

April 2020

SÁVE THE DÁTE!!!!!

2020 KATM Annual Mathematics Conference:

Catalyzing Change,

Keynote Speaker: Dr. Robert Berry

September 28, 2020

Shawnee Heights High School 4201 SE Shawnee Heights Road Tecumseh, KS

KATM Bulletin

A Message from our President

"What a strange and uncertain time we are living in." "Is this our 'new normal??" "#togetheralone"

I'm sure you all have heard these multiple times during the last few weeks, and possibly even said it yourself. I have!

This global pandemic is scary, it is uncertain, and teaching and learning will never be the same, nor should it. Your KATM Board has worked tirelessly to prepare the <u>Learning Resources Document</u>, a list of resources that you could use for your students as we are in the mode of "continuous learning." There are many resources you could find on the internet, but these have been vetted by Kansas teachers at each grade level. In addition, you can see resources on our KATM Facebook page, and join us in Zoom conversations.

We are "in this together," and although we are physically distancing right now, please know that KATM is here for you to help you with resources, not only for right now, but also for the future of teaching and learning mathematics in Kansas. And be sure to make plans now to attend the KATM Fall Conference in September. It will be so good to see each other again!

It has been my pleasure to serve you this year. See you all soon!

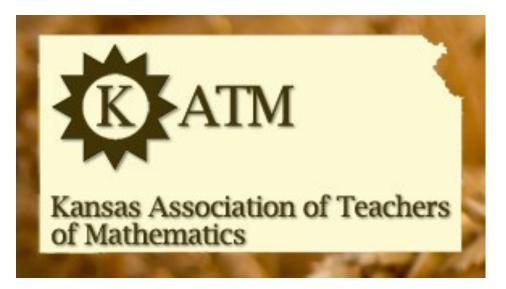
Janet Stramel KATM President



<u>Click here</u> if you're interested in joining in conversation with other Kansas math teachers in our Facebook groups. Invite your friends too! We have had lots of Facebook lives and other great resources this past month! Check out the video section to see all of our past Facebook live resources.

<u>Click here</u> to get information about applying for the Capitol Federal or Cecile Beougher scholarship. Applications are due in June! All members are eligible to apply, and the application is fairly simple!





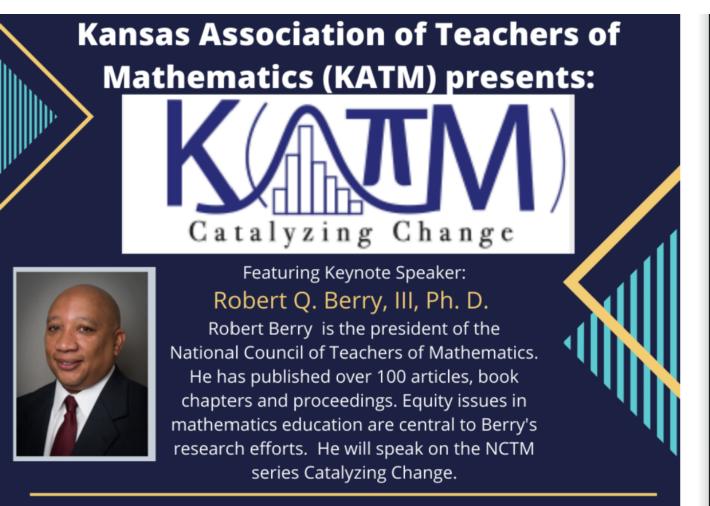
Join KATM today!

KATM has been proud to provide resources for Kansas educators in this time of crisis. You can find the most current version of our <u>Learning Resource Document</u> on our website.

We have had numerous Facebook live videos on our webpage during the last month. The topics have included Desmos, Open Middle, Math Snacks, ABCYa, Estimation 180, Solve Me Puzzles and more. <u>Click here to see the videos</u> available on our Facebook page.

If you have found value in these resources, please consider joining KATM to support our mission. Benefits of membership include eligibility to apply for KATM scholarships, quarterly Bulletins, access to limited NCTM resources on the KATM website, as well as supporting your professional organization to allow us to continue to support Kansas teachers.

Click here to join KATM! Or let a colleague or friend know about KATM.



September 28, 2020

SHAWNEE HEIGHTS HIGH SCHOOL, 4201 SE Shawnee Heights Road, Tecumseh, Ks.

Register now at www.katm.org

Conference News, September 28, 2020 - Shawnee Heights High School:

We are now accepting presentation proposals for our September 28, 2020 KATM Annual Meeting. I am sure that there are many of us that will have some great things to share after going through Continuous Learning! Attached you will find a flyer to learn more about this year's Strands! <u>Submission Link</u>

• NEW this year - We will have sessions and workshop times available.

Registration is now open as well.

• Our Keynote is Dr. Robert Berry, Past-President of NCTM. We are so excited to have him join us and talk about Catalyzing Change! Read more about Dr. Berry on the Conference Flyer At-tached!

KANSAS ASSOCIATION OF TEACHERS OF MATHEMATICS ANNUAL Catalyzing Change

We need you!!!

Do you have knowledge and passion about mathematics education? Please plan to present. You may submit a proposal on the following topics at katm.org.

*Establish Equity in Mathematics *Facilitate meaningful Mathematical Discourse *Implement tasks that promote Reasoning and Problem Solving *Make connections using Mathematical Representations *Support Productive Struggle in learning mathematics *Build Procedural Fluency and Conceptual Understanding

SEPTEMBER 28, 2020
SHAWNEE HEIGHTS HIGH SCHOOL,
4201 SE Shawnee Heights Road, Tecumseh, KS Register now at www.katm.org

*Logo design by Shawnee Heights High School student Korbin Hogan

April 2020

Dear Kansas Math Teachers,

Ok, quick math question. How many times have you used the word unprecedented in the last month? Yeah, I lost count a couple of weeks ago...

These last few weeks have brought challenges that none of us anticipated. It's easy to feel overwhelmed or to lose hope. But one awesome thing that I have seen in Kansas educators coming together to help each other out in the "unprecedented" times.

KATM is happy to help our members , and I've never been more proud to serve on the KATM board.

Sincerely,

KATM Bulletin Editor

Jenny Wilcox

KATM is still planning for our fall conference. <u>Click here</u> to submit your presentation proposal.

What's your favorite online teaching tip? What burning questions do you have about distance learning?

Post them to our <u>Facebook</u> <u>page!</u>

The KATM Bulletin needs submissions from K-12 teachers highlighting the mathematical practices and sound pedagogy. Submissions could be any of the following:

- ♦ Lesson plans
- ♦ Classroom management tips
- ♦ Books reviews
- ♦ Classroom games
- ◊ Reviews of recently adopted resources
- ♦ Good problems for classroom use

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Email your submissions to our Bulletin editor: jennywilcox@katm.org

2020 KATM Officer Election Results

President Elect: Will Dunn

I teach students mathematics at the High School level, having taught Algebra 1 through AP Calculus. I am the current Vice President, High School of the KATM Board and am very eager to continue the renewed and dynamic work we have set forth for ourselves these last two years. I am a Jedel Fellow having earned the Exponential Award from the Jedel Excellence in Mathematics Education committee in 2019, and a Noyce Scholar through the National Science Foundation. Additionally, I am a founding member and on the steering committee of the Jayhawk Math Teachers' Circle at the University of Kansas. My areas of professional consultation fall under instructional technique and assessment practices.

VP Elementary: Nikki Meier

Hello, My name is Nikki Meier. I am currently a Kindergarten teacher in Topeka, KS for Auburn-Washburn USD 437. I have been in education for 22 years, mostly teaching kindergarten. I have also run an afterschool program for K-5, been a presenter and trained other teachers. I have my National Board Certification in Early Childhood and am currently working on my masters of instruction of STEM at Emporia State University. I love developing relationships with my students and families. I am the current VP for Elementary for KATM and have enjoyed the relationships I have had the chance to develop over the past two years. I look forward to serving.

VP High School: Jancy Dee Radke

I have been teaching math for 14 years. I taught 1 year in Upper Elementary (4-6), 7 years in Middle School (6-8) and the last 6 years have been in High school (Primarily Geometry and Geometry Support). I love learning from others and modifying and adapting new strategies to meet the needs of the students I work with. I teach because I love making a difference in the lived of my students. No matter how bad a day may seem or how exhausted I am when I leave school if I make an impact on even one student it was all worth it!

April 2020

One benefit that KATM is proud to provide to our members, through our affiliation with NCTM, is access to selected NCTM journal articles. We have located some NCTM articles that pertain to online learning which are reviewed in this Bulletin. The complete articles are available in the members only section of the KATM website. We hope this information is useful during the current conditions of continuous learning.

A review of "Blending Instruction with Khan Academy" from Mathematics Teacher

Reviewed by Carrie La Voy, Ph.D.

I read Lori Cargile's article, "Blending Instruction with Khan Academy", from *Mathematics Teacher (*NCTM, 2015). Cargile's work is intended as a guide for teachers who want to blend instruction effectively. While the article was published in 2015, I wonder how much of this applies to today's classrooms, especially given our current learning environments.

Cargile questions mathematics teachers' use of Khan Academy and if current practices align with Sal Khan's vision of the program as a "resource for blended learning" and "not a standalone product that should be used in isolation" (p. 36). She writes about four components of Khan Academy-based instruction, highlighting the need to use **formative assessment data** and focusing on improvement and effort rather than on performance alone. She offers ideas about methods of **goal setting** to encourage autonomy and empowerment. She supports using a **checklist (or "playlist") of expectations** to ensure Khan Academy is used purposefully and intentionally, noting it "should be used for about 20 percent of total class time" (p. 37). Finally, she discusses using the program to support **active and collaborative learning** for <u>all</u> students, where the teacher acts as a "facilitator or organizer of learning experiences" (p. 37).

Later in the article, Cargile references research that notes 78% of teachers (in a 2014 study) said they had flipped at least one lesson. She discusses a 2013 analysis that reported students in blended learning environments perform better than those in face-to-face environments alone. She follows this with some criticism of the program, but also includes ways teachers can participate in self-paced Khan Academy professional development.

How many of you use Khan Academy as part of your instruction? I wonder if the number of teachers who have flipped at least one lesson (78% in 2014) has increased or decreased. I wonder how distance learning practices will influence this number. If you have ideas for using Khan Academy or other similar tools to enhance instruction and support active learning, we'd love to hear from you!

Carrie La Voy, Ph.D., KATM Executive Board, Vice-president - College

KATM Bulletin

A review of "Extending Mathematical Practices to Online Teaching" from Mathematics Teacher

Reviewed by Will M Dunn

After the safety and security of my students, the fear of how to provide and facilitate their meaningful mathematical learning was at the top of my list when COVID-19 changed the education landscape to a strictly remote dynamic. In "Extending Mathematical Practices to Online Teaching", from *Mathematics Teacher (*NCTM 2017), authors Fernandez, McManus, and Platt address two key considerations regarding synchronous mathematical learning in an entirely online space. Its relevance to what many of us have currently undertaken is clear. For this reason, and despite the article's analysis of a class from several years ago (using an online interface no longer available), the two considerations that are its thrust remain equally salient today.

1. How does a remote/digital environment change the learning by students and the teaching by educators?

2. How do teacher beliefs get translated to online environments?

The authors do a fine job answering these questions, primarily through vignettes taken from the class previously mentioned. Considerations regarding effective modifications abound. Items such as how to address student questions, facilitate ongoing discourse, and address anticipated (and unanticipated) student responses are addressed. By its synchronous nature, the standard balance between individual work with a dedicated class time is still at play.

Most noteworthy to this reviewer is the list of beliefs held by the analyzed educator. The professor's list was not framed out by mechanical skills students were expected to master, but rather NCTM's process standards, including things like, "problem solving autonomy" and "collaboration". The importance of keeping these element's intact and relevant can be achieved – if an educator chooses to retain them as non-negotiable beliefs. This is a teacher action, not a student action. These values are at the center of my own on-site classroom. My favorite line from the article is, "Thus, the students' questions, rather than a professor's plan, drove the lessons" (434), and it was a relief to see that the beliefs exhibited by the quote were successfully met.

While digital interfaces change, the foundations of meaningful learning are immutable and transcend any package in which they get boxed. Leaving the slightly outdated veneer of the article's premise, its themes and messages are clear and important – sound learning can be achieved and done well, remotely or otherwise, if we keep the values that have always driven meaningful learning firmly at the center. I encourage you to read this article and to share how you plan to keep these values alive and well for your own practice, no matter "where" your classroom may be.

A review of "Designing Online Playgrounds for Learning Mathematics" from Mathematics Teacher

Reviewed by Betsy Wiens

Two secondary mathematics teachers, one middle and one high school, participated in an online education course. As a result, not only did they increase their understanding of algebra, they also explored new, effective ways to use technology in their own classrooms.

This article discusses a variety of effective ways to use technology involved online playgrounds- instructional experiences with multiple entry points. There were three types of playground equipment explored: online interactive tools, video conferences, and social media. Each of these types were described in some detail with specific tools included and antidotal evidence of effectiveness.

In this time of remote teaching and learning this article about the effective use of technology to gain understand is an important read particularly for middle level and high school mathematics teachers. The article is easy to navigate and gives practical information about online resources.