



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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## MEET YOUR ADE TEAM:



**Eboney McKinney**

Director K-12 Math Standards

[Eboney.McKinney@azed.gov](mailto:Eboney.McKinney@azed.gov)



**Laurel Cherry**

Math Specialist

[Laurel.Cherry@azed.gov](mailto:Laurel.Cherry@azed.gov)



**Jenifer Fernandez**

Exceptional Student Services Math Specialist

[Jenifer.Fernandez@azed.gov](mailto:Jenifer.Fernandez@azed.gov)



**Rob Hilliker**

Exceptional Student Services Math Specialist

[Rob.Hilliker@azed.gov](mailto:Rob.Hilliker@azed.gov)

**Debbie Gordon**

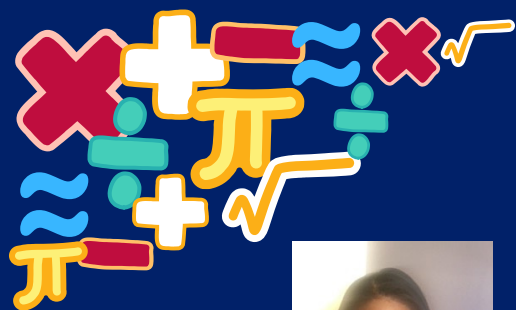
Presidential Award Coordinator

## VISIT US ONLINE:

+ [The Arizona Department of Education](#)

✕ [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,

I had the pleasure of working with three of Arizona's finest professional organizations: Arizona Association of Teachers of Mathematics (AATM), Arizona Technology Educators Association (AzTEA), and Arizona Science Teachers Association (ASTA), over the past week. We met over two days to participate in strategic planning for the future of our collaborative as well as our individual organizations. During our time together the word - association- was brought up and how there are those that believe it has a negative connotation. This conversation stayed with me and I wanted to share my experiences, in hopes that you would consider sharing yours with your colleagues and encourage them to join.

My experience as an educator would not have been what it was and is had I not become member of my professional associations.

- I joined my local association- the Sierra Vista Classroom Teachers Association and became a member of the Arizona Education Association as well as the National Education Association. *I gained a wealth of knowledge in leadership, education policy and advocacy, at the state and national level.*
- My work as a Teacher Leader with the Center for Recruitment and Retention of Mathematics (CRR) at the UoA led me to AATM and the National Council of Teachers of Mathematics (NCTM). *The CRR changed my mathematics teaching and I continued to grow and learn as a member of NCTM.*
- As a math leader I joined Arizona Mathematics Leaders (AML) and National Council of Supervisors of Mathematics (NCSM). *I've learned to lead from a content-specific focus and have grown my professional network.*
- As a Mathematics Specialist with ADE in Exceptional Student Services, I became a member of the Council of Exceptional Children (CEC). *I gained a wealth of knowledge about supporting our exceptional students.*
- As a member of the Association State Supervisors of Mathematics (ASSM), *I am connected and learning alongside other State DoE Math leaders.*

My experiences within these different professional associations made me the educator I am today. I am well informed about educational policy and understand our state educational system and actively advocate for AZ schools and students. I am connected to teachers and leaders at the state and national level in mathematics and building new connections with those in Educational Technology. I am constantly learning and adding to my toolkit as an educator and a leader. My personal and professional networks are vast and continuing to grow. My life has truly been enriched by being a member of each of these professional organization. I wouldn't be writing to you from my position, had I not joined my professional associations. I hope you consider learning about these organization and consider not only joining but becoming an active member.

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

Take care,

*Eboney McKinney*

eboney.mckinney@azed.gov

Ph: 480-363-4030

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:**

#### **MAR 6, 2021, 1PM-2:30PM: TI SPOTLIGHT SESSION #2:**

Online Teaching Ideas Using TI Technologies: TI-84/CE, TI-SmartView emulator, TI-84 CE Chromebook App, Families of Functions Online Video Course, More Web-based Materials

#### **MARCH 13, 2021, 8:30AM-1:00PM:**

HEMS-MS: Identity, Curiosity, and Community in the Middle School Classroom (Part 1 of 2, please only register if you can attend both sessions) and April 17th.

#### **MARCH 13, 2021, 1:30PM-3:00PM:**

CPM Spotlight Session #2 - Patterns with a Purpose: Building Conceptual Understanding of  $y = mx + b$

#### **MAR 27, 2021, 1PM-2:30PM: TI SPOTLIGHT SESSION #3:**

Leverage Classroom Instruction and Technology to Maximize Achievement on the ACT and SAT

#### **MAR 27, 2021, 8:30AM-12:30PM: IMPACTS-MS FOUNDATIONS OF FUNCTIONS AND FUNCTIONAL REASONING**

IMPACTS-MS Foundations of Functions and Functional Reasoning

### **COMING NEXT MONTH:**

#### **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

Monday, March 29th 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

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

[Register in advance for the Grades 5-8 meeting.](#)

### High School Grades 8-12

Wednesday, March 31st 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.



Presidential Awardees receive a certificate signed by the President of the United States; a trip to Washington, D.C., to attend a series of recognition events and professional development opportunities; and a \$10,000 award from the National Science Foundation. They also join a network of award-winning teachers from across the country. The National Science Foundation administers PAEMST on the behalf of The White House Office of Science and Technology Policy.

**WHEN:** NOMINATION DEADLINE, MARCH 1ST, 2021

**WHEN:** APPLICATION DEADLINE, APRIL 1ST, 2021

**WHO:** SECONDARY (7-12) TEACHERS

**WHERE:** APPLY DIRECTLY AT [WWW.PAEMST.ORG](http://WWW.PAEMST.ORG)

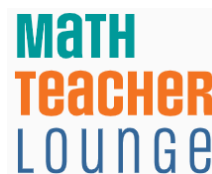
The National Science Foundation is currently accepting nominations and applications for the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) program. PAEMST are the highest honors bestowed by the United States government specifically for K–12 science, technology, engineering, mathematics, and/or computer science teaching. Anyone—principals, teachers, parents, students, or members of the general public—may nominate a teacher by completing the nomination form available on the PAEMST website. To submit a nomination, you will need the teacher's name, email address, and school contact information. If you know more than one teacher deserving of this award, you may submit more than one nomination. Elementary (K-6) Teachers can apply during the next cycle in 2021-2022.

## ADDITIONAL LEARNING OPPORTUNITIES



Check out our [PD calendar](#) for upcoming opportunities to learn and earn certificate recertification hours.

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.



## 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.

## ALGEBRA TILES TRAINING, 4 PART SERIES

### JOIN US FOR THE LAST TWO ALGEBRA TILES SESSIONS

**WHAT:** ALGEBRA TILES PART 3: EXPLORATION OF ALGEBRA TILES IN MULTIPLYING

**WHEN:** BINOMIALS AND FACTORING QUADRATIC EQUATIONS

MONDAY, MARCH 1 FROM 3:30-5:00P.M.

Register in advance for Algebra Tiles Part 3.

In this webinar, we will explore the use of virtual algebra tiles to multiply binomials and to factor quadratics.

**WHAT:** ALGEBRA TILES PART 4: EXPLORATION OF ALGEBRA TILES IN COMPLETING THE SQUARE AND DIVIDING QUADRATIC EQUATIONS

**WHEN:** MONDAY, MARCH 8 FROM 3:30-5:00P.M.

Register in advance for Algebra Tiles Part 4.

In this webinar, we will explore the use of virtual algebra tiles to complete the square and to divide quadratics.

**EARN:** PARTICIPANTS CAN EARN 1.5 HOURS OF PROFESSIONAL DEVELOPMENT CREDIT FOR EACH SESSION ATTENDED.

Attendance at all sessions is recommended but not required. These sessions will not be recorded.

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.

Please contact [Jenifer Fernandez](#) with any questions.

## LITERACY OFFICE HOURS

**WHAT:** LITERACY OFFICE HOURS

**WHEN:** TUESDAY, MARCH 2, 2021—3:30–4:45 P.M. WITH Q & A FROM 4:45–5:00 P.M.

Register in advance for March 2.

For more information, please email Sandra Figueroa at [sandra.figueroa@azed.gov](mailto:sandra.figueroa@azed.gov), ESS/Professional Learning and Sustainability Literacy Specialist.

## 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.



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.



## TODOS MATH EVENTS - REGISTER TODAY!

[Virtual Math Conference - June 21st-23rd](#)

[Leadership Institute - June 24th-25th](#)

## DESMOS GUIDE TO BUILDING MATH ACTIVITIES V2.0

[Check out this blog written by the Desmos team.](#)

BY Faith Moynihan, Lisa Bejarano and Dan Meyer  
February 11th, 2021

"Create opportunities for students to be right and wrong in different, interesting ways."



# THE ADE MATH TEAM



## MEET YOUR DIRECTOR:

**Eboney McKinney**

**Director K-12 Math Standards**

**[Eboney.McKinney@azed.gov](mailto:Eboney.McKinney@azed.gov)**

Eboney McKinney is the Director of Mathematics and Educational Technology for the Arizona Department of Education, Academic Standards Unit. Prior to that she was a Math Program Specialist for ADE in Exceptional Student Services. Before coming to the ADE she spent 2 years as a Student Achievement Teacher and 9 years in the Sierra Vista Public School District as a Teacher Leader and education advocate. As a classroom teacher she taught grades 4, 5, and 6, while advocating for her students and colleagues as President of her local association and as a board member of the AZ Education Association and the AZ Association of Teachers of Mathematics. She also facilitated math professional development with the IMPACTS program through the University of Arizona Center for Recruitment and Retention of Mathematics Teachers from 2016-2019, as an IMPACTS Teacher Leader. She is an active member of the following math organizations: AML, NCSM, ASSM, AATM and NCTM. She earned her undergraduate degree in Elementary Education from Prescott College and her graduate degree in Mathematics Teaching from Mount Holyoke College. She is currently finishing up a certificate program from MHC in Professional Development and Coaching.



**Laurel Cherry**

**Math Specialist**

**[Laurel.Cherry@azed.gov](mailto:Laurel.Cherry@azed.gov)**

Laurel comes to the ADE with over 20 years of experience in mathematics education. She spent most of her time as a secondary math teacher and has worked as co-taught teacher in both California and Arizona. She has created and presented professional development for schools, districts and conferences all over the country. She is passionate about sharing practices on how to get students more involved in visual, kinesthetic and hands-on learning.



**Jenifer Fernandez**

**ESS Math Specialist**

**[Jenifer.Fernandez@azed.gov](mailto:Jenifer.Fernandez@azed.gov)**

Jenifer H. Fernandez is the Math Program Specialist for the Arizona Department of Education, Exceptional Student Services in the downtown office of Tucson, Arizona. She obtained both her undergraduate and graduate degrees from the University of Arizona in Education and Mathematics Teaching and Leadership. She is dual-certified in Elementary and Secondary Mathematics with a Mathematics Specialist endorsement. Prior to her position at ADE, she was a mathematics teacher in the Tucson area for 15 years. Her years of teaching experience range from elementary grades through high school math. She has also been a math professional development facilitator at the local, state, and national level since 2006. She is an active member of several math organizations including AML, AATM, ASSM, NCSM, and NCTM. Her philosophy is rooted in that all students are capable of learning mathematics and it is our responsibility as leaders to empower educators to create a positive culture and mindset around mathematics education.



**Rob Hilliker**

**ESS Math Specialist**

**[Rob.Hilliker@azed.gov](mailto:Rob.Hilliker@azed.gov)**

Rob served eleven years as a high school math teacher and four years in leadership positions as a math coach and district math specialist/new teacher induction and technology integration coach. He has provided mathematics professional learning to special and general education teachers at a site and district level as well as through the University of Arizona's Center for Recruitment and Retention Mathematics Teacher Workshops. He also has five years of co-teaching experience at the secondary level and has provided professional learning to teachers so that secondary students with disabilities could effectively engage in grade level standards.