



Arizona
Department of Education

MATH NEWSLETTER

Our goal is to provide engaging and meaningful learning opportunities and resources to support mathematical growth for educators.

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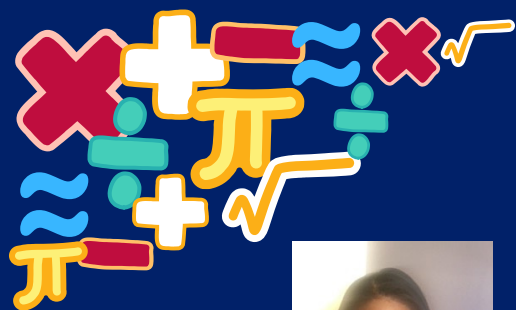
Presidential Award Coordinator

VISIT US ONLINE:

+ [The Arizona Department of Education](#)

X [Mathematics Professional Development](#)

÷ [Mathematics Resources](#)



ADE K-12 DIRECTOR OF MATH AND ED TECH STANDARDS



EBONEY MCKINNEY

A Message from the Math Director



Hello Math Friends,

Are you a Walnut Tree or a Marigold? Do you know how your colleagues view you? What is your impact on your educational community? We often get bogged down with the day to day, this year more than ever, and may not even notice the impact we have on others or the culture. The analogy of the walnut tree or marigold comes from [The Cult of Pedagogy](#) blog post, [Find Your Marigold: The One Essential Rule for New Teachers](#), by Jennifer Gonzales in 2013. Many of you may be familiar with this blog post and have may even shared it with others. I know I've used it several times, since being introduced to this great article. If it has been awhile since you've read it or you've never read it, I encourage you to **stop here and (re)read the article.**

This month I'm asking you all to do some personal reflecting about your impact on those you've encountered in person or for many of us, virtually. What would those that have spent time with you say about you, as an educator? Marigold or Walnut Tree? No one is perfect, despite what we see on IG and Pinterest! Teachers are human beings and become creatures of habit and everyone inevitably falls into unnamed, but known categories based on the climate and culture of our workspaces. And we all know, the longer you've been at a site/district, the deeper your roots are and further they spread. Are your roots supporting and encouraging? Or are they toxic and destructive?

This year has been like no other and we all have learned a lot, made mistakes, and missed opportunities. With that being said, we have also supported, shared, encouraged, and learned from each other and educators everywhere! It has been beautiful to watch not only the math community but the larger education community, come together in support of each other and our profession! I ask you to be cognizant of your continued impact on your students, their families, your colleagues, your school community, but most importantly yourself.

We can't be Marigolds all the time, but we don't want to become the Walnut Tree that inadvertently causes destruction to our beloved school communities. Continue supporting and encouraging those around you- yourself included, as you are doing great work that will having a lasting impact! #MathRocks

As always, please feel free to reach out to our ADE Math Team.

Take care,

Eboney McKinney

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Follow me on Twitter: @EboneyYMcKinney



FREE TRAININGS FOR ALL EDUCATORS UNTIL SEPTEMBER 2021!

The Arizona Department of Education has partnered with the Center for Recruitment and Retention of Mathematics Teachers (CRR) to offer free professional learning opportunities until the end of September 2021. The goals of the institute are to provide teachers an exciting opportunity for professional growth, to establish a rich community of teachers on which to derive support and encouragement, and to create ongoing support for lasting and durable changes to teaching and learning in each classroom.

JOIN THE CRR FOR THESE UPCOMING EVENTS:

APRIL 10, 2021, 1:30PM-3:00PM: CPM SPOTLIGHT SESSION #3 CREATING COLLABORATIVE CLASSROOMS (VIRTUAL & IN PERSON)

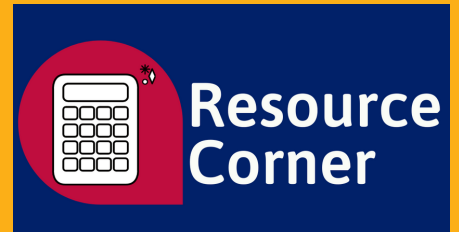
In this highly engaging and interactive session, participants will experience a team building activity, team roles, and study team strategies that foster collaboration in both a virtual and in-person classroom. Participants will work together to solve middle level math problems using various study team strategies and will reflect on how the Standards for Mathematical Practices are tied into and highlighted by these engagement strategies. All the problems and strategies from the session will be available to participants in a series of take-away activity links and handouts. Come collaborate with us!

APRIL 17, 2021, 8:30AM-1:00PM: HEMS-MS: IDENTITY, CURIOSITY, AND COMMUNITY IN THE MIDDLE SCHOOL CLASSROOM

How do we encourage mathematical identity, curiosity, and community in our classrooms (virtual or physical)? How do we support our students' growth as young mathematicians without wearing ourselves thin? Together we will grapple with these questions and engage in activities to promote student identity and community. All activities and strategies presented can be easily incorporated into your virtual or physical classroom. This session is intended for all middle school teachers with specific examples of activities from 6th, 7th, and 8th grade curriculums. This is a 2 part workshop, please only register if you can attend both parts.

APRIL 24, 2021, 12:30PM-2:30PM: 14TH ANNUAL ADVANCED PLACEMENT (AP) PRACTICE EXAMS

On the day of the event, students will join a Zoom Scoring Session for their specific exam (students may only attend one session). Facilitators will walk through the solutions and scoring of the Free Response problems so that every student will know their score (1-5) on the full practice exam when the Scoring Session is completed. Teachers are invited to attend with their students to help make connections between their instruction and the exam (a PD Certificate can be provided).



K-12:

- [Whiteboard.fi](#)
- [Kahoot](#)
- [Quizizz](#)
- [Classkick](#)
- [Desmos](#)
- [Mathigon](#)
- [Geogebra](#)
- [Math Mash-up](#)
- [PhET Simulations](#)
- [Youcubed](#)
- [Padlet](#)
- [Jamboard](#)
- [Would You Rather](#)
- [Which One Doesn't Belong](#)
- [Visual Patterns](#)
- [MathEqualsLove](#)
- [OpenMiddle](#)
- [MakingMathMoments](#)

ELEMENTARY:

- [ToyTheater](#)

MIDDLE & HIGH SCHOOL:

- [Graphing Stories](#)
- [Custom Functions](#)



**JOIN US
ONLINE!**

Elementary - Grades K-5

Tuesday, April 27th from 3:30–4:30 p.m.
with Q & A from 4:30–5:00 p.m.

Register in advance for the Grades
K-5 meeting.

Middle School Grades 5-8

Wednesday, April 28th from 3:30–4:30
p.m. this session will NOT have a Q & A.

Register in advance for the Grades
5-8 meeting.

High School Grades 8-12

Thursday, April 29th from 3:30–4:30 p.m.
with Q & A from 4:30–5:00 p.m.

Register in advance for the Grades
8-12 meeting.

The ADE Math Team has scheduled office hours to allow educators to meet together to network, problem-solve, and develop solutions to allow all Arizona teachers and students to continue to feel supported and to be successful. Grade-band meetings are provided for all math teachers, including special education teachers! These grade-band meetings will include opportunities for networking, problem solving, and sharing different implementation models. Office hours are one hour long with an additional 30 minutes at the end for a Q & A session.

Participants can earn one hour of professional development credit for each session attended. Note: accommodations must be requested at least one week in advance of each webinar.



Optimism and Opportunity for All!

Leading Change, Teachers' Institute, &
School Counselors' Institute



LEADING CHANGE, TEACHERS' INSTITUTE & SCHOOL COUNSELORS' INSTITUTE

ADE is happy to share that we will once again be hosting the Teachers Institute and Leading Change Conference virtually, on June 9-11, 2021.

This year's theme is "Optimism and Opportunity for All". Keynote presenters will include John Hattie, Dominique Smith, Douglas Fisher, Nancy Frey and Mark Perna, leading experts in equity, teaching and learning, assessment and building and fostering effective teams in education.

WHEN: JUNE 9TH-11TH, 2021

WHO: TEACHERS, DISTRICT AND SITE ADMINISTRATORS, SUPPORT STAFF,
CONTENT SPECIALIST

WHERE: VIRTUALLY

WHAT:

- VIRTUAL LEARNING
- ACCELERATING LEARNING
- BUILDING AND STRENGTHENING RELATIONSHIPS
- EQUITY, DIVERSITY, AND INCLUSION
- TRAUMA-INFORMED TEACHING
- SOCIAL EMOTIONAL LEARNING
- SUPPORTING STUDENTS FROM VULNERABLE POPULATIONS
- USING AND ANALYZING DATA

Sessions will be live or pre-recorded and broadcast with live chat by session presenters.

Information regarding the conference can be found [here](#). If you have any questions please send them to leadingchange@azed.gov.

ADDITIONAL LEARNING OPPORTUNITIES



Check out our [NEW Google PD calendar!](#)

this calendar will keep track of upcoming opportunities around the state of Arizona to learn and earn certificate recertification hours. This calendar can be added to your computer, phone or tablet to help you easily monitor events.



EXPLORING IN DESMOS

WHAT: EXPLORING FUNCTIONS IN DESMOS

WHEN: MONDAY, APRIL 26TH FROM 3:30-4:30P.M.

WHO: TEACHERS FROM GRADE 6TH-12TH

Join us to explore Desmos Activity Builder (DAB) and functions. We will interact with a variety of slides that have been created to demonstrate the features that DAB has to offer. This PD will not be a step-by-step tutorial for how to create in DAB, but it will be more of an exploration of what it has to offer.

Be sure to register in advance for this event!

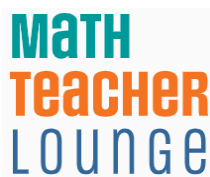
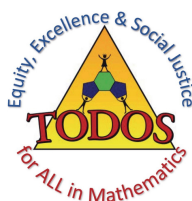
TODOS MATH EVENTS

ACTIVATING AGENCY, ACCESS AND ADVANCEMENT IN MATHEMATICS

Virtual Math Conference - June 21st-23rd

BE A CHANGE-AGENT, TAKING ACTION FOR EQUITY IN MATHEMATICS EDUCATION

Leadership Institute - June 24th-25th



Join great guests in the Math Teacher Lounge. The next episode of the Math Teacher Lounge with Bethany Lockhart Johnson and Dan Meyer is almost here. Visit the lounge to receive an alert for when the next episode drops with great guests such as Robert Berry, Francis Su, and many more! Get access now.

Bookmark our Professional Development webinar page to view the series schedule and register for upcoming webinars.



NATIONAL MATH FESTIVAL



WHEN: MONDAY, APRIL 16TH-18TH

WHO: YOUTH, AGES 2 - 18+

This is family math inspiration at its best. Drop in and out throughout the weekend. Stay a few minutes, or a few hours. Take it easy, or dive deeply: Both approaches will be fun during this exciting community-building weekend.

You can also check out the event schedule in advance, or simply join us April 16-18 and see what's live!

- On the Stage: Film Events, Math Talks, and other presentations
- In Booths: Family fun resources, Math Experts (live on camera)
- In Sessions: Hands-on demos, puzzles, games, activities, and more; Meet the Mathematician: workshops and live conversations



GOT QUESTIONS?

Visit the [AzM2 website](#) for all of your questions about statewide achievement test for your Arizona students.

AZM2 PORTAL

Visit the [AzM2 portal](#) to find details about testing windows, practice tests and much more.



COUNT ME IN! EXPLORING ADDING AND SUBTRACTING INTEGERS

WHEN: TUESDAY, APRIL 6TH FROM 3:30-5:00P.M.

[Register in advance for Exploring Adding & Subtracting Integers](#)

In this free webinar, we will explore multiple representations to build conceptual understanding for the addition and subtraction of integers. We will apply and extend previous understandings of operations with whole numbers to create zero-sum pairs. Additionally, we will demonstrate how to develop grit and creative problem-solving with accessible low-floor/high-ceiling tasks.

COUNT ME IN! EXPLORING MULTIPLYING AND DIVIDING INTEGERS

WHEN: TUESDAY, APRIL 13TH FROM 3:30-5:00P.M.

[Register in advance for Exploring Multiplying & Dividing Integers](#)

In this free webinar, we will explore multiple representations to build conceptual understanding for the multiplication and division of integers. We will demonstrate how to develop grit and creative problem-solving with accessible low-floor/high-ceiling tasks.

Attendance at both sessions is not required but recommended. A computer or tablet with the ability to access Google slides is not required but is strongly recommended to enable full participation in the session. Participants can earn 1.5 hours of professional development credit.

Note: Accommodations must be requested at least one week in advance of the webinars.

Please email [Jenifer Fernandez](#) or email [Rob Hilliker](#) with any questions.

TUITION ASSISTANCE PROGRAMS

WHAT: RECRUITMENT & RETENTION INFO: [GETSET](#) AND [SETTA](#) TUITION ASSISTANCE PROGRAMS

WHEN: DEADLINE IS APRIL 16TH AT 5PM

WHO:

- The General Education Teacher to Special Education Teacher (GETSET) program provides tuition reimbursement to certified general education teachers who want to pursue a career change to become certified in an area of special education.
- The Special Education Teacher Tuition Assistance (SETTA) program provides tuition reimbursement to paraprofessionals and educational interpreters that leads to special education teaching certification.

[Click here for more information on these assistance programs.](#)

FREE TUTORING FOR YOUR STUDENTS!

If your students are struggling in the evenings when you are not available, there is help!

They can access a FREE University of Arizona college math tutor by simply logging on using a link. Please see the [online schedule](#). Thank you to the CRR for coordinating this.



GET INVOLVED!

JOIN A PROFESSIONAL MATH ASSOCIATION



Free membership is available to all Arizona Teachers. Click on [link](#) to activate or update your membership!

There are two types of memberships available, Essential and Premier. Visit the [NCTM website](#) to find which one is the best fit for you.

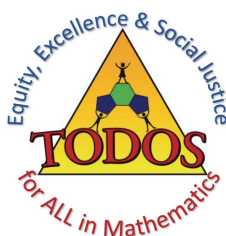


NATIONAL COUNCIL OF
TEACHERS OF MATHEMATICS



If you are a math leader and are looking to collaborate and share your expertise with other Arizona math leaders, then this is the group for you! Visit the [Arizona Math Leaders website](#) for more information.

Learn more about [TODOS!](#) Their mission is to advocate for equity and high quality mathematics education for all students— in particular, Latina/o students.



BETTER BREAKOUT ROOMS EXPERIENCE FOR STUDENTS

Five strategies that help middle and high school students form a community of learners in the virtual classroom.

Written by: Samantha Shane
March 1st, 2021



[Check out this article from Edutopia](#)

COACHING CORNER



MIND THE GAP: WORKING WITH ADULT LEARNERS

A tool from Elena Aguilar,
Brightmorningteam.com

Elena Aguilar should be on your bookshelf! She is a wealth of knowledge on school systems change that starts with the adults in the building. [The Art of Coaching](#), [The Art of Coaching Teams](#), [Onward](#), [Coaching for Equity](#) are just a few of the books she has shared with the educational world. Working with students versus working with adults is different! The tool shared in this month's Coaching Corner is about getting to the root of what is keeping your Coachee from moving forward. Elena shares the history behind the Mind the Gap tool, the original EduWeek Article, how to get started using the tool and a few additional words of wisdom, for you to consider as you plan on how to support a Coachee towards making change.

Just like we need to know our students and view them through a strength-based model, we must do the same with our adult learners. We must acknowledge where they are at, what experiences they come with and that they want to make changes. Coaching our colleagues can be a tough balancing act but having a tool like this in your Coaching Toolkit can be a Game Changer!

Happy Coaching!

[Link to Mind the Gap Tool](#)

FINANCIAL MATH



THE UNIVERSITY OF ARIZONA
ELLER COLLEGE OF MANAGEMENT

Economic Education

FREE FINANCIAL MATH PROFESSIONAL LEARNING OPPORTUNITIES.

The Brown Foundations seek to advance the use of economic principles in public and private decision making through strategic partnerships and educational programs. Their program goal is to equip teachers to increase student exposure to fundamental principles of economics in a neutral and nonpartisan way, and to help students develop an appreciation of how economic analysis applies to everyday choices as well as business and policy issues.

[Join them for FREE teacher PD sessions both live and on demand.](#)

SONIA KOVALESKY DAY

WHEN: APRIL 17TH, 2021



To celebrate women in mathematics, Sonia Kovalesky (SK Day) is a free, online workshop for middle and high school students. It will feature fun math activities, information about careers in math and STEM, and talks from professional women who do math for a living!

[Click here to find out more information.](#)

NEED SOME COMIC RELIEF?

Mashup Math has curated the top 10 Calvin and Hobbes Comics about mathematics. Enjoy!

