

A hand is shown holding a globe of the Earth. A bright yellow sunburst radiates from the center of the globe. The globe is surrounded by various geometric shapes: a dark green ring with a white circle in the center at the top left, a red jagged shape at the top, a pink jagged shape at the bottom left, and a gold jagged shape at the bottom right. A white banner with a torn edge is placed across the middle of the globe.

# THE NEW ~~NORMAL~~ BETTER

Skip Tyler  
@SkipTylerMath  
SkipT@CTLGconsulting.com

SURN Math Days  
October 2022

**I LOVE YOU**

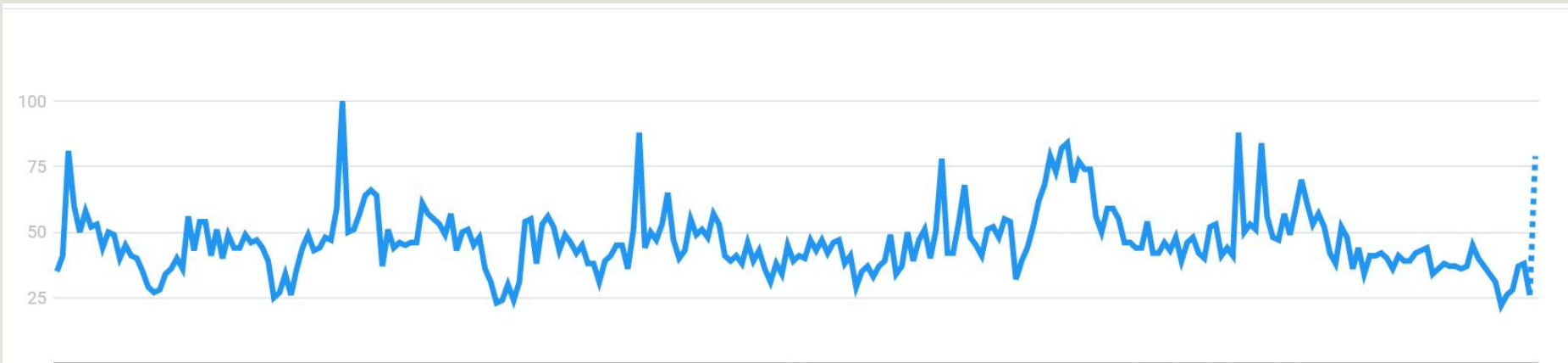
**I LOVE YOU**

You're probably thinking  
- you don't even know me.

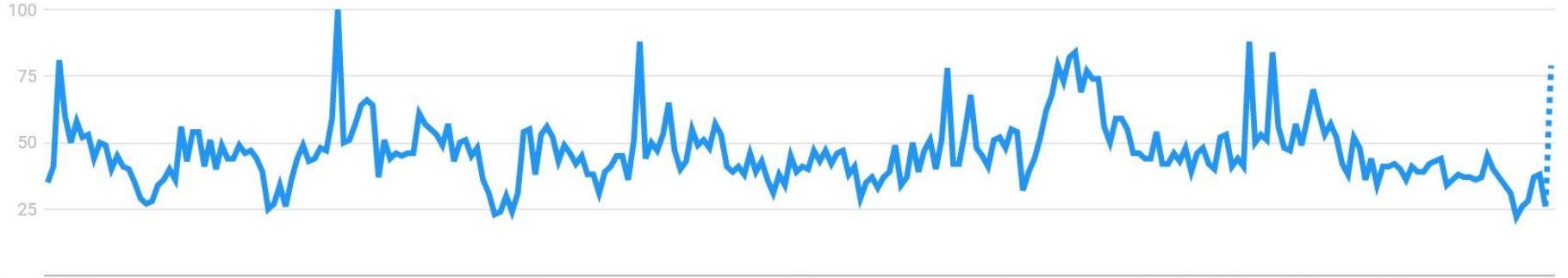
That's true. But if people  
can hate for no reason,  
**I can love.**

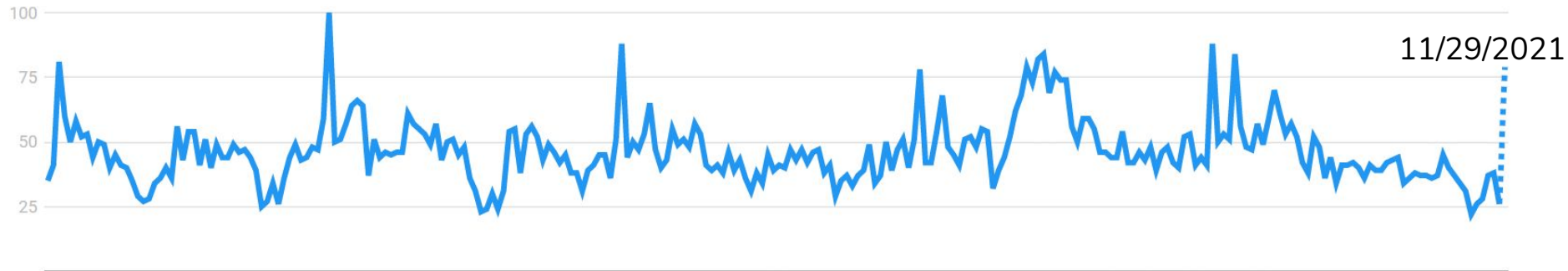


# NOTICE & WONDER



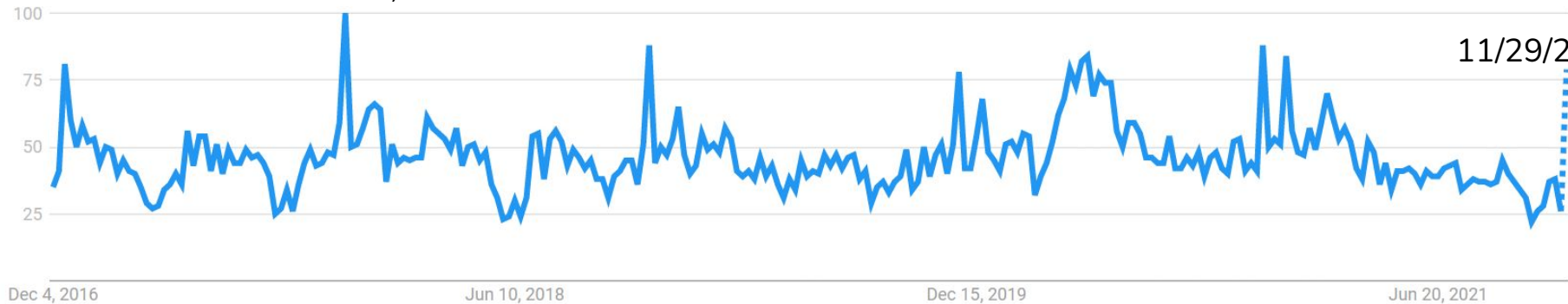
# What do you notice? What do you wonder?





Nov 19-25, 2017

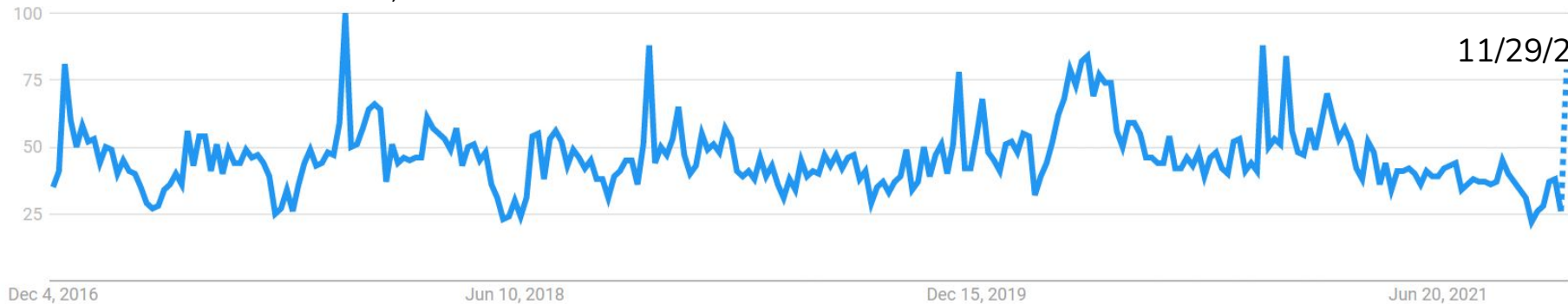
11/29/2021



Interest over time 

Nov 19-25, 2017

11/29/2021



Interest over time 





Interest over time 



**Google Search History: “How many tablespoons in a cup?”**

Interest over time 



**Google Search History: “How many tablespoons in a cup?”**

**What will the graph look like in **one month**?**

Interest over time 

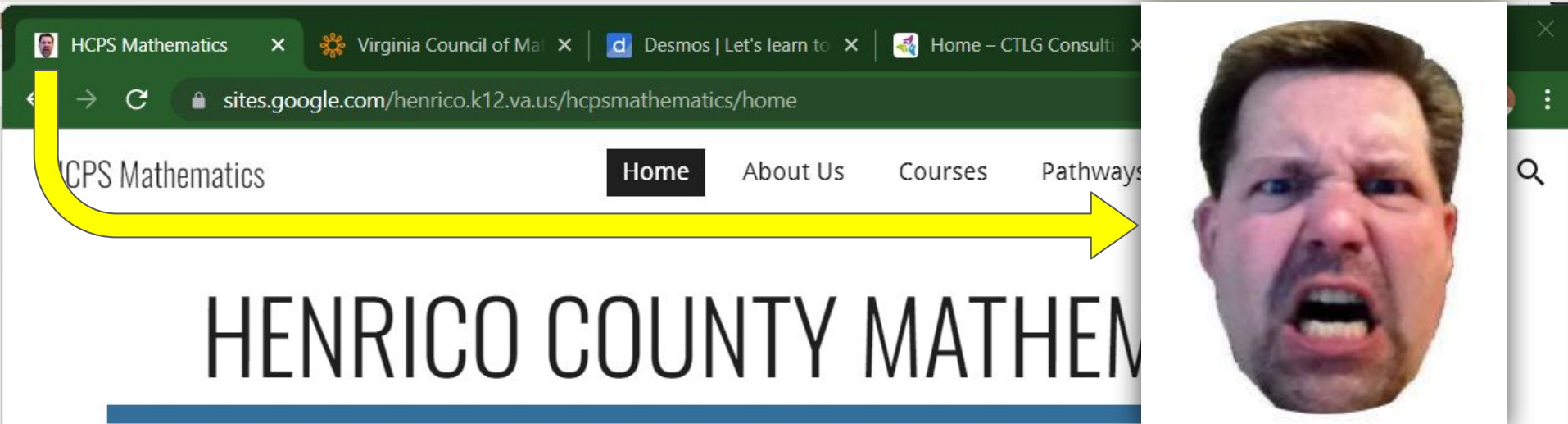


**Google Search History: “How many tablespoons in a cup?”**

**What will the graph look like in **six months**?**

# ABOUT SKIP TYLER

- Retired from Henrico County Public Schools after 31 years (18 high school teacher, 13 math supervisor).



The image shows a screenshot of a web browser displaying the Henrico County Mathematics website. The browser's address bar shows the URL `sites.google.com/henrico.k12.va.us/hcpsmathematics/home`. The website's navigation menu includes links for `Home`, `About Us`, `Courses`, and `Pathways`. The main heading on the page reads `HENRICO COUNTY MATHEM`. A yellow arrow originates from the `Home` link in the navigation menu and points to a portrait of Skip Tyler, a man with a frustrated or shouting expression.

# ABOUT SKIP TYLER



- Math instruction is my passion
- I'm a 12-year old trapped in an old man's body
- I like to take people's phones and secretly take selfies
- My slogan or motto...

**Everyone Is A MATH Person**  
**#ChangeTheStory**

Let's have some fun today!

# WHO ARE YOU?

## Instructions

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[www.menti.com](https://www.menti.com)

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# WHO ARE YOU?

## Instructions

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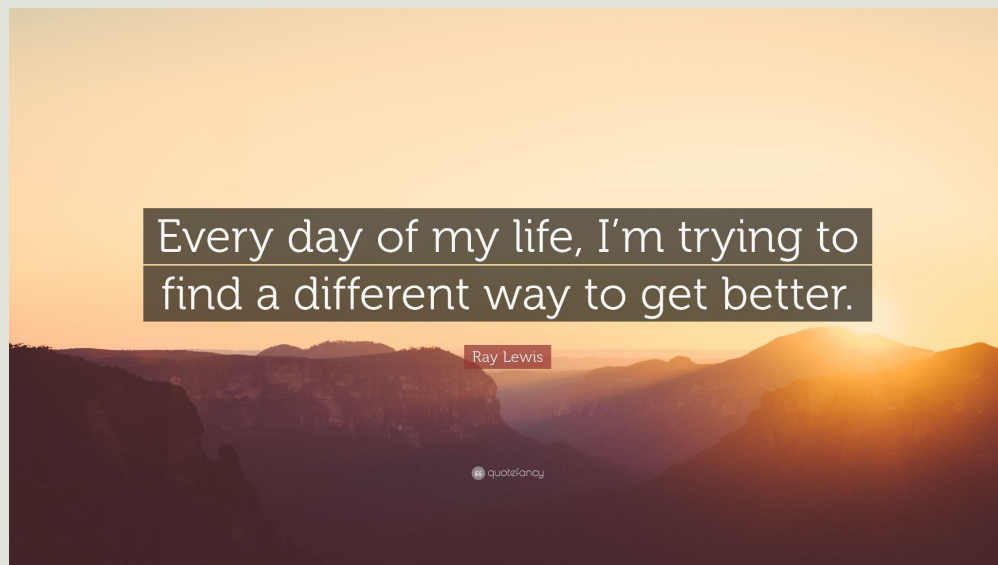
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**5108 1513**



Or use QR code

# LEARNING INTENTION

- Identify instructional practices and strategies that we know work.
- Find the BETTER!



Every day of my life, I'm trying to  
find a different way to get better.

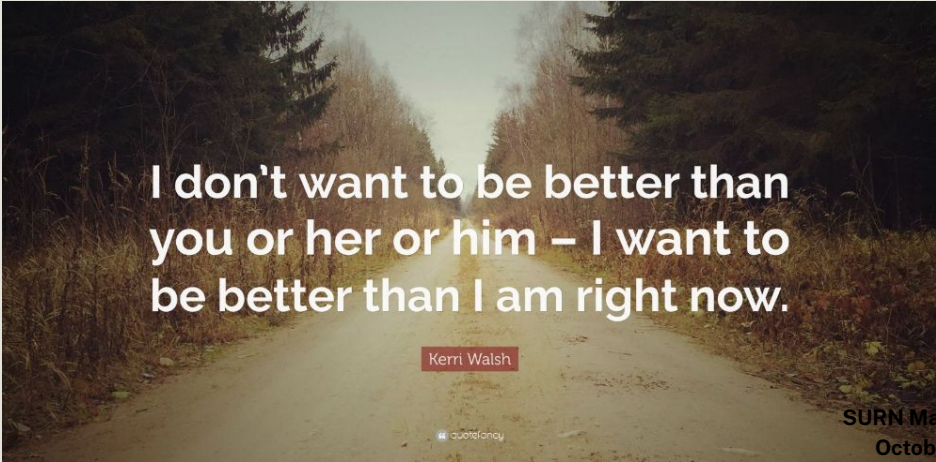
Ray Lewis

quotefancy



# SUCCESS CRITERIA

- I can identify best instructional practices and strategies for advancing meaningful student learning.
- I can continue to reflect upon my own practice and get better.



I don't want to be better than you or her or him – I want to be better than I am right now.

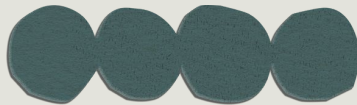
Kerri Walsh

quorefancy



# THE NEW ~~NORMAL~~ BETTER

What does this mean?



# WHAT IS THE NEW BETTER???



Every year I reflect on previous years.  
(This is year 32 for me)

Over the past 18 months, people keep saying  
“This is the new normal”.

**However, there is nothing normal about what we are doing!**



If I could represent the last 18 months as a TikTok video, this would be it.



We could see things coming but we just couldn't react quickly enough to address the problem. Instead, we were reactive.

# LET'S PRACTICE REFLECTING

You are planning a vacation!

- Where are you going?
- What type of lodging?
- How are we getting there?
- Who is going with you?



When we dig into past experiences, some things subconsciously (good/bad) come to mind. All previous experiences are filtered and some emotions are suppressed.

# LET'S DO IT AGAIN!

What is the  
perfect class?



Content? Students? Environment?  
Did you use any negative experiences to  
identify the class?  
How many people went straight to a person  
they didn't want in the class?

# OUR GOAL TODAY

Let's think about the perfect classroom.  
What are the things we learned over the past 2 years  
(good and bad)?  
How are we going to create the “New Better”?

# REASONING ROUTINES

## Alike and Different

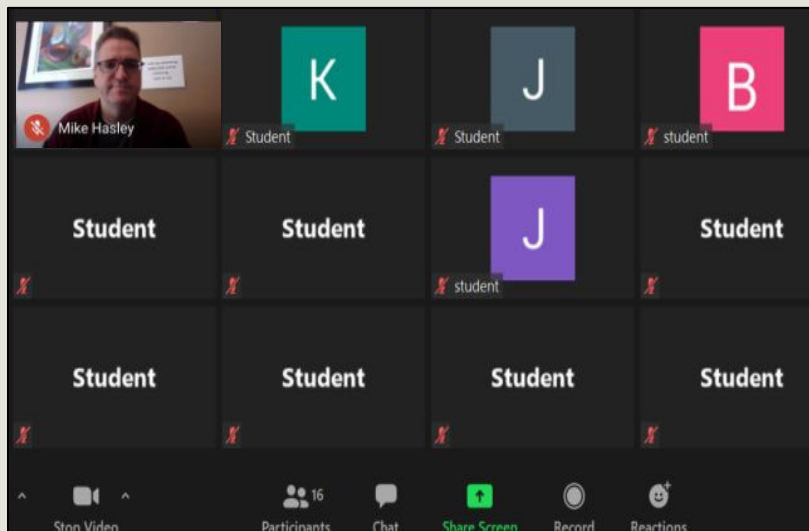


This is what we were discussing Pre-COVID...



# REASONING ROUTINES

## Alike and Different



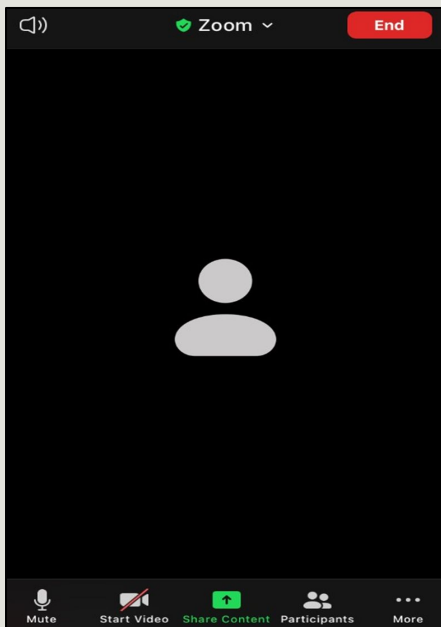
# REASONING ROUTINES

## Alike and Different



# REASONING ROUTINES

## Alike and Different



This is what it is all about!

A hand is shown reaching out from the right side of the frame, about to touch a globe of the Earth. The globe is centered and has a bright yellow sunburst radiating from its top. The scene is decorated with various paper cutouts: a dark green ring with a hole in the top left, a red jagged arrow pointing down from the top left, a pink jagged arrow pointing left from the bottom left, and a gold jagged arrow pointing down from the bottom right. A white banner with torn edges is placed horizontally across the middle of the globe.

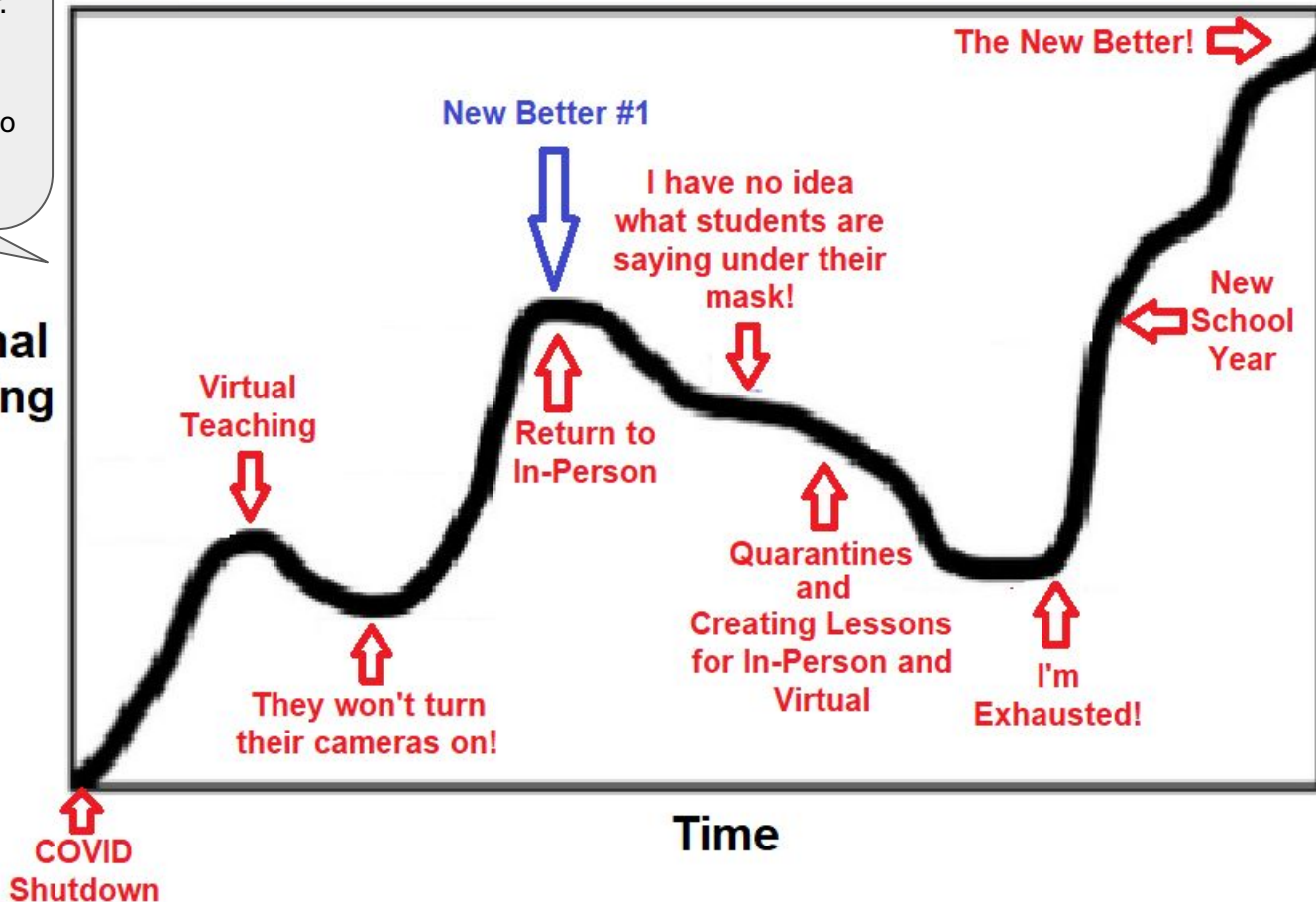
**THE NEW ~~NORMAL~~ BETTER**

**Full disclosure**

I started using this phrase last school year. Education just wasn't ready for it since we were still dealing with so many side effects of pandemic teaching

# The Path to the New Better

**Emotional Well-being**

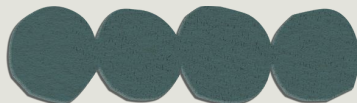


# CONFERENCE THEME



## Moving Beyond: Reclaiming Best Practice

- It is time for the **NEW BETTER**
- Asset Based Mindset - Moving beyond the focus on students' deficits and to focus on building students' capacity
- Let's take what we have learned from the last two years and apply it to what we already were doing!



# Asset Based Mindset

**“If districts focus too much on remediating learning loss—holding kids back a grade level, categorizing students according to their deficits, and centering lesson plans on catch-up work—the students who have experienced the most trauma and disconnection during the pandemic may be assigned to the lowest level and most stigmatized groups. They will be viewed as deficient, and the inequities in place before and during the pandemic will be further amplified.” (Berger, 2021)**



# THE PROBLEM

How do we take the positive things that we learned over the past few years and add them to our toolkit of what we did prior to that?

How do we turn the negative things into action items to make it positive?





# SUCCESSSES & CHALLENGES

## INDIVIDUAL BRAINSTORM

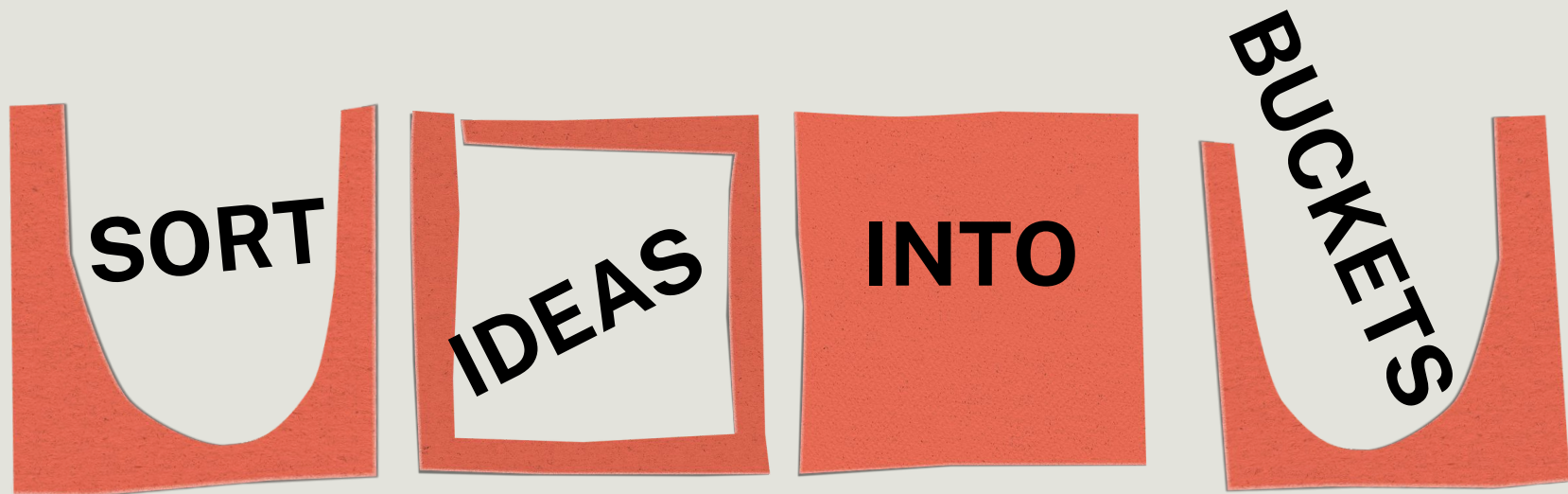
- What did you really enjoy or learn from “pandemic teaching”?
- What were the struggles?

Come up with as many solutions as possible. **Write each one down on a separate sticky note** - even the ones you don't think are great.

We want all of your ideas. Not just the good ones.



# SMALL GROUP DISCUSSION



Share all of your ideas and group the ideas that are similar.

Identify “big idea” themes for the buckets.

Try to come up with at least 4 key words for successes  
and 4 key words for challenges.

# SUCCESSSES AND CHALLENGES

## Instructions

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# SUCCESSSES AND CHALLENGES

## Instructions

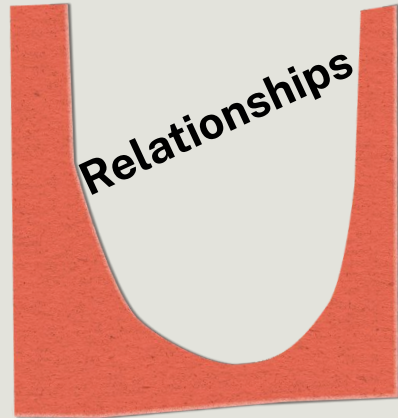
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[www.menti.com](https://www.menti.com)

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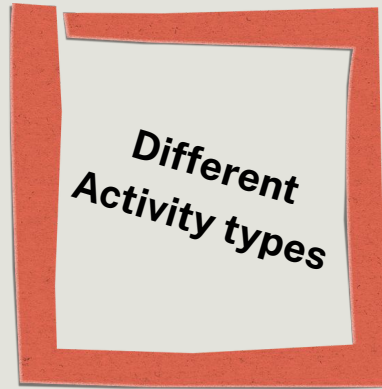


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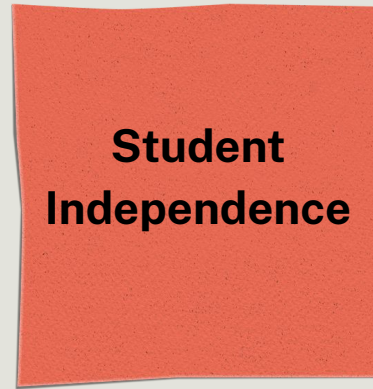
# SUCCESSSES



Created a different way to connect with students



Developed digital resources to support virtual learning including student choice activities

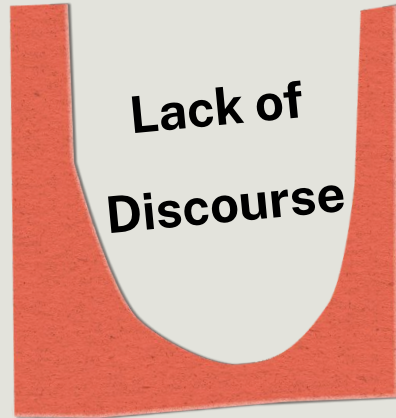


Gave students time to work at their own pace

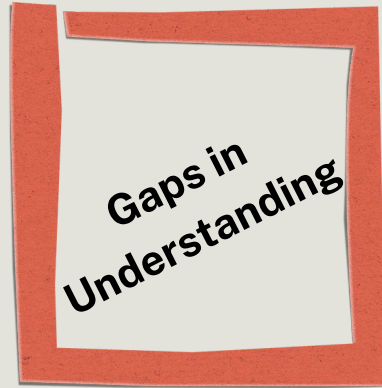


More instructional conversations and sharing due to having to teach differently

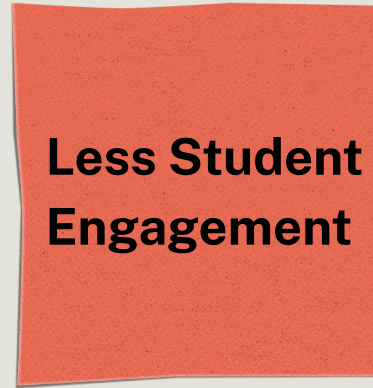
# CHALLENGES



Students have not had to speak to anyone for discussion and sharing of ideas.



Students didn't master the prerequisite content or used online support for answers.



Students could hide and not participate due to virtual learning and social distancing.



Easy for students to hide and not feel supported. Lack of peer interactions.

# TIME WARP



We are having the same conversations that were occurring prior to COVID. The good news is that we are back to having conversations about instructional best practices.

It's time for...

## Top 5 things we knew before the pandemic!



# TOP 5 THINGS WE KNEW BEFORE THE PANDEMIC

5. Whoever does the talking does the learning. Get students thinking and get students talking.
4. Discourse should be like... We are at an amazing place in education.
3. Relationships matter. Nurture and establish a nurturing environment. It's time to **#ChangeTheStory!**
2. Our instruction should be... **#ChangeTheStory!**
1. Students are very good at... Thinking Classrooms - Peter Liljedahl). They know what schools look like and how to manipulate the system.





# NEXT STEPS



**Where do we go from here?**

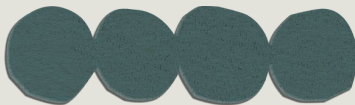
# WHERE DO WE GO?





Let's start with a focus on the following:

- Build community
- Increase student discourse and utilize sentence starters
- Place value on the think PROCESS and not the PRODUCT
- Provide open-ended thinking opportunities
- Teach the curriculum while embedding and spiraling back content

This is how we can close gaps in understanding!!!



# HAND SIGNALS & MATH TALK

<p>When you come up with the same solution or strategy as another mathematician, silently signal "MC +001" to let other mathematicians know that you agree with them!</p>	
<p>When you're solving a math equation in your brain, and you've already thought of two ways to find the solution, silently signal for "I have the solution and one strategy!" while other mathematicians continue to think!</p>	
<p>When you're solving a math equation in your brain, and you've already thought of two ways to find the solution, silently signal for "I have the solution and two strategies!" then continue to think of additional strategies while other mathematicians also continue to think!</p>	

*As you can always add additional fingers as you come up with more and more strategies to find the solution! You're an amazing mathematician!!!!*

## Math Talk Moves

 <p>"Let's talk about math!"</p>	<h3>Revoicing</h3> <p>"So you're saying that _____ Do I have that right?"</p>
	<h3>Repeating</h3> <p>"Can you restate or rephrase what _____ just said?"</p>
	<h3>Reasoning</h3> <p>"Do you agree or disagree, and why?"</p>
	<h3>Adding On</h3> <p>"Would someone like to add on?"</p>
	<h3>Waiting</h3> <p>"Take your time...we'll wait..."</p>
 <p>"The way I got my answer was..."</p> <p>"I did that too, but I also..."</p>	<h3>Turn &amp; Talk</h3> <p>"Partner turn and talk or think-pair-share"</p>

"Summary Tables of Productive Talk Moves" from Classroom Discourse in Math: A Teacher's Guide for Using Talk Moves to Support the Common Core and More, Grades K-4 by Suzanne H. Chapin, Catherine D'Onofrio, and Nancy Canavan Anderson. Copyright © 2013 by Scholastic, Inc. All rights reserved. Item # 54883.


**Math Solutions.** | [mathsolutions.com](https://mathsolutions.com)

# SENTENCE STARTERS

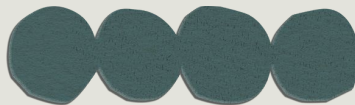
<b>Another idea I had was...</b>	<b>I was confused (wondering) about...</b>	<b>How or why did you...?</b>	<b>I agree with _____ because...</b>
<b>I have a different way to explain...</b>	<b>I have the same answer, but my explanation/strategy is...</b>	<b>Your answer/strategy reminds me of...</b>	<b>I disagree with _____ because...</b>
<b>Can you explain more about...</b>	<b>I have a different answer because...</b>	<b>One thing that I like about your answer is...</b>	<b>Your idea and my idea are similar because...</b>
<b>Your idea and my idea are different because...</b>	<b>I like how you used the math vocab, _____ to explain it.</b>	<b>Instead of _____, you can use the math word _____ to explain.</b>	<b>I would like to add on to that idea...</b>

# NEXT STEPS



- We **HAVE** to change how we teach.
- We have the opportunity to create a new educational system for students. Let's retrain students and show them what a **BETTER** classroom looks like!

## Where do I start?



# TRADITIONAL MATH STRUCTURE

5 minutes	Warm Up
15 minutes	Homework Check
20 minutes	Student Independent Practice Students attempt to solve problems in the same way the teacher solved them. The teacher walks around the room monitoring the students.
5 minutes	Assign Homework

Everyone Is A **MATH** Person  
#ChangeTheStory

# NEXT STEPS



**Warning!**



# NEXT STEPS

ted! #NCTMLA22

Stay Connected

Nat Banting via Twitter - NCTM presentation

You do it again

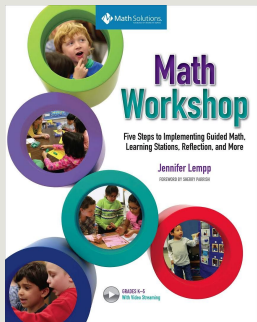
Everyone Is A **MATH** Person  
#ChangeTheStory

aid it.

kitchen table becomes  
a place of pain and  
suffering.



# MATH WORKSHOP STRUCTURE



TASK & SHARE		FOCUS LESSON, GUIDED MATH, & STATIONS		GUIDED MATH & STATIONS			
approx. 5-10 min.	<b>NUMBER SENSE ROUTINE</b>	approx. 5-10 min.	<b>NUMBER SENSE ROUTINE</b>	approx. 5-10 min.	<b>NUMBER SENSE ROUTINE</b>		
approx. 30 min.	<b>MATH TASK</b> One task is given, students work in collaborative groups. The teacher moves to small groups and provokes thinking through asking good questions. This task typically has multiple entry points, allowing for all students to have access to this problem. This could be a parallel task or open-ended question, one that supports differentiation.	approx. 15 min.	<b>FOCUS LESSON</b> Whole group focus lesson that is well planned to allow for differentiation.				
approx. 20-25 min.	<b>TASK SHARE &amp; REFLECTION</b> Students share out about the various strategies that were used. Students ask questions, clarify their thinking, modify their work, and add to their collection of strategies in their tool box.	approx. 30 min.	<b>GUIDED MATH</b> Teacher meets with groups of students in heterogeneous and/or homogeneous groups for small group instruction.	<b>STATIONS</b> Students are working on engaging activities that are mathematically purposeful. These activities could be in the form of a single, cognitively demanding question or a variety of stations in which student choice is a factor.	approx. 45 min.	<b>GUIDED MATH</b> Teacher meets with groups of students in heterogeneous and/or homogeneous groups for small group instruction.	<b>STATIONS</b> Students are working on engaging activities that are mathematically purposeful. These activities could be in the form of a single, cognitively demanding question or a variety of stations in which student choice is a factor.
		approx. 5-10 min.	<b>REFLECTION</b>		approx. 5-10 min.	<b>REFLECTION</b>	

# TURN AND TALK

- How does the math workshop model compare to that of the traditional model?
- What do you notice about the three structures?
- What resonates with your current work or beliefs?



TASK & SHARE		FOCUS LESSON, GUIDED MATH, & STATIONS		GUIDED MATH & STATIONS	
approx. 5-10 min.	<b>NUMBER SENSE ROUTINE</b>	approx. 5-10 min.	<b>NUMBER SENSE ROUTINE</b>	approx. 5-10 min.	<b>NUMBER SENSE ROUTINE</b>
approx. 30 min.	<b>MATH TASK</b> One task is given, students work in collaborative groups. The teacher moves to small groups and provokes thinking through asking good questions. This task typically has multiple entry points, allowing for all students to have access to this problem. This could be a parallel task or open-ended question, one that supports differentiation.	approx. 15 min.	<b>FOCUS LESSON</b> Whole group focus lesson that is well planned to allow for differentiation.		
approx. 20-25 min.	<b>TASK SHARE &amp; REFLECTION</b> Students share out about the various strategies that were used. Students ask questions, clarify their thinking, modify their work, and add to their collection of strategies in their tool box.	approx. 30 min.	<b>GUIDED MATH</b> Teacher meets with groups of students in heterogeneous and/or homogeneous groups for small group instruction.	approx. 45 min.	<b>GUIDED MATH</b> Teacher meets with groups of students in heterogeneous and/or homogeneous groups for small group instruction.
		approx. 5-10 min.	<b>REFLECTION</b>	approx. 5-10 min.	<b>REFLECTION</b>
			<b>STATIONS</b> Students are working on engaging activities that are mathematically purposeful. These activities could be in the form of a single, cognitively demanding question or a variety of stations in which student choice is a factor.		<b>STATIONS</b> Students are working on engaging activities that are mathematically purposeful. These activities could be in the form of a single, cognitively demanding question or a variety of stations in which student choice is a factor.

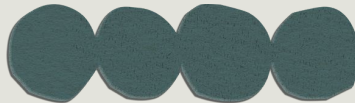
# CONFERENCE THEME



## Moving Beyond: Reclaiming Best Practice

- It is time for the **NEW BETTER!**
- Stop worrying about the curriculum.
- Get students to think. Whether it is Reasoning Routines, Tasks, activities...thinking will make teaching easier. This is how you build confidence, self-efficacy, and helping students become a mathematician.
- Rough Draft Math, Building Thinking Classrooms, Math Workshop

My next session will be discussing Reasoning Routines!



# INDIVIDUAL REFLECTION

What resonated the most with you?

## Instructions

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# INDIVIDUAL REFLECTION

What resonated the most with you?

## Instructions

Go to

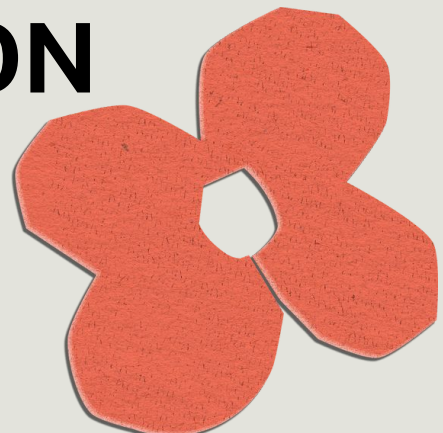
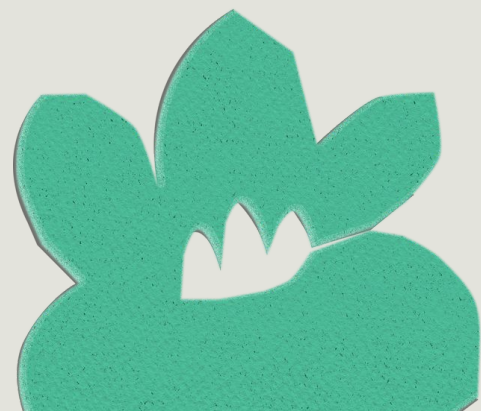
[www.menti.com](https://www.menti.com)

Enter the code

5108 1513



Or use QR code



# SUCCESS CRITERIA

- I can identify best instructional practices and strategies for advancing meaningful student learning.
- I can continue to reflect upon my own practice and get better.



# CLOSURE

- It's easy to go down the rabbit hole and complain about what it's not right in education today. I'm guilty of it too. And I think that's part of human nature to talk like that. But we have to stay focused on what is really important. The students. The now.
- Kids have different skills in their toolbox than before. It's not learning gaps. We need asset-based learning. We have to change how WE teach. That is my charge to you.
- Now is the time to change the story. Shake up the system. Make the change. Be the change.

Everyone Is A **MATH** Person  
#ChangeTheStory



**THANK YOU!**