



Notes to Nerds

Workshops

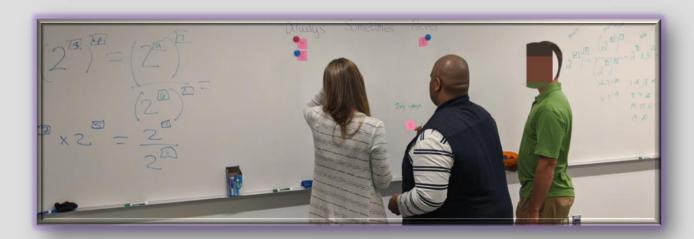
**Director's Notes** 

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## Coming Soon: Face to Face High School Workshop, Frank Brown Hall, Room 1010

### **November 16<sup>th</sup> – A Dive into Resources for Engaging Students**

We are excited to announce A Dive into Resources for Engaging Students in Mathematic – a day-long, face to face workshop for High School Mathematics teachers on November 16<sup>th</sup>! This exploration of engaging mathematical practices and resources will give you ideas that you can implement immediately.

Nancy Mims and Peter Anderson will create an atmosphere for you to experience activities firsthand, ask questions, and generate new ideas.

Sign up soon - Space is limited!

The USG continues to work closely with the Georgia Department of Public Health to prioritize the wellness and safety of CSU and all of its campus communities. Data Source: https://www.columbusstate.edu/covid/

## October & November Virtual Workshops

Workshops available to Chattahoochee County, Muscogee County, Russell County, and St. Anne Pacelli schools are **NO COST** to the teachers

After the workshop, you will receive an email to fill out an evaluation.

Note: It should take less than 10 minutes to respond

Upon completion, you will receive a Certificate of attendance for the workshop.









Date: Tuesday, October 26, 2021 Time: 3:45pm - 4:30pm

K – 5th Elementary School: Creating Mathematical Thinkers (Virtual Workshop)

Habit 7: Summarize, determine importance, synthesize

**Presenter: Laura Stokes** 

Date: Wednesday, October 27, 2021 Time: 4:15pm – 5:00pm

High School Virtual Workshop (Geometry)

**Presenter: Peter Anderson** 

Date: Thursday, October 28, 2021 Time: 4:30pm - 5:15pm

8th Grade: Unit 3 - Geometrical Applications of Exponents -- Thursday, October 28

**Presenter: Hope Phillips** 

Date: Thursday, November 4, 2021 Time: 4:30pm - 5:15pm

7th Grade: Unit 3 -Ratio & Proportions --Thursday, November 4

**Presenter: Hope Phillips** 

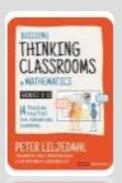
Date: Tuesday, November 9, 2021 Time: 3:45pm - 4:30pm

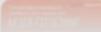
K – 5th Elementary School: Creating Mathematical Thinkers (Virtual Workshop)

Habit 8: Develop vocabulary
Presenter: Laura Stokes

# Building Thinking Classrooms Learning Community

Hosted by Peter Anderson, Director





Date: Tuesday, October 26, 2021 Time: 7:00pm – 8:00pm https://columbusstate.libcal.com/event/8202451 Building Thinking Classrooms – Learning community

Warning: It will change the way you teach. Contact Peter Anderson

Date: Tuesday, November 30, 2021 Time: 7:00pm – 8:00pm https://columbusstate.libcal.com/event/8436445 Building Thinking Classrooms – Learning community

Warning: It will change the way you teach. Contact Peter Anderson



## Director's Notes

### Do we see things the way they are?

I was attending an Algebra 1 team data meeting on Tuesday morning. It hit me how much we depend on data to direct our energies. Are we looking at the right things?

Latoya, a young lady in my Algebra 1 class, was tardy recently. When she arrived in class, she did not seem to be in a pleasant mood. Walking into class, Latoya recognized the routine, picked up a handful of equations from the nearest student's desk, went to the back of the room, and settled into a chair facing away from the other students. I brought her folder over and set it near her workspace, asking her if she needed anything else. Latoya did not look up or acknowledge receipt of the notebook or my question. I moved away from her toward the other students as they grazed on equations at a leisurely pace.

Not too much later, I began weekly interviews. A colleague suggested that I use a Marilyn Burns-like technique of letting the students tell me what they know. It takes, on average, about five minutes. When one student finishes, another often volunteers to take his/her place.

Much to my surprise, Latoya raised her hand to come to an interview. She came up to my desk and sat down, but she did not have her journal. Since I was closer to her desk, I offered to get her journal. Arriving at her desk, I noticed that she had completed much of the assignment. Her powered-down cell phone was plugged into an outlet (The reason she did not want to sit with the class.) What I thought I observed was not at all what I found to be happening. Latoya was working and engaged with the math - not sitting in the corner sulking over having a rough morning.

Journal in hand, I returned to the interview. I asked her to show me some of her best mathematics. She laid into solving multi-step equations and how she handled *ninja-like* subtraction signs. She demonstrated her work with confidence using a dry-erase marker on the desktop. When she finished, I asked if she could do the same with an inequality statement. With less confidence than before, she said she would give it a shot. I wrote a two-step inequality on the desk and handed her the dry-erase marker. She looked at it for a minute and then remarked that she did not know where to start.

No worries, I said. What do you think the problem is asking you to do?

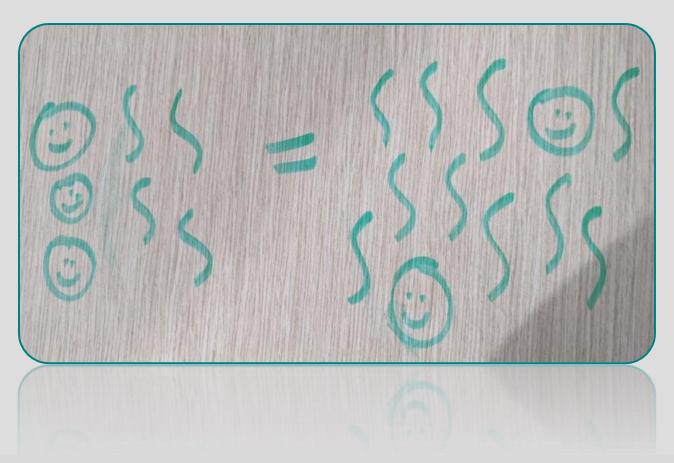
She shrugged her shoulders and replied, *Isolate the "x"?* 

Do you feel comfortable trying it?

Sure, as she began to work through the steps.

When she got a solution, I wondered if it made sense to her. I observed Latoya solving some challenging multi-step problems, and her initial "inequality" hesitancy caught my attention.

I drew smiley faces and nerd-strings in two groups on the desk. I asked her if the two groups were equal and whether she could tell me how many nerd-strings a smiley face was worth?



She erased "like" characters from each side until she gave me the answer.

I asked Latoya if she thought she could write an equation to represent the smiley faces and nerd-string drawing. Latoya thought for a moment and asked me, *Do you mean using "x"s and stuff like that?* 

Our discussion revealed to me that this very bright student did not link algebraic symbols to any meaning. She had just been solving equations by mimicking moves that she had seen repeated over the years. Her written work and assessments did not reveal this to me. I would have missed that Latoya was not making meaning of the algebraic sentences if we had not had our discussion.

**Neither** did I see that she was doing the math work at her desk. I wonder what other things I miss?

In the rhythm of a school day, there is so much for a teacher to do.

- And often for a student to do as well.

Maybe by slowing down and listening to one another, we might get more done.

Happy Maths, Pete

### News Items



The Mathematics Collaborative will be working with the Nursing Students in Tonya Herrings' Class these next few weeks to prepare for their dosage calculations exam. We are excited!



The Resource teachers have been in schools all around the area! From Muscogee County to Chattahoochee to Russell County Alabama, we are seeing students and teachers do amazing things! Contact us to see if we can support your school's efforts in mathematics.



We would like to welcome two new members to our staff. Fatima Edmondson, a CSU student in computer science, and Timi Banjo, an engineering student at CSU. They are great additions to our staff and support our work at the Collaborative!



Valuable PD ... for free (and you get a certificate!) - Several events are on tap until the end of November! (Link Here)

Workshops available to Chattahoochee County, Muscogee County,
Russell County, and St. Anne Pacelli schools are NO COST to the teachers



Jordan Vocational High School - <u>Project Share</u> - It has two parts: **Part One** is that a resource teacher is placed in the high school for one period a day for a semester to engage students in learning mathematics using rich tasks and best practices.

**Part Two** is where you enter in - *yes, you*! Come and observe, critique, and challenge us to be better educators - together.

Contact us if you or your students would like to visit. Peter Anderson

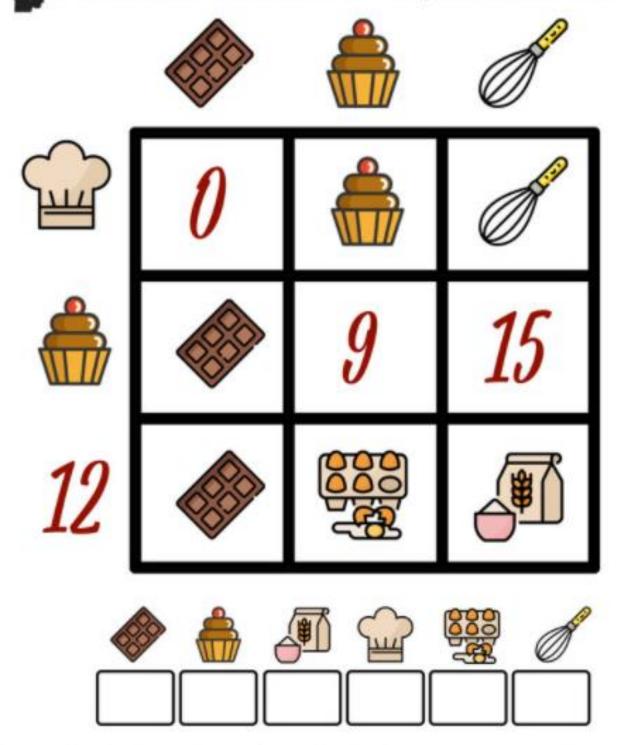
# Resource Teachers Happy Chocolate Cupcake Dayl

Find the value for each icon in the equations below.

mashup math

# Happy Chocolate Cupcake Day!

Find the value of each icon in the multiplication table below:



You can download more holiday-themed math challenges at www.mashupmath.com



## Happy (hocolate (upcake Day!



Find a value for each icon in the area model below so that it represents the value 216.



October 18 is National Chocolate Cupcake Day!

You can download more holiday-themed math challenges at www.mashupmath.com





### Caught in the Act (of being a teacher leader.)

The mission of the Mathematics Collaborative is to develop and support teacher leaders in our community. To that end, we seek to recognize those teachers who exemplify the qualities of a teacher leader.

### Amanda Allen is a teacher leader.

Ms. Allen is a remarkable academic coach at Gentian Elementary School. Amanda is passionate about helping any and all who come into her circle. Over the past few years, she has been instrumental in assisting the teachers at Gentian Elementary to develop skills for student success in learning mathematics. She was key to the success of the **Make It Count** program that engaged 2nd Graders and local volunteers in weekly mathematics activities.

When asked what she enjoys most about teaching, she responded:

Relationships and Reflection are areas that are important to me in teaching. Relationships are valuable in every aspect of education (i.e. with students, parents, colleagues, etc.) Getting to know others, addressing them by their name, and knowing their strengths and areas for improvement have positive impacts on academic, professional, and emotional growth. Personal relationships can help us press forward during the most difficult circumstances because we know someone genuinely cares for us. Reflection is important as we make improvements to our professional practice and set goals to further student achievement. Essential parts of reflection are collaborating with others and being a life-long learner. Through relationships and reflection, we can support each other and grow personally and professionally to better meet each other's diverse needs.

We at the Mathematics Collaborative appreciate and support the efforts of every teacher to help students become successful learners of mathematics. We are particularly impressed by these teacher leaders and their dedication to becoming even more amazing educators.

Amanda, your approach to teaching mathematics is very special. You are - Caught in the Act of Being a Teacher Leader!



CLICK HERE TO READ MORE ABOUT OUR WEBSITE





#### **Columbus Regional Math Collaborative**

Frank Brown Hall 1127 Broadway Columbus, GA 31901

Mailing Address: 4225 University Avenue Columbus, GA 31907