the committee?
- Will it support Ohio in becoming a leader in CS education?

Time-bound

- What is the timeline for implementation?
- If this recommendation is dependent upon another recommendation, how does that impact this timeline?

Instructions:

Read through your feedback from fellow committee members. Build upon your best-case scenario for how this recommendation could be implemented being sure to address all five sections of a SMART goal. Please discuss and capture in any order, but indicate on your planning document where each SMART section is being addressed.

Each sub- group will have 60 minutes to work, a 10 minute break, and then beginning at 11:00AM, 5-8 minutes to share your updated recommendation with the full committee. Your presentation should cover the details of how you recommend solving this challenge with a detailed implementation plan incorporating each SMART goal section. The committee will then have 7-10 minutes to ask questions and discuss this recommendation as a full group.

Notes before break

- Email your updated plans to gaierk@battelle.org and (add ODE CS email address)
- We realize March 30 begins hitting spring breaks, we plan to do a vote for quorum at the conclusion of the meeting.
- Also, JobsOhio will be hosting us March 30th. They are excited to also provide an Intel update and an industry panel. To accommodate this, we need to add an extra 30 minutes. Would you prefer to start earlier (at 9) or end later (at 1)?

Coffee & Stretch

10 minutes



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Share out and Discussions



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Discussion questions

For sub-groups?

- What do you need group input on?
- What is not fully fleshed out?

For committee?

- Where do you have clarifying questions?
- What concerns do you have?

Seeking Consensus



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From discussion to state plan

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In closing...



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What's next?

Upcoming Pre-work: Pre -read on solutions to **challenges preventing districts from offering computer science**



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Upcoming Meetings

March 30 | At JobsOhio

Vote for quorum on March 30th?

Would you prefer to start earlier (at 9) or end later (at 1)?

April 20 | COSI

May 11 | COSI

June 1 & 2 | COSI

** Note: HB 110 gives us until October 2022, but plan to finish in spring/early summer.*



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Closing



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