

This session will be recorded and available at https://mc2.nmsu.edu/

Welcome! Please introduce yourself in the chat box by writing your name, your district, and your role in the education sector.

# Mathematically Connected Communities

Purposeful Reentry and Adapting to Change
August 12, 2020
5:00-6:10 pm

Allie and Michelle will tag team first three slides. Erika and Terri will monitor waiting room/chat.

**Session Time: 1 hour** 

Slides 1-3 5:00-5:10

Share Link to Handout in chat.

Link:

https://docs.google.com/document/d/1jNxbsexfpsToDDiwMDHyttGxQ8AKxIkt MacGdyMxs9I/edit?usp=sharing

Pop up Zoom Poll for participants to share results Slide 5.

Remind participants that we are recording.

If you do not wish to be a part of the posted video please let one of the facilitators know via private chat.

### About MC<sup>2</sup>



# Mathematically Connected Communities (MC<sup>2</sup>) is:

- A partnership of dedicated math educators, including teachers, mathematicians, researchers, and school district administrators, working collectively to improve mathematics learning for K-12 students across the state of New Mexico
- Initiated with funding by the US Department of Education/ Math-Science Partnership (MSP), the NM Public Education and Higher Education Departments (PED and HED), and Title II funding by districts to strengthen the quality & effectiveness of teachers, principal, and other school leaders

Mathematically Connected Communities (MC2) works to improve math education through a variety of professional learning experiences which align to NM PED's reentry guidance.

#### Four Live Web-Events Sessions

- Awareness and Information: Purposeful Reentry and Adapting to Change
- 2. Unpacking Important Mathematics Reentry Documents
- 3. Structuring Accelerated Learning in Reentry
- 4. The Importance of Models in Developing Fluency



#### End at 5:10

Framework for these webinar is support for teachers and principals in their re-entry plans as that is what is impacting education right now.

But be aware of what you already know and mindful of what is new. What can you adapt and what needs to change?

What do you know how to do well? You're purpose is still the same.

When we first saw the reentry documents and thought about teachers going back to school this year, we thought about what teachers needed in the immediate space for support so this series of sessions will take you through guidance on the documents, adjusting your classroom to different models of fully online, face to face or hybrid and most importantly, continuing to hold high mathematical standards for teaching and learning in this year.

Taking a look at our topics, we are in session one right now and this is really a space where we want to come together as professionals and talk about ways to support teachers, colleagues, and students as we adapt to the changes we face with this school year.

The following sessions build into the pathway teachers and school leaders find themselves in: needing to unpack reentry documents, building knowledge and awareness around them, and then digging deeper into specific ways in which

they are framed. In that framing, we are going to focus on two major areas of the reentry documents which is the idea of accelerated learning as it is being defined and the role of the fluency standards and fluency in math teaching and learning this year.

We will talk more about these events, how to register, what is required of participants and all at the end.

Pause for any questions...[1 minute]

**Transition for next slide:** We wanted to start this session with an image from a great resource that many of you may know. It comes from the IM and is used as a notice and wonder but for our purposes tonight its going to be used as our ice-breaker. So



#### 5:10-5:15

Team Builder: Which set of socks best describes you right now and why?

- 1. Think time (1 minute).
- 2. If you have an offering, like you to type it into the chat but don't hit enter yet. Give 1 minute to type in offerings.
- 3. 3-2-1 Hit enter. Go back through and scroll through which set of socks resonanted with our learning community tonight and why. Who is your sock twinsie tonight?

We start here because it opens the learning space.

We are purposeful in taking the time to get grounded with who is on our online space tonight and we do so with an invitation which demonstrates we value putting ideas on the table and to gauge where we are at in our thinking.

And with that, let's learn a little bit more about where we are at professionally. On the next slide we are going to share the Zoom poll results so we can see where we are in our school year.



Erika, 5:15

Zoom Poll: Have you already started teaching?

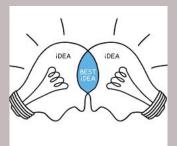
- 1. I've been back for less than a week and it feels like a month!
- 2. Teachers are back, but not students (yet).
- I've been back for more than a week and I'm already working with kids.

## Norms for Break Out Rooms

We will have 10 minutes in break out rooms to think, share and discuss.

In exploring today, what are the norm(s) you will take with you?

- Invite participation by using names
- Honor individual thinking and learning time
- Ask questions
- Expect to share
- Reflect on where you want to grow



#### Wanda and Allie

Slides 6-7 5:15-5:30

## Purposeful Reentry: Know and Grow

In the Overview document of each of the grade/course Instructional Scope document is a section on Culturally and Linguistically Responsive Instruction.

Read through this section and reflect with your break out room on the following:



- What aligns with what I already know?
- Where do I want to grow?

After we go over this slide, we will need to have break out rooms opened. Break out rooms will be randomly assigned. Open enough rooms to have 4-5 participants per room.

Slides 6-7 5:15-5:30

https://webnew.ped.state.nm.us/wp-content/uploads/2020/07/Kindergarten-New-Mexico-Mathematics-Instructional-Scope.pdf

(pg. 5 Culturally and Linguistically Responsive Instruction)

Link to Full Document of Instruction/Overview:

https://drive.google.com/file/d/1yt58aIFNp8qj7bnymRNYep\_yTaCpsRIW/view?usp=sharing

Link to just section on Culturally and Linguistically Responsive Instruction: <a href="https://drive.google.com/file/d/17x3dVmpR-KpVzGCtm7kTpN9OZ3k5c\_K2/view?usp=sharing">https://drive.google.com/file/d/17x3dVmpR-KpVzGCtm7kTpN9OZ3k5c\_K2/view?usp=sharing</a>

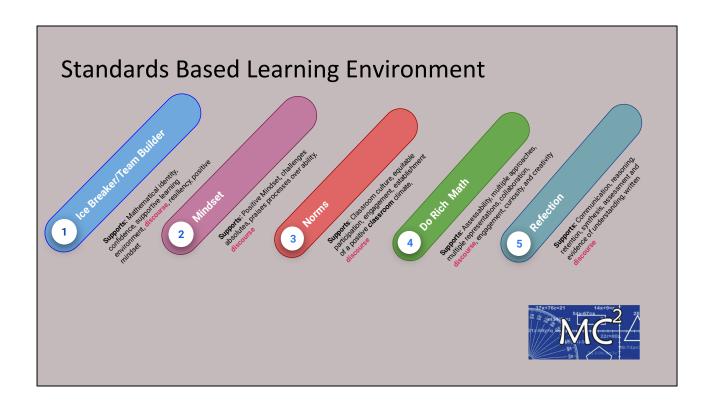
- 1. Read Culturally and Linguistically Responsive Instruction Section in Overview on Instructional Scope.
- 2. Go into breakout rooms to discuss thoughts with the **prompt**: 5 minutes
  - a. What aligns with what you already know?
  - b. Where do I want to grow [within my own understanding of

a. culturally and linguistically diverse practices] this year?

Read Culturally and Linguistically Responsive Instruction section in the Overview Instructions of Instructional Scope documents from NMPED.

#### In breakout rooms discuss:

- What aligns with what you already know?
- Where do I want to grow [within my own understanding of culturally and linguistically diverse practices] this year?



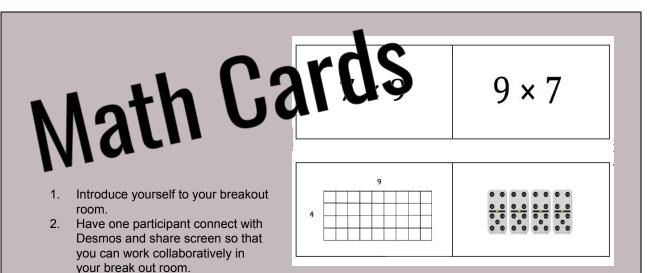
## Michelle 5:30-5:32

Ask participants to give a thumbs up, I know SBLE.

Put this on your radar. Remembering SBLE: Don't let go of good practices. We are still grounded in what makes good math classrooms from what you read, and your teaching and learning experiences. **Connect back to reading we just did!**[Ground]

As classroom teachers, you build this space every year or with every class. In the traditional face to face classroom, this routine is your first five days but online and in the ways you are adapting you may find that it takes longer.

And then we go do math!



## 3. Be mindful of the norms established.

4. Be ready to share out!

#### **DESMOS LINK TO ACTIVITY:**

https://student.desmos.com/join/fp8tab

#### **Erika**

After we go over this slide, we will need to have break out rooms opened. We can use the same rooms as before.

Break out rooms will be randomly assigned. Open enough rooms to have 4-5 participants per room.

Send to breakout rooms no later than 5:35 Breakout Rooms 5:35-5:50 1 minute waning

Link to Jo Boaler:

https://www.youcubed.org/tasks/math-cards/

Set 1, Set 2

**Task Instructions** 

#### **DESMOS LINK TO ACTIVITY:**

https://student.desmos.com/join/fp8tab

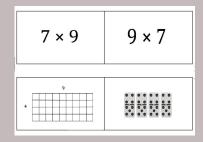
Code: fp8tab

Note: You do not have to sign in to Desmos to play. Just choose the continue without signing in option and enter a name (Breakout Room 7 for example).

- 1. The aim of the activity is to match cards with the same numerical answer, shown through different representations.
- 2. Lay all the cards down on a table and take turns picking them and explain why you are choosing those cards. Pick as many as they find with the same answer (shown through any representation).

For example 9 and 4 can be shown with an area model, sets of objects such as dominoes, and the number sentence. When you match the cards you should explain how you know that the different cards are equivalent.

This activity encourages an understanding of multiplication as well as rehearsal of math facts.



- 1. What was engaging for you? (and how do we replicate that with our kids?)
- 2. What is the important mathematics students are engaging in with this?

## Michelle 5:50-5:55

#### Whole Group

#### Summary:

- What was engaging for you? (and how do we replicate that with our kids?)
- 2. What is the important mathematics students are engaging in with this? Achieve the Core do the Mathematics.

How does this connect with reentry? (next slide)

Consider: Call out by Breakout Room (Spinner or Dice) (Depending on time have 3 minimum share out)

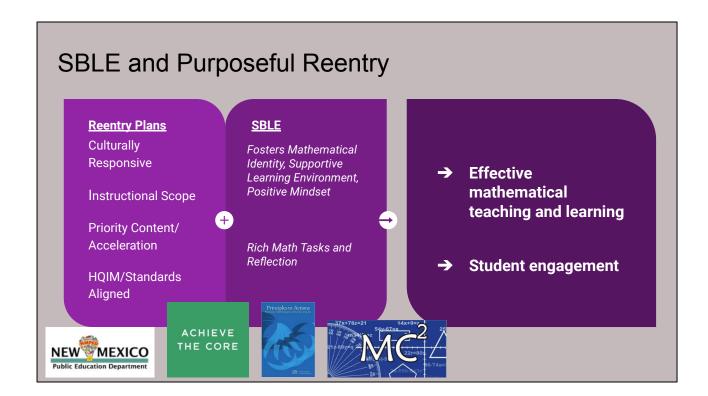
#### Timely alternative:

Type into the chat something that worked really well while working together on this task.

Transparency: We've experienced an invitation to math and then a math task together and we talked about what worked well for working together. If this was a classroom, fully online or face to face, this would be the start to our

would be a smaller piece of a larger structure which purposefully has students engaging in tasks to develop the math learning environment.

This routine is a part of a routine and structure of a Standards Based Learning Environment. So what is a SBLE?



#### Allie

5:55-6:00

From Wested: "Embrace the fact that remote professional learning is not second best to in-person learning, but there are different benefits and limitations, and help your participants shift their mindsets as well."

Where are you seeing connections? What are you excited about? Or, what questions do you still have?

Take one minute to think.

When you are ready, enter your ideas into the chat.

## 5 Purposes of Professional Learning

- Developing Awareness
- Building Knowledge
- Translating New Knowledge into Practice
- Practicing
- □ Reflecting Deeply

# Four Live Web-Events Sessions on Purposeful Reentry

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Instructional Scope for Mathematics (Where to Start):

https://docs.google.com/document/d/1qvJwgji5ZUi1PZjhOubbZPUDWs6nkDRBK0i

0YmOkkb0/edit?usp=sharing

6:00-6:10
Erika and Michelle
Lenses for Learning
Levels of Professional Development
Horsely
5 Purposes of Professional Learning
Share Handout with Links to reentry docs

In order to see substantial change in classroom practice, change agents need to attend to various strategies and purposes for teacher learning. Loucks-Horsley describes five purposes of professional learning:

- (1) Developing awareness for the need to change and benefit of the change. Teachers should be introduced to new content and instructional approaches and engage in thoughtful discussion and inquiry regarding the new ideas.
- (2) Building knowledge provides opportunities for teachers to develop their content knowledge in mathematics (and science) and well as pedagogical content knowledge, or the knowledge to teach the content well (Shulman,1987).
- (3) Translating new knowledge into practice is needed if teachers are to take their new professional learning and draw on their own knowledge base to consider how to implement new practices in the classroom. Strategies to support this transfer may include classroom coaching, designing new math

lessons, modeling of lessons, or mentorship.

- (4) Practicing teaching helps teachers learn new content or pedagogical strategies through purposeful practice in the classroom. This practice may come through analyzing student work, lesson study, or collaborative planning and teaching.
- (5) Reflecting deeply on teaching and learning engages teachers in examining their classroom practice and considering strategies to strengthen and improve. Reflection may occur through strategies such as analyzing student work, video reflection, or lesson study.

This is the why, the research behind our professional learning together. And the reason we want to have a learning partner.

# Thank you!



Link to MC<sup>2</sup> Website: https://mc2.nmsu.edu/

Link to MC<sup>2</sup> Professional Learning: https://mc2.nmsu.edu/pd/

Link to MC<sup>2</sup> Contact Page: https://mc2.nmsu.edu/about-us/contact-us/

#### How to Register for Web Sessions

- Register in learning pairs through the MC<sup>2</sup> website
- Registration will open the **Thursday** before the event on the MC<sup>2</sup> website
- Events will start at 5:00 pm unless otherwise noted on the registration

#### Mark your calendars:

- o August 26
- September 9
- o September 23

We encourage feedback Plus/delta in the chat, private or public.