

THE UPPER EAST TENNESSEE COUNCIL OF TEACHERS OF MATHEMATICS

NEWSLETTER



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In This Issue:

- *You've Got to Move It, Move It*
- Kristy Vigil
- *Stay Out of the Teachers' Lounge!*
- Jill Taylor
- *The Importance of Engaging End of Unit Tasks*
- April Thomas
- *The Struggle is Real*
- Sarah Asbury
- *The Importance of Real World Math in Special Education*
- Heather Vaughn
- *Meeting Individual Needs in the Inclusive Math Classroom*
- Courtney Humbert

MEETINGS FOR 2019-20

Usual schedule: 4:00-4:45: Refreshments, announcements, business meetings, short presentations; 4:45-6:00: Programs for all levels.

Next Meeting: Tuesday, February 18

Boones Creek Elementary School (the new one), Johnson City. More information to come later.



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YOU'VE GOT TO MOVE IT, MOVE IT!

- KRISTY VIGIL-

I have found with teaching first grade that math, music, and movement go hand in hand. My students pick up the songs and movements even when some are reluctant. I am NOT a music teacher, I don't play any "real" instruments, and I definitely do NOT have a "nice" singing voice. However, I will "bring it all" to help my students learn and have fun doing it. Guess what? They don't care or realize that I am not musically gifted because we are having so much fun. Music and movement help my students make connections and deepen their understanding.

I also like math chants. They are great for reviewing and building fluency. Chants are fun "call and response" activities that are quick and engaging.

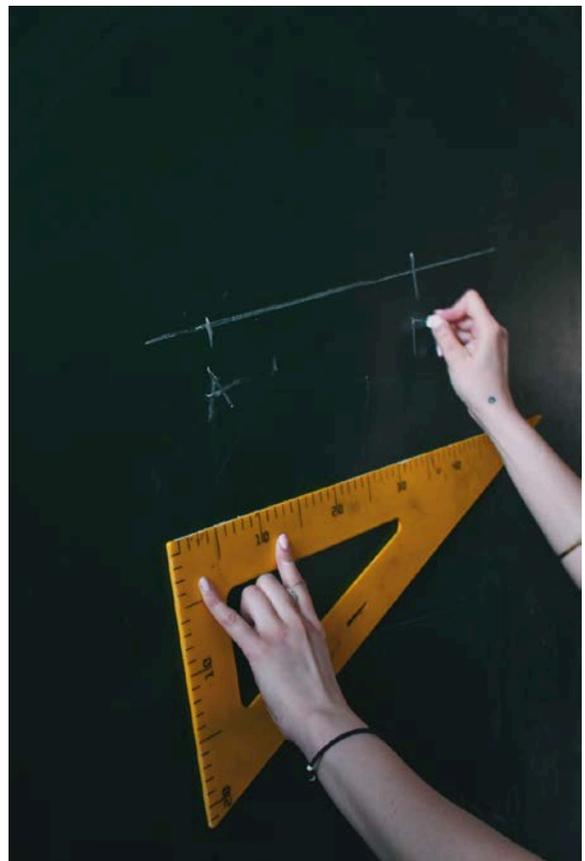
I have found that incorporating music and movement into my math lessons has created a more relaxed and fun learning environment. Once my students have learned the songs, I often hear them repeating them over and over. Even during assessments!

I had my own math anxiety as an elementary student, so as a teacher it is very important for me to create a stress-free environment that reduces the anxiety and fears that struggling students might experience. I have found that:

Music + Movement + Math = Success

Some of my favorite resources:

- Youtube
- Harry Kindergarten
- Dr. Jean
- Numberock
- Flocabulary
- Go Noodle!
- Math chants
- Songsforteaching.com



STAY OUT OF THE TEACHERS' LOUNGE

- JILL TAYLOR -

My first year teaching, I was like a sponge, eager to soak up all of the advice that both past and present teachers were ready to share. I was given a wealth of useful information. Everything from ways to manage my classroom, to how to avoid teacher burn-out. One of the many people I consulted happened to be my father-in-law, a former special education teacher and director. He began by advising me to quickly befriend the janitor, secretary, and cafeteria manager of my school. He then informed me he was going to give me the best advice he knew to give. I leaned in with great anticipation of what this prized information could possibly be. After all, he was known for accomplishing great things during his time in the school system. I certainly did not expect to hear, "Stay out of the teachers' lounge". "Stay out of the teachers' lounge?", I thought. What kind of advice is that? Where will I eat my lunch? How will I get to know my co-workers? To be honest, I pretty much just shook my head as if in agreement and pushed that nugget of knowledge to the side.

It didn't take many trips to the teachers' lounge to realize why my father-in-law had given this particular advice. No matter if I was eating my lunch, making copies, or simply picking up my mail, it

seemed that I was bombarded with negativity. Here are a few examples of what I heard:

"Did you see what little Cindy's mom had on when she dropped her off today?"

"If I get one more e-mail from little Bobby's mom excusing his behavior I am going to scream!"

"If she (principal) speaks to me like that one more time I'm going to tell her off!"

I think you get the point.

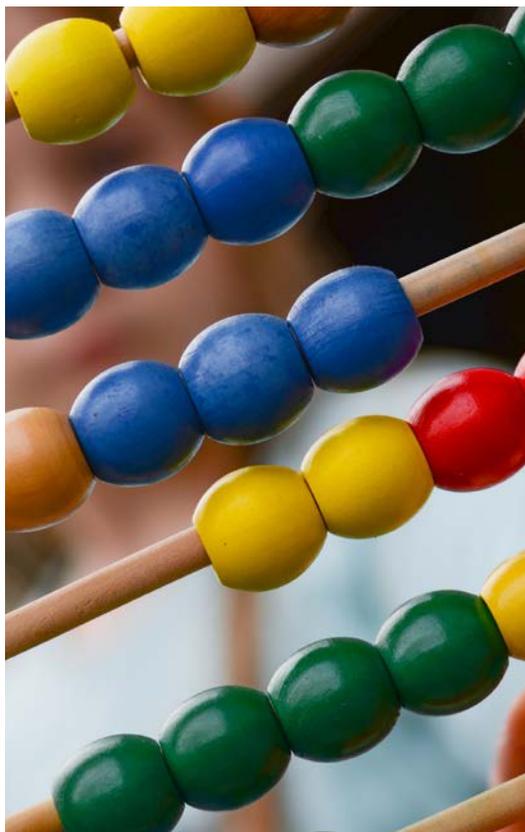
What my father-in-law failed to tell me was that "the teachers' lounge" is not confined to only one room, it is more of an atmosphere that can pop up anywhere, and when you least expect it. It is a negative aura that can show up in the hallways, playground, bus duties, etc. So, I guess the question is "What do you do when you find yourself in the middle of all of this gossip and negativity?"

When we find ourselves in the middle of the proverbial "teachers' lounge" it can feel almost impossible to escape. I recently had a friend in the student teaching program who came to me for advice on what to do when her teacher began gossiping with other teachers in her classroom during her planning time. In this case, the "teachers' lounge" was her mentor teacher's classroom. I empathized with her, knowing that this could be a very awkward position. After all, she didn't want to offend her mentor teacher. The advice I gave her is the same advice that I would give anyone: find a way to

change the topic, excuse yourself to “complete a task,” or simply walk away.

In conclusion, it is my belief that we need to rise above the toxic climate of the “teachers’ lounge.” We would expect our students to do the same if they found themselves in a similar situation. Together, we can knock out the destructive atmosphere that the “teachers’ lounge” generates.

“YOU CAN NOT CHANGE THE PEOPLE AROUND YOU, BUT YOU CAN CHANGE THE PEOPLE THAT YOU CHOOSE TO BE AROUND.”
– ANONYMOUS



THE IMPORTANCE OF ENGAGING END OF UNIT TASKS

- APRIL THOMAS -

As teachers, we know how important it is to assess our students. It’s crucial for us to know their strengths, their weaknesses, and everywhere in between. Assessments help guide us in our everyday instruction. It helps us to make the best decisions for our students. However, sometimes it can feel like we are constantly assessing. There are so many different ways that we all use to assess our students. We assess them by using exit tickets, homework problems, projects, tests, the list goes on and on... as it should! However, sometimes our assessments need to be shaken up a bit. That’s what I have been trying to do with incorporating engaging end of unit tasks into my classroom.

It is my belief that it is so important to engage our students in interactive end of unit tasks. These tasks have not only made a huge difference in my classroom assessments, but they have also had a positive impact on my students and their learning as well. What I love about most of the assessments that I have used in my classroom is that many of them originated from the ideas of my students. For example, my favorite end of unit task is one called “Remainder Reindeer.” As our unit about division was drawing to a close, and with Christmas fast approaching, one of my students commented about how cool it would be if we could work with a problem about remaining reindeer. Immediately, my

brain started thinking of an end of unit task that would not only be super fun and engaging, but full of math too.

To begin, I always love to incorporate people that my students know into the tasks. Whether it be the students themselves or teachers, they love being able to relate to the problem they are solving. I also truly enjoy incorporating a writing portion into each and every task. For the Remainder Reindeer example, I challenged my students to write a letter to our principal to help her decide whom to give the remaining Remainder Reindeers to. My students absolutely loved this portion of the task! They were so thoughtful about their responses, and they felt so much pride in their writing (and in their math work) to write to the principal about this topic. The best part was placing all of the letters into my principal's box to share.

Once the task has been completed, the models drawn, and the letters shared, my students had such a fun time creating their own remainder reindeers to take home for Christmas. The best part of using engaging end of unit tasks to assess is to see students take what we have learned in the classroom and apply it to real-world scenarios. It has truly made a definite difference in my classroom, and my students look so forward to solving these tasks. Overall all types of assessments matter, and I still use all kinds of assessments in every lesson that I teach. However, as essential as they are, let's make them fun, too!

REMAINDER REINDEER



Ms. Thomas wants every student to make a Remainder Reindeer for their Christmas tree.

Ms. Brown has 19 students. Mrs. Pannell has 20 students. Ms. Thomas has 20 students.

Students will need a clothespin, a pipe cleaner, a set of googly eyes, and a red pom-pom for the nose. Ms. Thomas is buying the supplies from Walmart.

Table:

Materials	Number per Package	Number of Packages Needed
Clothespins	18	
Pipe cleaners	50	
Googly eyes	25	
Pom-pom nose	24	

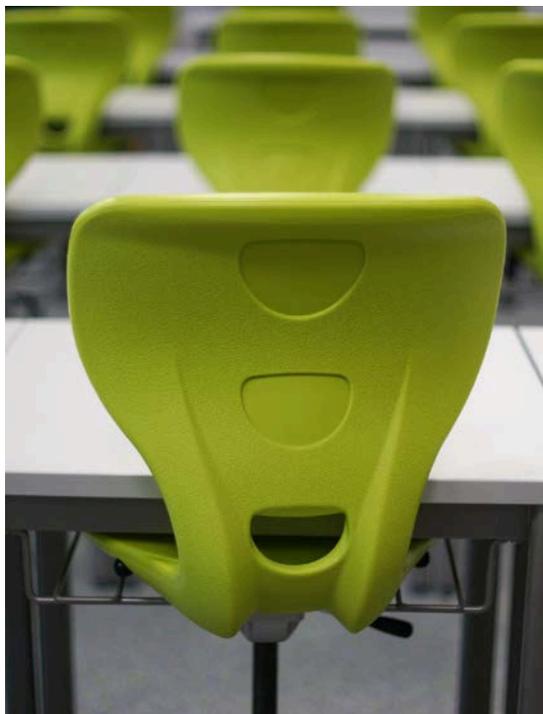
Use words, models, and equations to answer the questions. Show your work.

How many packages of each item are needed to make sure every fourth grade student can make a Remainder Reindeer?

Are there left over materials? How many complete Remainder Reindeers can be made with the left over materials?

Ms. Thomas has decided to give Dr. Coleman the leftover Remainder Reindeers to distribute. Write a letter to Dr. Coleman to help her decide to whom to give the remaining Remainder Reindeer.

Challenge: If Ms. Thomas wants to use all of the materials she buys to make Remainder Reindeer without having any leftover materials, how many of each material would she have to buy? Show your work.



THE STRUGGLE IS REAL

- SARAH ASBURY-

When we think of the word struggle, most of the time it carries a negative connotation. We think of struggle as being something we don't want because it may stifle our growth, and surely no one wants to struggle, right? Absolutely not!

Productive struggle should be an integral part of any classroom setting because of the learning that can come from that experience. Welcoming mistakes and letting students know that it is okay to fail can completely change the dynamics in a classroom. When students know that it's okay to ask questions and explore and think for themselves, that is when the magic of true learning happens. This learning will follow them through life because you have now equipped them in handling situations where they had no idea what to do and they were allowed to think for themselves. They were allowed to make mistakes and explore possibilities and they now know that it is okay if it was a wrong choice. What matters is that they try to learn from that mistake and look at the problem from a different perspective.

As educators, we want our students to have all the right answers. The problem with giving them answers is that finding the answer is a lot like life, it's all about the journey and less about the destination. Obviously, the destination is important, but that will come later on in the education journey. We want them to see the scenery and learn along the way. They need to know how they arrived at their destination

(answer). Try to imagine when you were younger that you closed your eyes whenever your parents drove you somewhere. When you arrive at your destination you opened your eyes so you could find out where you were. Would you have any idea how to get there again? Most likely not. It's all about the journey. It's all about finding your own way of doing things and arriving at your answer.

It is much harder to see your students struggle, but well worth it when we allow them to think independently and own their learning. It is amazing to see how differently students think when they are given the opportunity to explore on their own. When given the opportunity to struggle and even fail on their own, students are able to figure out where they went wrong and learn from that. If they were given all of the answers and not allowed that time to think and to make mistakes, so much learning is being taken from them. For students to persevere in math is crucial because navigating the math world can be frustrating to students at times and without that they will give up. This holds true in real life every single day. Without the mindset of it is okay to make mistakes, it is okay to fail, but it is not okay to give up. Look at your problem from a different perspective and learn from your mistakes. All great learning comes from productive struggle and mistakes! Through this, you are giving them the tools to be successful in life.

IMPORTANCE OF REAL WORLD MATH IN SPECIAL EDUCATION

- HEATHER VAUGHN -

Students with special needs, learning and being fluent in real world math could change their lives. These are skills that they need that could be the difference in whether they are able to get a job or not later in life. They need to be able to tell time and time differences in order to be punctual and complete a time card. It is very important they become fluent in money calculation and management so they can give correct change or purchase things they need. As a middle school special education teacher, I really try to focus on these things and give my students real life scenarios so they become fluent and confident in these skills. For example, we will learn how to fill out time cards. I have a lesson where we look up prices at a grocery store and they are given an amount of money to use. The students have to figure out what they would need for the week, how much all their food would cost, and calculate the tax to make sure they have enough money to make the purchase. Real world math can really change the quality of life for special education students as they get older and can help them become productive citizens in the community.

MEETING INDIVIDUAL NEEDS IN THE INCLUSIVE MATH CLASSROOM: A STRATEGY FOR TEACHING STUDENTS WITH SPECIFIC LEARNING DISABILITIES

- COURTNEY HUMBERT-

In the inclusive classroom, teachers often struggle with meeting the many diverse needs of their students who are diagnosed with Specific Learning Disabilities. Throughout my journey as a special education teacher, tension, frustration, and feelings of failure are just a range of the emotions that classroom teachers have expressed to me regarding their experiences teaching this diverse group of students. In order to shed some light on how to “crack the code” for teaching students with learning disabilities, classroom teachers need to be equipped with evidence-based strategies that they may employ in their own teaching practice.

One strategy that is often used by seasoned special educators is the Guided Instruction strategy. This strategy involves the intentional shifting of classroom work from the teacher-as-model, to sharing the responsibility jointly, and finally transitioning into independent practice and application on behalf of the learner (Fisher and Frey, 2010). One of the most effective ways to implement this strategy in the classroom is to use the model: I do,

we do, you do. In this model, the teacher begins with informing the class that the instruction is going to be broken down into three portions.

The first portion is the modeling session in which the teacher has complete control of the academic learning taking place. The instructor introduces and models the given math topic of the day, with students not taking any part in doing their own work; they are simply watching and listening. Modeling of the given topic should be repeated several times to reinforce student understanding and ensure that students are ready to move to the next portion of the lesson.

The next step is “we do,” in which students begin to take control of a portion of their own learning. During this time, the teacher should guide students through the process of completing the given work, ensuring that students are engaged. Students complete math problems step-by-step with the teacher. In this step, students are applying their prior knowledge learned in the “I do” step. Teachers should ensure that students are in full understanding of the subject matter before moving on to the final step; if students are not ready to progress, they will likely experience failure and frustration, which could lead to the students giving up completely.

The final step in the strategy is the “you do” phase. Students take full control of applying their knowledge, with teachers checking for student understanding throughout. This is the stage where

students should be in full and complete understanding of the material at hand, with the occasional question or problem being answered with teacher assistance.

Although this is just one strategy that special educators use to ensure student success, there are many more! I encourage all inclusive classroom teachers to explore new strategies for teaching students with Specific Learning Disabilities, whether it be through independent research, or learning from their school's special educators. While some teachers may not support the use of this strategy for teaching, it is an evidence-based method that has been tested and achieved success; and as we all know, the use of evidence-based strategies will inevitably lead to greater student success!



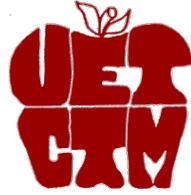
MIAMI UNIVERSITY – PROJECT DRAGONFLY NOW ACCEPTING APPLICATIONS FOR 2020

OXFORD, Ohio (Sept. 3, 2019) – Miami University's Project Dragonfly is accepting applications for 2020 Earth Expeditions graduate courses that offer extraordinary experiences in 16 countries throughout the world.

Earth Expeditions can build toward the Global Field Program (GFP), a master's degree that combines summer field courses worldwide with web learning communities so that students can complete the GFP master's part-time from anywhere in the United States or abroad. <http://GFP.MiamiOH.edu>

Project Dragonfly also offers the Advanced Inquiry Program (AIP) online master's degree that combines Miami University web-based courses with experiential learning and field study through several AIP Master Institutions in the U.S. Applications for Miami's 2020 cohorts are being accepted now with place-based experiences provided at zoos and botanical gardens in Chicago, Cincinnati, Cleveland, Denver, New York, San Diego, Seattle, and St. Louis. New for 2020: residents of the Jacksonville, Florida, area can study at Jacksonville Zoo and Gardens, AIP's newest Master Institution, and earn Miami's AIP master's degree. <http://AIP.MiamiOH.edu>

Graduate tuition for all programs is greatly reduced because of support from Miami University.



Upper East Tennessee Council of Teachers of Mathematics

Membership Application, 2019-2020

Complete and Return to Jamie Price with a dues of \$10, or bring to a meeting

Make checks payable to UETCTM.

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Phone (_____) _____ - _____ text call

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UETCTM may be asked to share your information with other math organizations (NCTM, TMTA, etc.) that promote mathematics education.

Please check all applicable statements below.

- I am currently a member of NCTM
- I would NOT like my information to be shared
- I am interested in leading a session at UETCTM
- I am interested in serving as an officer at UETCTM