



COLUMBUS STATE  
UNIVERSITY

# NOTES *to* NERDS

*The official newsletter of the Math Collaborative*



*Invitation to Engaging Professional Learning: Register Now!*

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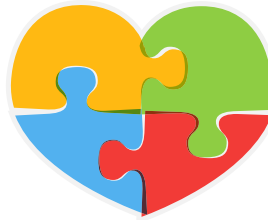
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**THE MATH COLLABORATIVE MISSION:**

The CRMC's mission is to improve math education for all students in our area by developing teacher leaders through deepening their content knowledge, developing best practices, and using available resources to improve student outcomes and experiences.

**TO DO THIS, WE MUST:**

Provide quality teacher growth experiences through continuous collaboration - in and out of the classrooms - with a focus on teachers' needs in support of student growth.



# By the Numbers

## FALL 2023

By most counts, the number of school days since August is about 90 days. Yet in that small span of time...

The Math Collaborative has conducted **11** full-day professional development sessions engaging over **130** teachers in **77** direct hours of professional learning (**43** of the teachers received financial support from the Ruby Tucker Fund to attend the sessions).

We were very humbled and excited to host **1** big Community Night. *Crossing the Chattahoochee* was a cross-curricular night involving educators from grades K-12 and the University - including Math, Social Studies, Special Education, English, and Science teachers! There were **45** educators in total attending. A special thanks to Dr. Salazar (CSU and Ivey Center), Rachel Vogt (Columbus Museum), and the staff of the Math Collaborative.

The Math Collaborative presented **3** sessions at the GA Math Conference and supported **2** more sessions from area educators. The overflow sessions served more than **100** teachers from across the state of Georgia.

The Collaborative supported schools with community math events documenting contacts with **66** parents - meeting in places as diverse as Winn-Dixie - to media centers - to school hallways!

In local direct services, the Math Collaborative worked in **5** different counties serving over **30** different schools!

Proudly, our 4 Resource Specialists had **894** direct teacher contacts including classroom visits, planning support, professional development, and consultations!

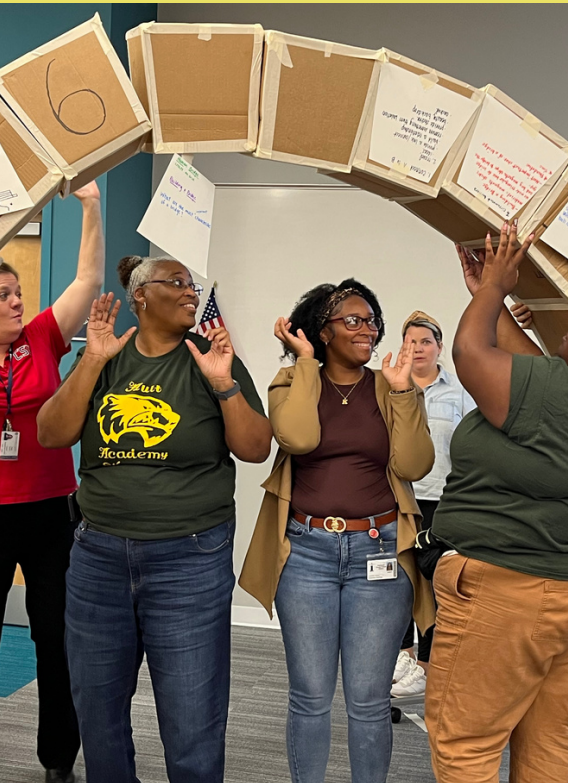
Conducted model or co-taught lessons to **428** K-12 students! Wow!

There were **80** contacts with valued school administrators.

Logged over **400** hours of planning in direct support of **266** hours of direct service to educators in our community.

The Math Collaborative is pleased to have worked with **52** CSU students, almost all of them are preservice teachers, and directly collaborated with the CSU faculty to support **1/2** dozen class sessions.

We served **2** schools with the Make It Count program to promote Math fluency for second grade students. This program served **64** students and engaged **5** community volunteers over a nine-week period.



*The work done by the Collaborative with teachers, students, and school is so much more than the numbers on this page. During a visit to an elementary school this past September, a young scholar ran over to me in an excited voice and asked, "Are we going to do Make It Count today?" It had been almost two years since I had worked with the young man as a rising second grader. The number of minutes spent with the young man in math activities was two years to faded but the anticipation and joy in his voice for the engaging activities was as fresh as if we had not stopped for a single day.*

# DIRECTOR'S NOTES

BY PETER ANDERSON, CRMC DIRECTOR

## RANDOM THOUGHTS WITH A THREAD

### THREAD ONE:

About a month ago, our puppy dog Murray was not feeling well. My wife was having a rough bout with COVID. Somehow or another, we associated her illness with Murray's lethargy and little movement. We assumed he had some variation of doggy COVID. As soon as we were able, we took him to the veterinarian and found his difficulty had nothing to do with COVID, but he did have a slipped disc in his back.

### THREAD TWO:

Just ahead of scheduled maintenance during a cold snap, my usually dependable vehicle would almost crank but not turn over to a start on the first try. Eventually, it did crank, and I drove to the dealer to get the problem fixed. My assumption (and best Googled research) was that it was a timing belt or a faulty ignition switch. Prepared for the worst, I was shocked that it was a defective car battery wholly covered under the warranty!

### THREAD THREE:

Hope Phillips and I met with some middle school teachers this past week. The teachers were using all the standard approaches to teaching mathematics, and the process was not working. There was an over-reliance on technology, the traditional delivery model, and a mishmash of tools (TPT rated as good). To their credit, they are reconsidering their approach to organizing their classroom to teach mathematics better. The difficulty they are facing is on so many levels that the focus needs to be on more than mathematics alone. The pressure these teachers felt concerned preparing the students for the end-of-course test. The stress they feel is quite understandable. The solution will ultimately depend on their ability to manage student behavior, address deficits, and motivate students. The change will not be an easy task, but it is a necessary one.



It is interesting how these stories have the same thread. There is an assumption that is well-meaning and thoughtful but needs to be corrected, and then followed by an informed solution specific to the situation.

CONTINUED...



Q: Where do math teachers go on vacation?

# RANDOM THOUGHTS WITH A THREAD

Continued...

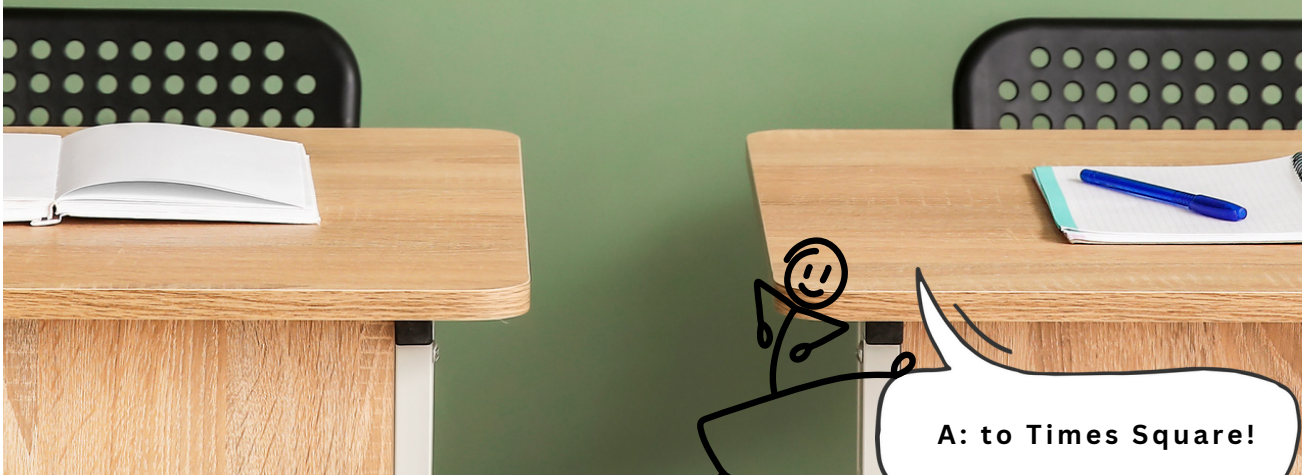
I have thought about what farce it would be if a doctor prescribed a cast for my arm if I presented with symptoms for the flu because the doctor decided he was only doing casts that week. It is unreasonable for us to do the same in the classroom. We have students suffering from a lack of understanding of basic fractions, but to stay on the pacing guide, we teach them about the rate of change of a line. We are putting a cast on a student who needs treatment for the flu.

As we begin the second half of the school year, it is essential to remember that the students in front of us are what make us teachers - not the curriculum that we proclaim to cover. Use your professional judgment to teach what the students need and remember the pacing guide is just that - a guide. You will make more tangible progress than you might realize.

You are doing the hard work - but it is indeed the good work.

Happy Maths,

Pete





# Professional Development

for Kindergarten through  
5th grade Mathematics Teachers

**K - 2nd  
GRADES**

**Thursday, January 18, 2024**

Differentiation:  
Geometry/Measurement  
[Click here to REGISTER NOW](#)

8:30 AM - 3:00 PM

**3rd -  
5th  
GRADES**

**Wednesday, January 24, 2024**

From Calculators to Thinkers:  
Problem Solving with Fractions and  
Decimals  
[Click here to REGISTER NOW](#)

8:30 AM - 3:00 PM

**SCAN  
ME**



Scan to register, or  
for more information, contact us:  
[www.columbusstate.edu/CRMC](http://www.columbusstate.edu/CRMC)

706.565.1474



# Professional Development

## for Middle School and High School Mathematics Teachers

**9th-  
12th  
GRADES**

**Thursday, January 23, 2024**

How Do We Teach Using Math Modeling Tasks: How Do We Put the Pieces Together?

[Click here to REGISTER NOW](#)

8:30 AM - 3:00 PM

**6th &  
7th  
GRADES**

**Tuesday, January 30, 2024**

Just-in-Time for the New GA Mathematics Curriculum: Exploring Area and Volume & Making Relevant Connections with Geometry

[Click here to REGISTER NOW](#)

8:30 AM - 3:00 PM

**SCAN  
ME**

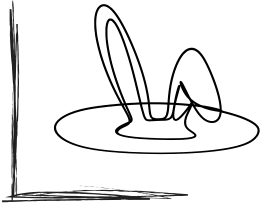


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# COOL TEACHER STUFF

CONTRIBUTED BY PETER ANDERSON, CRMC DIRECTOR



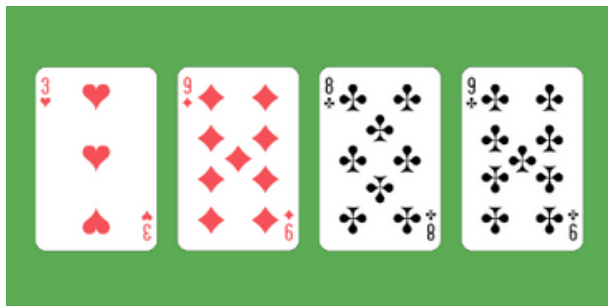
In our office when we come across a neat idea, we share it with a “Rabbit Hole Warning” because we find it so intriguing! Be warned...this is one Pete shared with the “Nerd Herd” in December...there is still a deck of cards on his desk where he thinks about it often to develop a strategy!



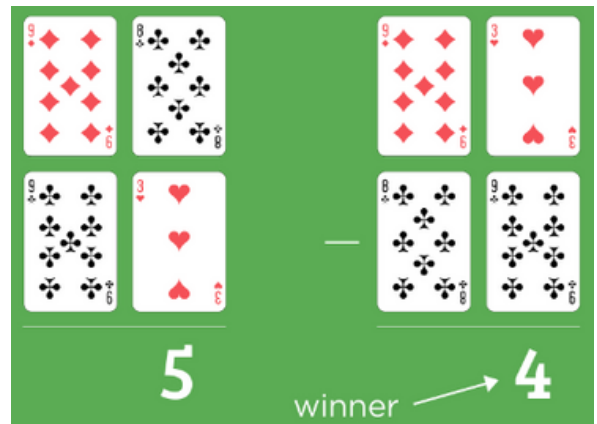
## *The Second Grade Problem that Won't Leave Me Alone!*

[This is a link to an article by Dan Meyer. He describes a card exercise by Jennifer Bay-Williams.](#)

She gave me a deck of playing cards—only the numbers. One of the face cards stood in for a zero. Bay-Williams told me to deal off four cards:



She then told me to use those cards to create a two-digit subtraction problem so that it had the smallest difference those cards could produce.



*What would your strategy be for the best score?*

In this case, I found a smallest difference of 4.  
She told me we were going to play the game five times but keep only four of the smallest differences.  
We'd add them up and compare our total score to other people in the audience. I had to decide whether or not to throw this score back or keep it. I kept it and dealt the cards again.

## COOL TEACHER STUFF

CONTRIBUTED BY PETER ANDERSON, CRMC DIRECTOR

# Why is a Negative Times a Negative Sometimes a Positive?

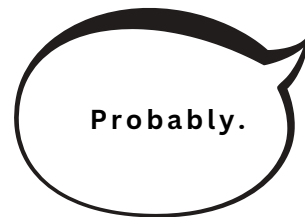
If you have 15 minutes, James Tanton gives a thoughtful and entertaining explanation of why a negative multiplied by a negative is a positive. He uses "groups of" arrays and the area model, and interestingly - he hangs it all on the distributive property. It is very accessible!



@jamestantonmath



Have you heard  
the one about  
the statistician?



Probably.

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# YAY!

# MATH MASTERS

ANNUAL COMPETITION 2024



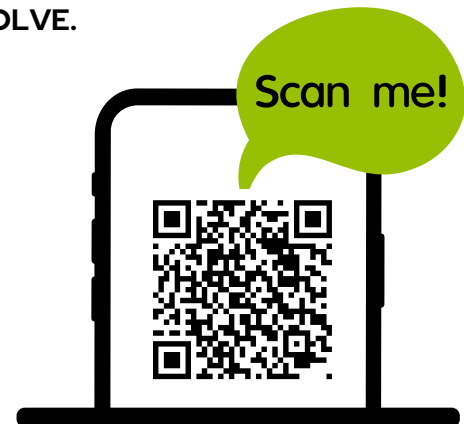
2023 FIRST PLACE WINNERS: RICHARDS MIDDLE SCHOOL

## MARCH 16, 2024

THE ANNUAL MATH MASTERS COMPETITION: A MIDDLE-GRADES MATH CHALLENGE THE CRMC, THE DEPARTMENT OF TEACHER EDUCATION, AND THE DEPARTMENT OF MATHEMATICS HAVE COME TOGETHER TO CREATE A STIMULATING MATH COMPETITION TARGETING MIDDLE-GRADE STUDENTS. THIS COMPETITION AIMS TO CHALLENGE AND SUPPORT STUDENTS' INTELLECTUAL GROWTH BY PROVIDING TASK-BASED MATH PROBLEMS THAT REQUIRE TEAM COLLABORATION TO SOLVE.

### WHY PARTICIPATE?

Naturally, it's all about snagging a shiny trophy...but the real *crème de la crème* is testing yourself with difficult challenges, sharing with teammates, and learning from others!



For more information and to register, scan the QR or visit our Event Calendar: <https://columbusstate.libcal.com/event/11253389>



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Click here to read more about our website:

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Keep the  
Math Magic Going!  
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