

Final AM-ME Research Group Meeting



Adapted Measure of Math Engagement Research Group,
May 13



Agenda & objectives

- Team building
- Project updates
- Group brainstorm of project accomplishments
- Individual reflection
- Action brainstorming

Team Building Activity

The Web We Weave

- We'll all stand in a circle and share how each person in this Research Group has contributed to the success of our project.
- Sammy or Alyssa starts with the ball of yarn and says, "I would like to thank (Name) for (accomplishment)."
- After thanking them, wrap the yarn around your finger, and throw the ball to that person. Continue until time runs out or everyone has touched the yarn.
- *Let's appreciate the web we weaved and how strong it is because we've all worked together!*

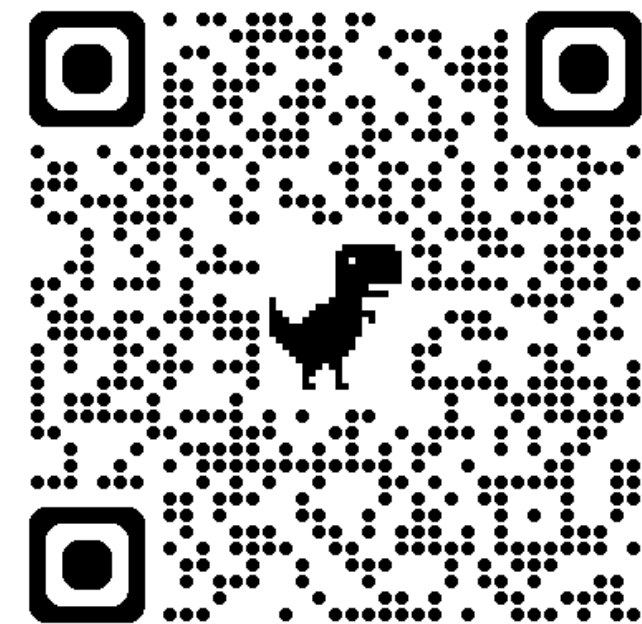
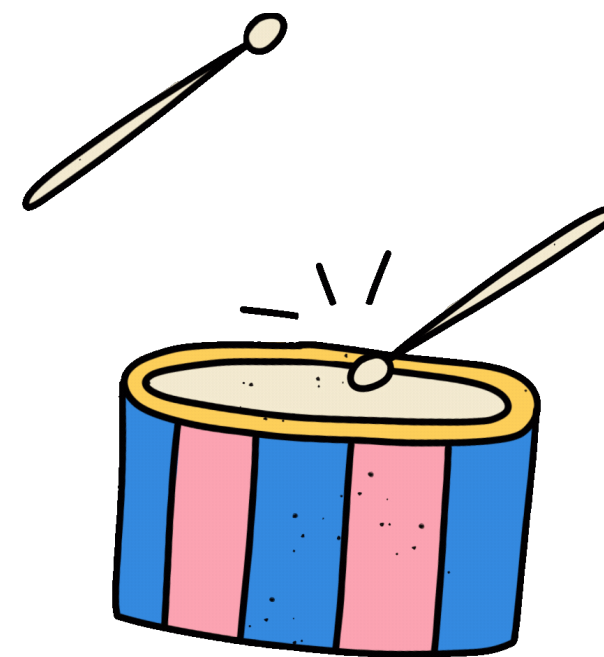


Group Norms



Project updates

- First, we have some bad news. We received a grant cancelation notification for this project on Friday, April 25th.
 - As we shared, we expected this and we're still committed to finishing the project!
- For some good news, we have a couple ideas about the name for the survey and would love your vote!



**Group
brainstorm of
project
accomplishments**



Year 1 Research Process

Fall 2022 

- Secured contract with Bloomington Public Schools.
- A principal from each middle and high school in the district nominated a teacher who then nominated a student. We provided criteria for nomination.
- Onboarded Research Group members.

Spring 2023 

- Conducted first round of qualitative data collection: interviews and focus groups with teachers and students about math engagement.
- Administered the Math and Science Engagement Survey (MSES), a validated measure.
- Began regular meetings with the Research Group, introducing the project, discussing math engagement, and adjusting research goals.

Summer 2023 

- The Research Group reviewed the qualitative and quantitative findings.
- Through iterative conversations, the Research Group designed data collection plans for Fall 2023 and offered insights into gaps in the MSES around engagement.
- Completed initial draft of the Adapted Math Engagement Measures (AM -ME) survey.

Year 2 Research Process

Fall 2023 

- Conducted second round of qualitative data collection: cognitive interviews with students and teachers to evaluate whether AM -ME survey items were understandable and useful.
- The Research Group reviewed the qualitative data and engaged in discussions and activities to adjust the AM -ME using data collected in Fall 2023.
- The Research Group developed the Spring 2024 data collection plan.

Spring 2024 

- Conducted third round of qualitative data collection: focus groups with students about high math engagement.
- Administered the AM -ME.
- Engaged in discussions and activities to adjust the AM -ME using data collected in Spring 2024.

Year 3 Research Process

Fall 2024



- "SRFYEXGF HSYVW VSYRF SHUYCHXZG
FCXC ESFGEXSRİ HSEYWI VSYTWI Kİ
VXYF GRXWCDS YXERCWWS SQ EHQ CXG CRF
KGRXKJ Ê
- "SRXRYGF FWEYVWS RWCRF CEXZKIGWXS
CFMXXI G , U \$ YVRI FCXC ESFGEXGF
CEVWXXI G GRXKG TVSMEXÊ

Spring 2025



- Administered final AM -ME.
- Engaged in discussions and activities to finalize the AM -ME using data collected across the entire project.
- Engaged in action planning discussions to determine how to translate our research into tangible changes in BPS.

Group Brainstorm

- Now that we're reminded of all the work we did, head up to the whiteboard to write down the things we've accomplished together. These can be specific lessons learned in our meetings, research findings, products we developed, and more:
 - Write down **highlights/accomplishments from this project**
 - Write down **things you're excited about related to this project going forward.**

Individual Reflections



Individual Reflections

- Write down answers to the following reflection questions in the handout:
 - How has your understanding of math engagement changed?
 - What have you learned about research?
 - What new skills or knowledge have you gained?
 - What have you learned about yourself as a student/teacher through this project?
 - What sort of changes in your math classroom do you hope to see after having gone through this project?



Break!



Action Brainstorming



March Action Planning Recap

Action steps identified from both groups:

- Encouragement from family, friends, and teachers
- Reasons and excitement to be in class
- Making content and presentations relevant and engaging
- Make time and opportunities for support
- Authentic relationships between students and teachers
- Adults that are not in the classroom helping with math
- Interesting, fun activities

March Action Planning Recap

Detailed Action Plan 1

| Focus | Where | Who | Action Steps | Resources |
|---------------------------------------|---|----------|--|---|
| Reasons and excitement to be in class | Classroom District through math curriculum | Teachers | Student-made seating assignments Create projects or other hands-on activities Avoid doing the same thing every day Choose an engaging, relevant curriculum Have integrity following the curriculum | <p>Money</p> <ul style="list-style-type: none">• Paying for teacher time to choose and develop curriculum• Create/buy relevant instructional materials <p>Time</p> <ul style="list-style-type: none">• Planning time for varied content• PLCs |

March Action Planning Recap

Detailed Action Plan 2

| Focus | Where | Who | Action Steps | Resources |
|--|--------------------------------------|--|---|---|
| <p>Make time and opportunities for support</p> | <p>Classroom School building</p> | <p>Teachers Student voice Principals</p> | <p>Classroom</p> <ul style="list-style-type: none"> • Designate work time • Incorporate partner work • Pencil and paper work is better than Chromebook work <p>Building</p> <ul style="list-style-type: none"> • Shift in schedule/priority for advisory periods • Create common time during the school day to answer questions/provide support • Accountability structures in HS | <p>Time</p> <ul style="list-style-type: none"> • Department meeting time • PLCs in high school meet once per week on block weeks • Dyad partners • Prep time - HS teachers don't have, MS teachers are losing next year <p>District buy-in Admin buy-in</p> |

March Action Planning Recap

Detailed Action Plan 3

| %SEYW | Where | Who | Action Steps | Resources |
|---|---|---------------------------------|---|--|
| Authentic relationships between students and teachers | Classroom District-wide <ul style="list-style-type: none"> • Permission and encouragement • Lessons PLC goal in math | District Teachers Principals | Fun, get to know you days throughout the year, team building days Specific for actions to build relationships - towards beginning and maintain Knowing how to say names Explain two-way street - important in MS Collect student data for this, PD for teachers | Structured time Clear activities Communication District and teacher buy-in Principal support PD stuff |

Small Group Brainstorming

- In small groups, take 20 minutes to discuss and write down responses to the following questions:
 - What could be done with the information collected from this survey?
 - How can teachers be supported (and challenged) to use this survey and the information from it?
 - How can families and students be engaged with the results of the survey?

Large Group Sharing

- When we're all back together, we'll spend about 10 minutes discussing your responses.

Large Group Sharing

- Finally, let's reflect on this question:
 - What is the **one change or impact** you hope will come from the research we've done together?
 - If you want to share an answer, we invite you to do so!

Closing



Certificates and Cards

We have certificates and cards to give to each of you :).



Exit Ticket

Slightly different this time, but we'd love to know more about your experience in this project.

Stay Connected



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Email



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>.