



STEM Series - Part 1

Technology Integration in STEM

Shawn Abele

About Me!



Welcome!

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[Hot Spot Website](#)



Objective

Participants will have grade level appropriate ideas and resources to integrate technology into STEM classes for the 2020-2021 school year and beyond!



WARNING!!!

WARNING!! Information Overload
Save this Slide Deck to refer to later!!



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.



Ed Tech Standards

Arizona Educational Technology Standards

1. Creativity and Innovation
2. Communication and Collaboration
3. Research and Information Literacy
4. Critical Thinking, Problem Solving & Decision Making
5. Digital Citizenship
6. Technology Operations and Concepts

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



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!



Ideas

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





SCIENCE

Science Resources

- [Google Slides Interactive Notebook](#)
- [Create templates for labeling](#)
 - [Change the page setup \(size\) of Google Slides](#)
 - [Add a background that can't be moved](#)
- [Online Periodic Table and Scientific Calculator](#) (Did you know...if you open the calculator on your phone and turn it sideways it's a Scientific Calculator???)
- [PBS Interactives](#) - Website with simulations
- [Wide Open School](#) - Common Sense





TECHNOLOGY

Technology Resources

- [Tech Expert job](#)
- Data [Log](#) - Sheets Template
- [FlipGrid](#)
- Create Slides Templates for students to complete
[Facebook for Famous person](#)
[African Animals Template](#)
- Infographics
[Google Drawing](#)
[CANVA - Canva Educator Application](#)
- [Common Sense Media!](#)
- [Learning Menus](#) / [Choice Boards](#)





ENGINEERING

Engineering Resources

- [Interactive Graphic Organizers](#) - Website with fillable PDF
- [Jamboard](#) - Google App
- [Collaborative Google Slides](#) - Slide Template with links for students
- Create 3D objects with [Tinkercad](#)
- [Code.org](#) (full training on code.org June 11th!!!)





MATH

Math Resources

- [Equatio](#)
- [Hour of Code - Artist](#)
- [Interactive math Activities](#) - Website with math manipulatives
- [Math Manipulatives](#)
- [Lego Math Template](#)
- [Digital math Mats](#) - Slides Template
- [GeoGebra](#) - 100s of interactives sorted by subject



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