STEM Series - Part 2
Computer Science Resources
for the K-5 Classroom
Shawn Abele

Welcome!

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[Hot Spot Website](#)

Objective

Participants will have grade level appropriate ideas and resources to incorporate Computer Science into K-5 classes for the 2020-2021 school year and beyond!

Standards

[Arizona Computer Science Standards](#)
New AZ CS standards were adopted in October of 2018.

[Arizona Educational Technology Standards](#)
These EdTech Standards were adopted in 2009. AZ Dept of Ed has just begin the process to update these standards. Timeline of completion of a new set of standards set for January 2021.

Computer Science Standards

[Arizona Computer Science Standards](#)
1. Computing Systems
2. Networking and the Internet
3. Data Analysis
4. Algorithms and Programming
5. Impacts of Computing

Many of these are already covered in your everyday use of technology in the classroom!

Why teach Computer Science?

[Check out these STATS](#) from code.org

ARIZONA

15,851 Open computing jobs

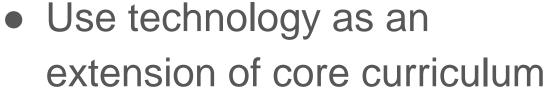(2.9x the state average demand rate)

1,014 Computer science graduates

UNITED STATES

633,868 Open computing jobs nationwide

71,226 Computer science students graduated into the workforce last year

Ideas

- Use technology as an extension of core curriculum
- Projects relating to core
- Stations and small group
- AZ Computer Science and Educational Technology Standards

WARNING!!!

WARNING!! Information Overload

Save this Slide Deck to refer to later!!

Grade Level Aligned

Standards Aligned Lesson Ideas and Resources

[Kindergarten](#)

[1st Grade](#)

[2nd Grade](#)

[3rd Grade](#)

[4th Grade](#)

[5th Grade](#)

Computing Systems Lesson Plan

[Kindergarten](#)

[1st Grade](#)

[2nd Grade](#)

[3rd Grade](#)

code.org

[Unplugged Activities](#)

Grade Level Aligned

TAKE FIVE!!

I'll share the slideshow in the chat, click on your grade level and take a few minutes to look over those materials.

Respond in the chat 1 thing you think you can apply right away next school year!

Computing Systems

Take apart an OLD COMPUTER!

[Video explaining](#) main Computer Parts

Assign a [Tech Expert](#)

Networks & The Internet

Color your password

Safe Online Surfing fun activities developed by FBI

Nova Labs - Cybersecurity (upper elementary)

Data & Analysis

Sample Data Log

Create Pictographs with Google Drawings

Collect Data using Google Forms

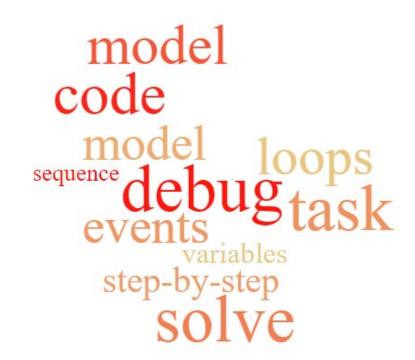# Algorithms & Programming

Interactive Adventure Stories in Google Slides

The Big Event - unplugged activity

code.org (full training on code.org June 11th!!!)

Impacts of Computing

Common Sense Media

Great short videos and activities about Internet safety! - excellent videos for beginning of the day when doing attendance!

usability
equity
implement
collaboration
evolve   accessibility
innovation
copyright

Questions and Comments

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Hot Spot Website

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