WHAT'S NEW IN October

UPCOMING WEBINAR OFFERINGS

(W= Webinar F= Face-Face)

Title	Date	Time	Cost	Type
STEMAZing Tips and Tricks: October 8, 2020- Session 1	10/8/20	4:00pm – 5:00pm	FREE	W
A Look at Arizona's New Science Standards	10/13/20	4:00pm – 5:00pm	FREE	W
STEMAZing Tips and Tricks: October 22, 2020- Session 2	10/22/20	4:00pm – 5:00pm	FREE	W
Constructing Explanations & Arguing from Evidence- Using Claims, Evidence, and Reasoning (CER)	10/29/20	4:00pm – 5:00pm	FREE	W
STEMAZing Tips and Tricks: November 5, 2020- Session 3	11/5/20	4:00pm – 5:00pm	FREE	W
Science & Engineering Practices: 1 of the 3 Dimensions of the AZ Science Standards	11/17/20	4:00pm – 5:00pm	FREE	W
Core Ideas: 1 of the 3 Dimensions of the AZ Science Standards	11/18/20	4:00pm – 5:00pm	FREE	W
STEMAZing Tips and Tricks: November 19, 2020- Session 4	11/19/20	4:00pm – 5:00pm	FREE	W

AzSCI ARIZONA SCIENCE TEST

Assessment Update

AIMS Science: "The Arizona State Board of Education took advantage of a waiver from the U.S. Department of Education to eliminate the testing of AIMS Science in the 2020-2021 school year. AIMS Science was scheduled to be administered in 4th, 8th and 10th grade for the final time before being replaced by AzSCI. Simultaneously, AzSCI was scheduled to be census field

tested in 5th, 8th and 11th grade. With the action taken by the Board, schools can now focus on the new assessment, AzSCI, which is aligned to the new standards. AIMS Science is now retired." Arizona State Board of Edcation virtual met 8-12-20. Highlights of the State Board Meeting

Please visit the Science Standards webpage for an updated timeline. For more assessment information, visit the ADE Assessment website.

National Board Webinars & Digital Resources

The National Board has worked to be a professional resource for all teachers during the COVID-19 crisis. Use the link to access to the webinar series designed for all educators – National Board Certified Teachers, candidates pursuing certification, and any other educators, too. This site, https://www.nbpts.org/core-connections/, has many useful resources including webinars, virtual tools and platforms, community, student, and parent engagement resources, virtual learning resources, and more!

Next GenScience with WestEd

This is a great, timely new resource, from WestEd. Keep Teaching Science! highlights effective ways to adapt science materials while maintaining or enhancing NGSS features. This is the result of a team of over twenty partners that included classroom educators, state education leaders, curriculum developers and professional learning providers.

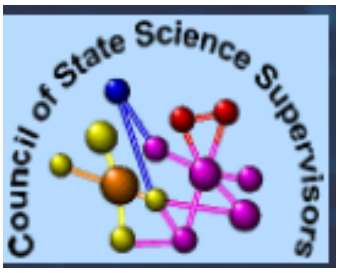
ASU Modeling Instruction

Modeling Workshops nationwide for spring and summer 2021 are listed at the American Modeling Teachers Association (AMTA) website. Workshop descriptions for summer 2021 are at the PhysTEC website. (More workshops are added periodically, so visit often.)

ASTA Science Talks

Arizona Science Teachers Association Science Talks. ASTA's Science Talks for the Academic Year occur the 4th Monday of each month from 4PM-5PM (excluding December). Join the Arizona Science Teachers association for an opportunity to engage in a generative conversation about successes, challenges, and resources.The importance of Science as a human endeavor is clear and staying connected during these difficult times is crucial. Engage with PreK-12 science teachers from around Arizona. We have new topics every month. Click the Registration Link to the Right of the date. Here is a list of events for science talks: https://azsta.org/events/science-talks/

Safety Resources from the Council of State Science Supervisors



The Council of State Science Supervisors in collaboration with the National Science Education Leadership Association conducted a Lab Safety Webinar on July 30, 2020. We want to thank Dr. Ken Roy and Dr. Kevin Doyle for sharing some considerations for our safety practices for this coming school year. We have linked the recording for the presentation portion of the webinar and associated resources below. For updated guidance and considerations please refer to CDC guidance, state agency guidance, and the NSTA's Lab Safety Page (see below).

Webinar Recording (https://www.youtube.com/watch?v=GyilhajkBg8&feature=youtu.be)

- **Note:** the slides are intellectual property and must not be duplicated, please contact Dr. Ken Roy at safersci@gmail.com for information about slides.

National Science Teachers Association- The National Science Teachers Association has a collection of science safety resources, although they are not specific for the COVID-19 situation. NSTA Safety Resources position statements and safety issue papers.

- Safety Recommendations for Opening the New School Year - NSTA blog by Dr. Ken Roy, NSTA Safety Officer
- CDC Guidance for General Laboratory Safety Practices during the COVID-19 Pandemic focused on research and academic labs
- CDC Recommendations for Cleaning and Disinfection
- FDA Guidance on Hand Sanitizers
- Hand Sanitizers Consumers Should Not Use (Updated Regularly)

STEMAZING Project- *NEW* RESOURCES!!!

The Pima County Superintendent Office has a project called STEMAZing! DaNel Hogan is leading this work and this project has tons of resources, professional development opportunities, and digital notebook examples! Visit the STEMAZing project, check out the available resources,or register for an upcoming event!

***NEW* and growing list of AZSS-Aligned Resources:**

https://stemazing.org/arizona-science-standards-aligned-resources/

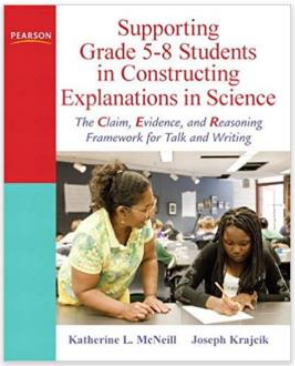
You can also follow the STEMAZing project on social media & sign up for the newsletter:

Facebook: https://www.facebook.com/TheSTEMAZingPro/

Twitter: https://twitter.com/TheSTEMAZingPro

Sign up for The STEMAZing Newsletter!

NEW Webinar- Constructing Explanations & Arguing from Evidence- Using Claims, Evidence, and Reasoning (CER)



This webinar will focus on discussing how the two Science and Engineering Practices of Constructing Explanations and Arguing from Evidence are connected. Together we will explore the differences between these two SEPs, dive into how they are connected, and discuss how to engage students in speaking and writing like scientists through using a strategy called “Claim, Evidence, Reasoning (CER)”. Tools for scaffolding CER statements with students will also be provided! Information from this amazing resource- *Supporting Grade 5-8 Student in Constructing Explanations in Science* will be used as well!

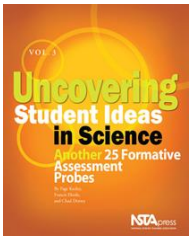
Webinars on the go! Watch a webinar on YOUR TIME!

ADE is pleased to announce that we have many new recorded webinars available for use on our main Science Standards website located ***here***. Scroll down and click on the drop-down menu titled “Recorded Webinars.” The webinars are now “packaged” on the website and include the video of the webinar, a PDF of the presentation, and a resource page with links to all resources used during the live webinar!

Here are the new recorded webinar packages:

A Look at Arizona’s New Science Standards | PDF | Resource Page
5-E Instructional Model and Science Notebooks | PDF | Resource Page
Phenomenon-Based 3-Dimensional Instruction | PDF | Resource Page
Science and Engineering Practices | PDF | Resource

Page Keeley- Digital Versions of Formative Assessment Probes!



Page Keeley, author of the *Unocovering Student Ideas in Science Formative Assessment Probes in Science* series, has recently released some of these amazing probes and openly published them via her Twitter account (@CTSKeeley). Click this link to see the formative assessment probes released as Google Slides.

Staying Grounded when Teaching Remote from OpenSciEd

Staying Grounded when Teaching Remote is a webinar series to support educators to stay grounded in the best practices of science teaching and learning while they shift to remote learning during school closures in response to the Covid-19 pandemic. This series focuses on routines and elements of storyline instructional models that are central to OpenSciEd, inquiryHub Biology, and NextGen Storylines materials. These webinars are a collaborative effort of the University of Colorado, The Charles A. Dana Center at the University of Texas, and OpenSciEd. OpenSciEd also developed a Remote Learning Online Tool Organizer, is a list of online tools generated by teachers using OpenSciEd and inquiryHub materials in their classrooms. This tool ties the tools to their use within the storyline instructional model.

OpenSciEd- 3 Discussion Types

OpenSciEd units use specific types of discussions to help draw out student ideas, support students in communicating with one another in scientific ways, and support student sensemaking. These different types of discussion serve different purposes, are useful in different phases of a lesson or unit, and have different characteristics depending on their purpose. If you are interested in additional resources that correlate to these three discussion types, check out the OpenSciEd Teacher Handbook.

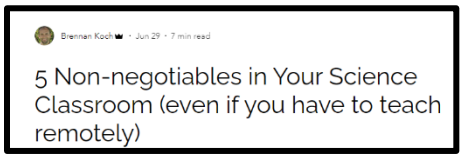
How I'm Teaching Remotely from Paul Anderson

Paul Andersen describes how he is teaching remotely in both conferences and classrooms. He tries to focus on good pedagogy rather than technology. The main topics include Whole Class Instruction, Science Investigations, Student Feedback and Small Group Work. Click this link to watch this video!

3-D Assessment Design with Paul Anderson, The Wonder of Science & STEM Teaching Tools

If you are interested in learning more about how to design 3-dimensional assessments, here are a few great resources to get you started. STEM Teaching Tool #29 describes the steps for designing a three dimensional assessment and STEM Teaching Tool #34 focuses on designing an assessment system that measures three-dimensional science leanring. Paul Anderson's site, The Wonder of Science, also has a few tools to help educators new to 3-dimensional assessment design. The first resource helps educators understand a simple 3-step process for designing assessment and another great resource describes how to use an assessment screening tool to review possible assessments for use.

5 Non-negotiables in Your Science Classroom (even if you have to teach remotely)



is a quick read, but full of great information! This article discusses 5 non-negotiables in your sciece classroom for both in-person and remote leanring. Simple ideas like connecting to kids, instill wonder, teaching critical thinking skills, be real, and have fun!!! Something useful for everyone to hear in here!

NEW 3-Dimensional Middle School Science Units Developed by Arizona Educators!!!

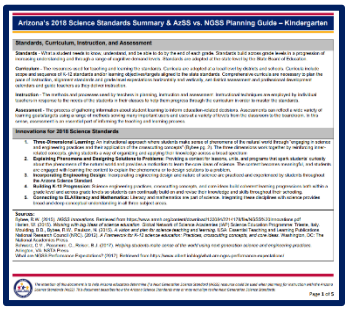
Arizona Science Teachers Associastions' (ASTA) ***A Deeper Dive: Constructing 3-dimensional Units*** was a partnership with Arizona Department of Education (ADE) and BSCS Science Learning (BSCS) financially supported by APS Foundation.

The Five Tools is a set of tools and processes to support educators to translate science concepts, practices and performance expectations into multiple instructional sequences that form an Arizona Science Standards (AzSS) unit, create an in-depth plan for one instructional sequence and assessment task, and provide an in-depth professional learning experience focused on the 3-dimensions. Click here to find all the Middle School science units that were developed!

What is the difference between AzSS and NGSS?

Wondering what aspects are the same or different? If so, then take a look at our two new science standards videos. This is a two-part video series. ***Part 1*** was designed to explain the similarities and differences between the NEW Arizona Science Standards that were adopted in October of 2018 and the Next Generation Science Standards. ***Part 2*** of this video series was designed to dig a little bit deeper into the similarities and differences between these two sets of standards by doing a side-by-side comparison of an NGSS standard and an Arizona science standard.

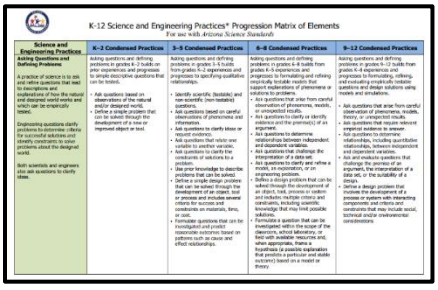
NEW Complete Set K-12 Summaries that Compare the AzSS to NGSS



A new addition, a complete set for K-12 combined into one document! Curious to know how each of the new Arizona Science Standards (AzSS) compares to the Next Generation Science Standards (NGSS)? The ADE, with the help of our Educator Leadership Team, created a new document called "Arizona's 2018 Science Standards Summary and AzSS vs. NGSS Planning Guide". These documents describe if the Next Generation Science Standards have a "strong," "partial," or "no correlation" to the Arizona Science Standards. This planning summary and guide can help districts and educators find resources, plan lessons, and understand more deeply how Arizona Science Standards compare to the national standards. Here are the documents for each grade level, and you can also visit our website and click "Planning Tools" to find these documents.

Kindergarten | First Grade | Second Grade | Third Grade | Fourth Grade | Fifth Grade | Sixth Grade | Seventh Grade | Eighth Grade | High School

3 Vertical Progression Documents – One for each of the 3 Dimensions!



Did you know? ADE's science standards website has three documents that can help educators plan for 3-dimensional science instruction. The first document is the ***Vertical Alignment Progression of Knowing Science*** that describes how the standards spiral from Kindergarten through Twelfth Grade. The second document is called the ***K-12 Crosscutting Concepts Progression Matrix of Elements*** that describes specific targets for each grade band in relation to each of the seven crosscutting concepts. The third document is the ***K-12 Science and Engineering Practices Progression Matrix of Elements*** that includes descriptors of what students should be able to do in regards to the Science and Engineering Practices in each grade band.

Register for Code.org's Computer Science State Policy Forum

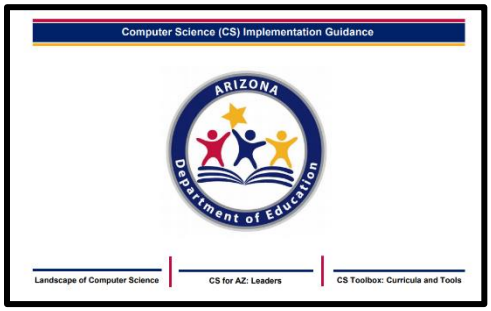
Register for the Computer Science State Policy Forum that held on October 14th from 1:00to 2:30 pm ET for a panel discussion of how "Computer Science is More Important Than Ever" featuring three state education chiefs. We'll also launch the 2020 State of Computer Science Education. Also reginster for the State of the State regarding Arizona.

Code.org has put together a list of recent curriculum updates, including support for online and socially-distanced learning (for example, using Code.org in online learning management systems).

CSTA Arizona Virtual Computer Science Summer Professional Development

The Computer Science Teachers Association of Arizona (CSTA-AZ) is excited to announce a menu of Virtual Professional Development experiences. Many of these sessions are *free* or have scholarships & funding available, such as through the ***Arizona Department of Education CSPD Fund.*** All courses apply towards the new Arizona Computer Science Teaching Endorsements for ***K-8*** and ***6-12***.

Computer Science Implementation Guidance Document and Endorsement



Arizona released K-12 Computer Science Standards in October 2018 and two options for Computer Science endorsement for K-12 teachers. To support the implementation of these standards, we are excited to present a ***Computer Science Implementation Guidance document.*** The primary purpose of this document is to introduce LEAs to resources that support the implementation of the new ***Arizona K-12 Computer Science Standards.*** Whether integrating C.S. and computational thinking across the curriculum or adopting it as a stand-alone course, there is a need to consider C.S. implementation within the K-12 system. As such, resources and guidance are outlined in the sections below that address the needs of the following stakeholders: school/LEA leadership; counselors and educators. An additional section includes considerations when adopting C.S. curricula and tools. In addition, to provide guidance regarding the new options for the Arizona Computer Science endorsement, the link to a one-page document that clearly outlines the requirements for ***PreK-8 CS Endorsement*** and ***6-12 CS Endorsement*** for Arizona educators can be found ***here.***

Computer Science Webinars and Resources from Gilbert Public Schools

If you are looking for way to integrate the Computer Science Standards into your classroom, here are some helpful resources! Shawn Abele, an educator from Gilbert Public Schools, has been providing webinars for the agency focused on Computer Science integration. She has also created these resources on **the Practical Application of the Newly Adopted Computer Science Standards** for ***Kindergarten | 1st Grade | 2nd Grade | 3rd Grade | 4th Grade | 5th Grade.***