Arizona Computer Science Standards Revision Working Group

August 14, 2018

Introductions

- Karl Griffor
  - Consultant
- Sarah Sleasman
  - Director of Science and STEM
- Jonathan Moore, Ed. D.
  - Deputy Associate Superintendent

Arizona Science Standards Revision Working Group

TO DO LiST
1. **SO**
2. **MANY**
3. **THiNGS**

Today we will...

❑ Begin / finish both public and 60% of technical comments

❑ Ensure that all our work is captured properly

Housekeeping

1. Sign in
2. Parking validation
3. Restrooms
4. Breaks/Lunch
5. Sign forms – All members

Cell phones should only be used during breaks and lunch. If you need to take a call, please go to the break room. Please check text and email only during break due to non-disclosure.
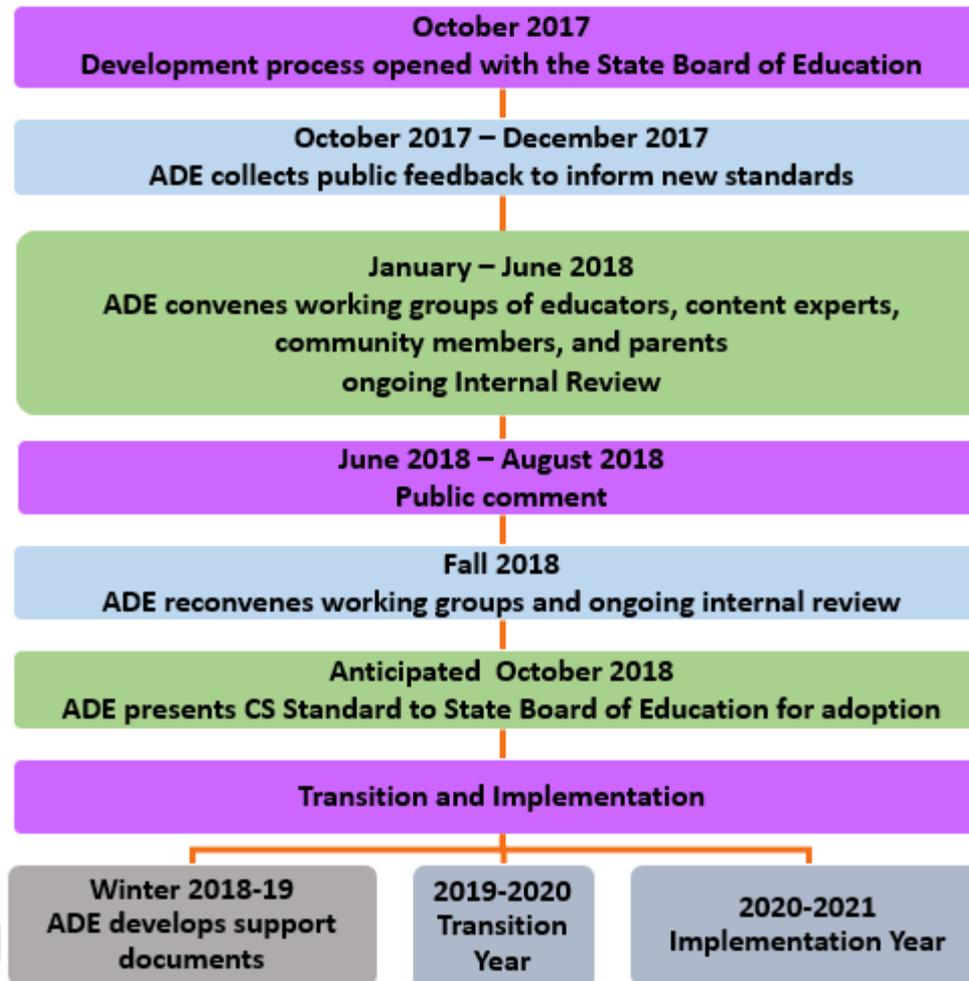
Introductions

Introduce yourself by telling everyone in the group:

1. Your name
2. Your school/district
3. Your current position
4. Something exciting about this summer

Biggest Thank You!

Science Standard Revision and Implementation Timeline

October 2017
Development process opened with the State Board of Education

October 2017 – December 2017
ADE collects public feedback to inform new standards

January – June 2018
ADE convenes working groups of educators, content experts, community members, and parents
ongoing Internal Review

June 2018 – August 2018
Public comment

Fall 2018
ADE reconvenes working groups and ongoing internal review

Anticipated October 2018
ADE presents CS Standard to State Board of Education for adoption

Transition and Implementation

| Winter 2018-19 ADE develops support documents | 2019-2020 Transition Year | 2020-2021 Implementation Year |

Working Group Norms

- Actively engage in all discussions
- Be open-minded
- Have an attitude that fosters collaboration, agreement, and consensus
- Be mindful of timelines and scope of work
- **Cell phone/email checks are limited to breaks**

Standards, Curriculum, & Instruction

Standards – What a student needs to know, understand, and be able to do by the end of each grade. Standards build across grade levels in a progression of increasing understanding and through a range of cognitive demand levels. Standards are adopted at the state level by the State Board of Education.

This is the "WHAT"

Standards, Curriculum, & Instruction

Curriculum – The resources used for teaching and learning the standards. **Curricula are adopted at a local level by districts and schools**.

Instruction – The methods used by teachers to teach their students. **Instructional techniques are employed by individual teachers** in response to the needs of the students in their classes to help them progress through the curriculum in order to master the standards.

This is the "HOW"

Today's Tasks

Reminder:

Keep in mind our work product is public record.

Today's Tasks-Tech Review

Technical reviewer comment-Lindsey

• K.NI.C.1: "Appropriately use and protect" could be explained a bit more, in terms of what it would look like. For example, "Students should enter a password independently and commit to keeping their password private."

Subconcept: Troubleshooting (T)	
K.CS.T.1	**Discuss basic hardware and software problems.** *Problems with computing systems have different causes. Students at this level do not need to understand those causes, but they should be able to communicate a problem (e.g., when an app or program is not working as expected, a device will not turn on, the sound does not work, etc.).* *Practice: Testing and Refining Computational Artifacts, Communicating About Computing: 6.2, 7.3*

Concept: Networks and the Internet (NI)

Subconcept: Cybersecurity (C)	
K.NI.C.1	**Explain that a password helps protect the privacy of information.** *Connecting devices to a network or the Internet provides great benefit, care must be taken to use authentication measures, such as strong passwords, to protect devices and information from unauthorized access. This is an essential first step in learning about cybersecurity. They should appropriately use and protect the passwords they are required to use. Usernames and passwords, such as those on computing devices or Wi-Fi networks, provide a way of authenticating a user's identity.* *Practice(s): Communicating About Computing: 7.2*
Subconcept: Network, Communication, and Organization (NCO)	
K.NI. NCO.1	**With teacher guidance, students discuss how computer networks can be used to connect people to other people, places, information, and ideas.** *Small, wireless devices, such as cell phones, communicate with one another through a series of intermediary connection points, such as cellular towers. This coordination among many computing devices allows a person to voice call a friend or video chat with a family member. Details about the connection points are not expected at this level.* *Practice(s): Communicating About Computing: 7.3*

Concept: Data and Analysis (DA)

Subconcept: Collection, Visualization and Transformation (CVT)

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Today's Tasks-Tech Review

Subconcept: Troubleshooting (T)

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	Practice: Testing and Refining Computational Artifacts, Communicating About Computing: 6.2, 7.3

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AZ CS1
6:18 AM Today   Resolve

Student should .....

RR: ...

Today's Tasks-Public Review

Public comment

Comment #	Actionable? Y/N	Suggest Changes	Committee Rationale/Notes
2.J	N		
12.J	N		
19.J	Y	Consider creating a table that lists standards content broken down by grade band, or lists all by single grade from K-12	

Final Thoughts

Table Share Outs
1.) Finish sharing out themes
or commonalities between
comments and commenters.
Capture via post-it's on the
posters on the wall
2.) Professional Development for
teachers to implement CS,
thoughts...