

AM-ME Research Group Meeting



Adapted Measure of Math Engagement Research Group,
December 12

Child Trends.

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Agenda & objectives

- Team Building
- Explore November Qualitative Data
- Math Identity Activity
- Factor Activity

Welcome



Norms and Expectations

Review norms and expectations.



Updates on Dissemination

Let's discuss updates on dissemination!

Dissemination Updates

- We've applied to present our Year 1 and Year 2 findings at the **district professional learning day for secondary teachers** on January 21st.
 - *Would Research Group members be interested in presenting?*
- We're applying to the American Educational Research Association (AERA) **Research Engagement and Development with Youth (READY)** Program! If accepted, the student researchers can attend READY in Denver, Colorado from April 23 - 27 to present their work and attend sessions and events.

Group Norms

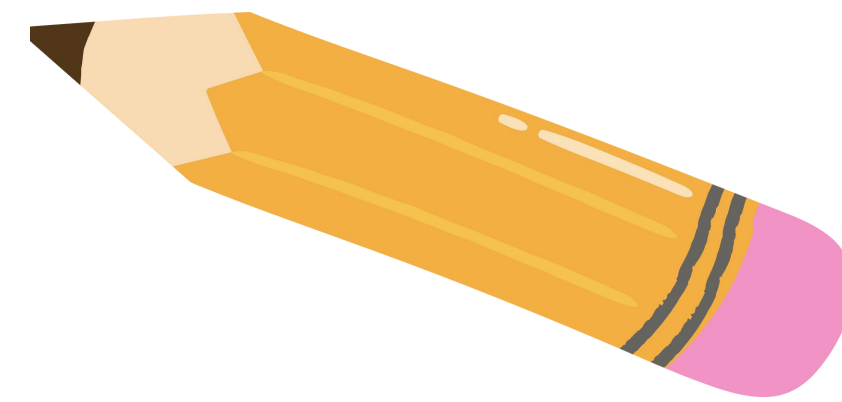


Team Building



Telestrations

- We'll break into two groups. Members of each group should arrange themselves in a circular shape.
- Write your name on the front of your booklet.
- Sketch round: Everyone will have one minute to sketch the secret word from Sammy and Alyssa.
- Pass sketches: Everyone passes their sketches clockwise to the next person.
- Guess round: Everyone will have one minute to look at the sketch and write their guess of what is drawn on the next sheet in the booklet.
- Pass guesses: Everyone will pass their booklets clockwise again.
- Sketch round: Everyone will look at the guess and begin to sketch that on the next page.
- Repeat: Continue this process until you get your booklet back.
- Flip through your book and enjoy the chaos that occurred!



November Qualitative Data Summaries



November Data

Let's review what we wanted to learn, who we spoke to, what data collection looked like, and summaries of the data collected from teachers and students in November.

Fall 2024 Data Collection

- In our October meeting we coded transcripts and made meaning of data. That helped us identify topics we wanted to learn more about from students and teachers.
- We took what you wanted to learn more about and created questions to ask teachers and students to learn more about the following:
 - Classroom climate
 - Teacher-student relationships
 - Effective instruction
 - Classroom behavior
- We also wanted to learn more about how identities impact math engagement. We reworked the activity RG students did in August with the identity flowers to better understand how students see their identities impacting their engagement.

Fall 2024 Data Collection

Student Focus Groups

- First answered questions on Post-it notes about classroom climate, classroom behavior, teacher-student relationships, and effective instruction.
- Then walked around to review answers from other students and discussed as a group.
- Finally, thought about their identities and answered questions on Post-it notes and had discussion about how their identities impact their engagement in math.

Teacher Interviews

- First answered questions about classroom climate, teacher-student relationships, and effective instruction.
- Then also answered questions about students' identities, how they might impact engagement in math class, and how they support diverse learners as teachers.

Fall 2024 Data Collection

Interviews

- **4 math teachers**
- Lasted between **25 and 30 minutes** .
- Took place online after school in November 2024.
- Participants each received a \$50 gift card for their time.

Focus Groups

- **27 students** total (between 4 and 7 students per focus group in 5 focus groups)
 - 59% in middle school, 41% in high school
 - 56% identify as female, 44% as male*
 - 96% like math, 4% don't like math*
- Lasted between **50 and 60 minutes** .
- Took place in middle and high schools during school in November 2024.
- Participants each received a \$50 gift card for their time.

*We could only calculate these percentages from 25 of the 27 students.

Teacher-Student Relationships

This theme refers to the positive and supportive interactions between students and teachers, where teachers show care, provide encouragement, communicate effectively, and build trust.



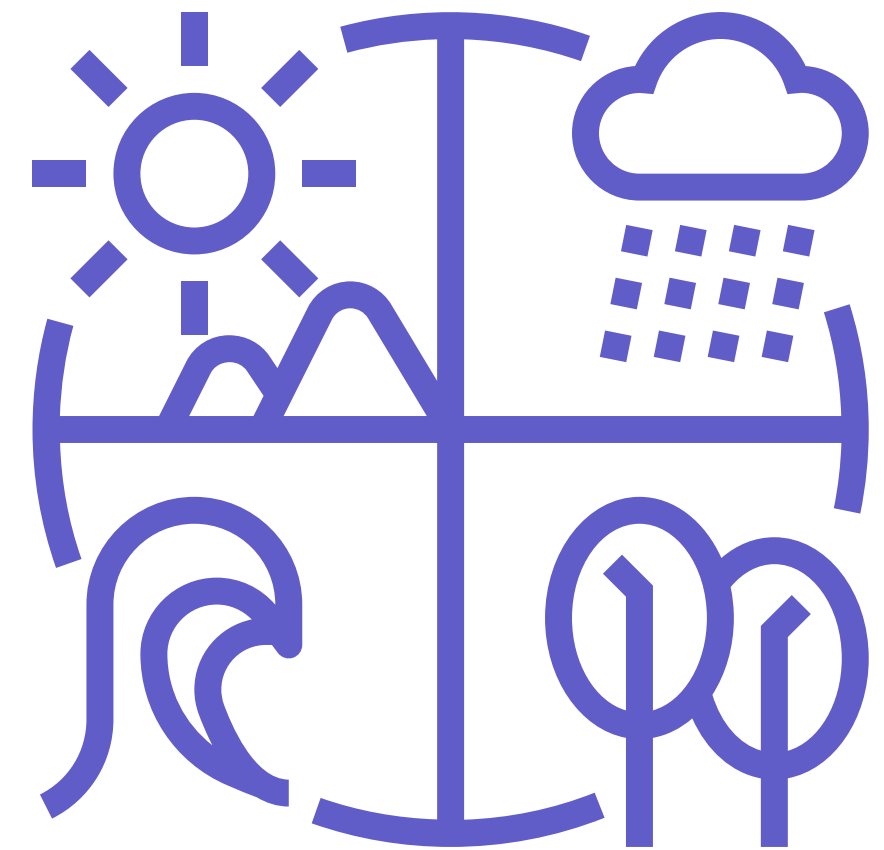
Classroom Behavior

This theme refers to how students actively participate in math class, stay focused, help others, try different strategies to solve problems, and use their background knowledge.



Classroom Climate

This theme refers to the positive, respectful, and supportive environment in a math class.



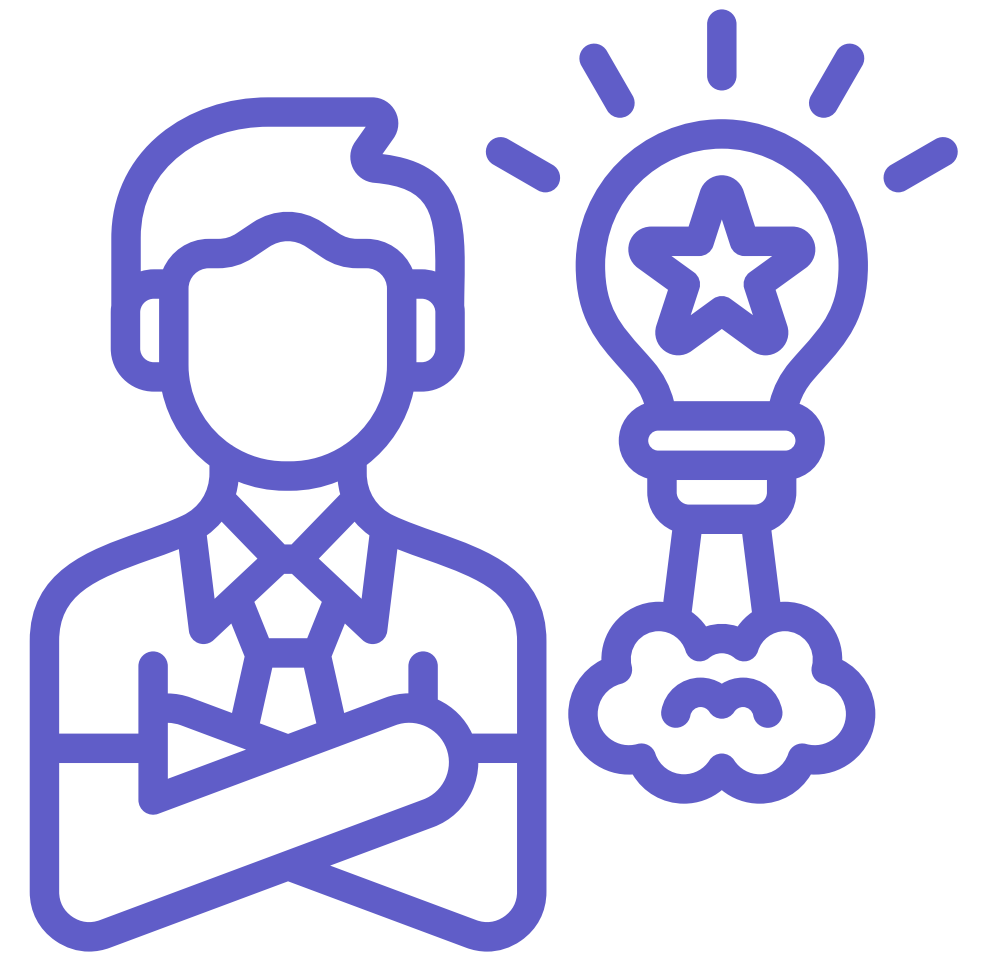
Effective Instruction

This theme involves teachers using clear instructions, varied activities, and real-life connections to make math learning interesting and accessible while challenging students at different levels to keep them actively engaged in their learning.



Math Identity

This theme refers to how students see themselves and are seen by others in terms of their ability and potential in math.



Math Identity Activity



Math Identity Activity

- Everyone will get a chance to read a summary of findings about math identity from the Fall 2024 data collection.
- In your group, split up into pairs. Each pair will have a large Post-it note to jot down survey questions about math identity. You'll have 10 minutes to brainstorm and write. You can:
 - Suggest edits to the current math identity survey questions (they will be on a slide during the activity)
 - Create new questions to better understand how identity impacts math engagement
 - Write down ideas as they come to you. There is no right answer!
- Come back to your group and review each other's Post-it notes. Use stickers to vote for your favorite questions! You'll have 10 minutes to review and vote.
- Identify a representative who will have 5 minutes to share your most voted survey questions with the larger group.

Math Identity Survey Items

- I see myself as someone who can be good at math.
- People see me as someone who can be good at math.
- People who look like me can be good at math.
- People act surprised when I am good at math.
- People do not expect me to be good at math.
- People do not expect me to like math.
- People believe I can take higher-level math courses.

**Reminder: our survey questions have response options that include
“Strongly Agree, Agree, Disagree, Strongly Disagree.”**



Break



Factor Activity



Factor Activity

- Each group will have a space in the room with two giant Post-its with questions to answer about your factor.
- For the first round, you will have 15 minutes to read your summary and answer questions on the giant Post-its as a group.
- After round one is complete, you'll move counter-clockwise to the next factor and spend 10 minutes reading and answering questions. You can build on or emphasize what the previous group wrote.
- After round 2 is complete, you'll rotate one more time and have another 10 minutes with the final factor.
- The questions for you to respond to on giant Post-its are:
 - What stood out to you from the summaries?
 - Write survey questions that capture what you read.
 - Reminder: these questions will have response options that include "Strongly Agree, Agree, Disagree, Strongly Disagree."

Closing



Infographic Coming Soon

We'll follow up over email soon with a link to our infographic on what we've learned!



AM-ME Survey

The survey will be distributed February 18 - 28, 2025!



Next meeting

We plan to have our next meeting in late January/early February.



Exit Ticket

Let us know what you liked and what you hope is changed for the next meeting.

Stay Connected



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Instagram (DM)



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Learn more about the Adapted Measure of Math Engagement at <https://www.childtrends.org/project/adapted-measure-of-math-engagement>.