

# Sharing Our Year 1 Findings!



Adapted Measure of Math Engagement Research Group,  
September 25



# Agenda

- Team Building
- Defining Math Engagement
- Brainstorm Dissemination Ideas!

# Today's Objectives

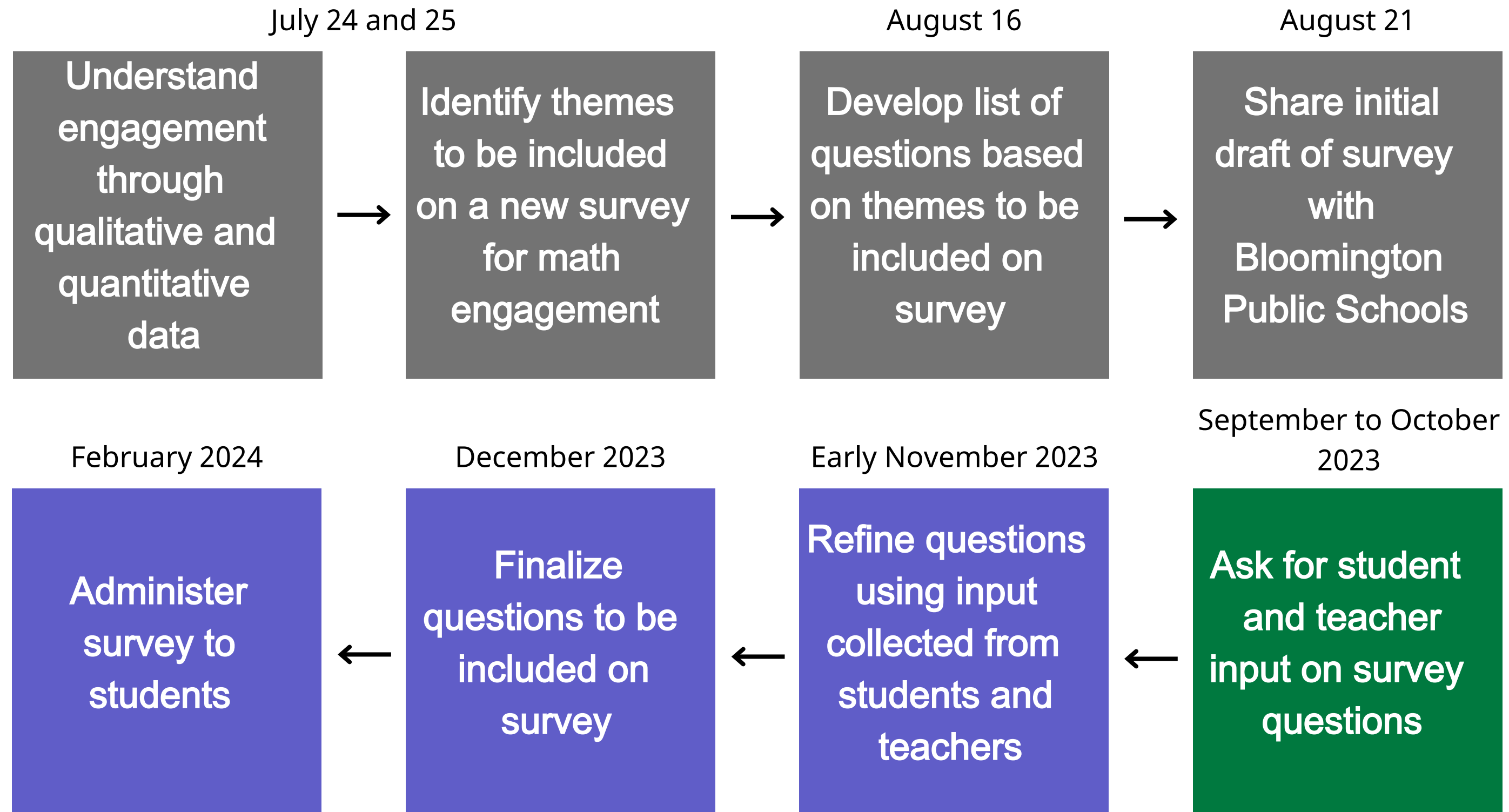
**1**

Discuss our revised categories of math engagement.

**2**

Brainstorm dissemination ideas.

# What will this process look like?



# Engaging in Fun Activities

- In October, we plan to set up to “fun” events for students and teachers to engage in. These events are based on the team building activity we did together in July!
- We will cover the cost of **food** and **non-alcoholic drinks** at the events.
- We are asking that you fill out one of the following surveys to indicate: (1) what you would be most interested in participating in, (2) what day of the week you are most free during October, and (3) what time of the day you are most free during October.

Students

Teachers

# Group Norms



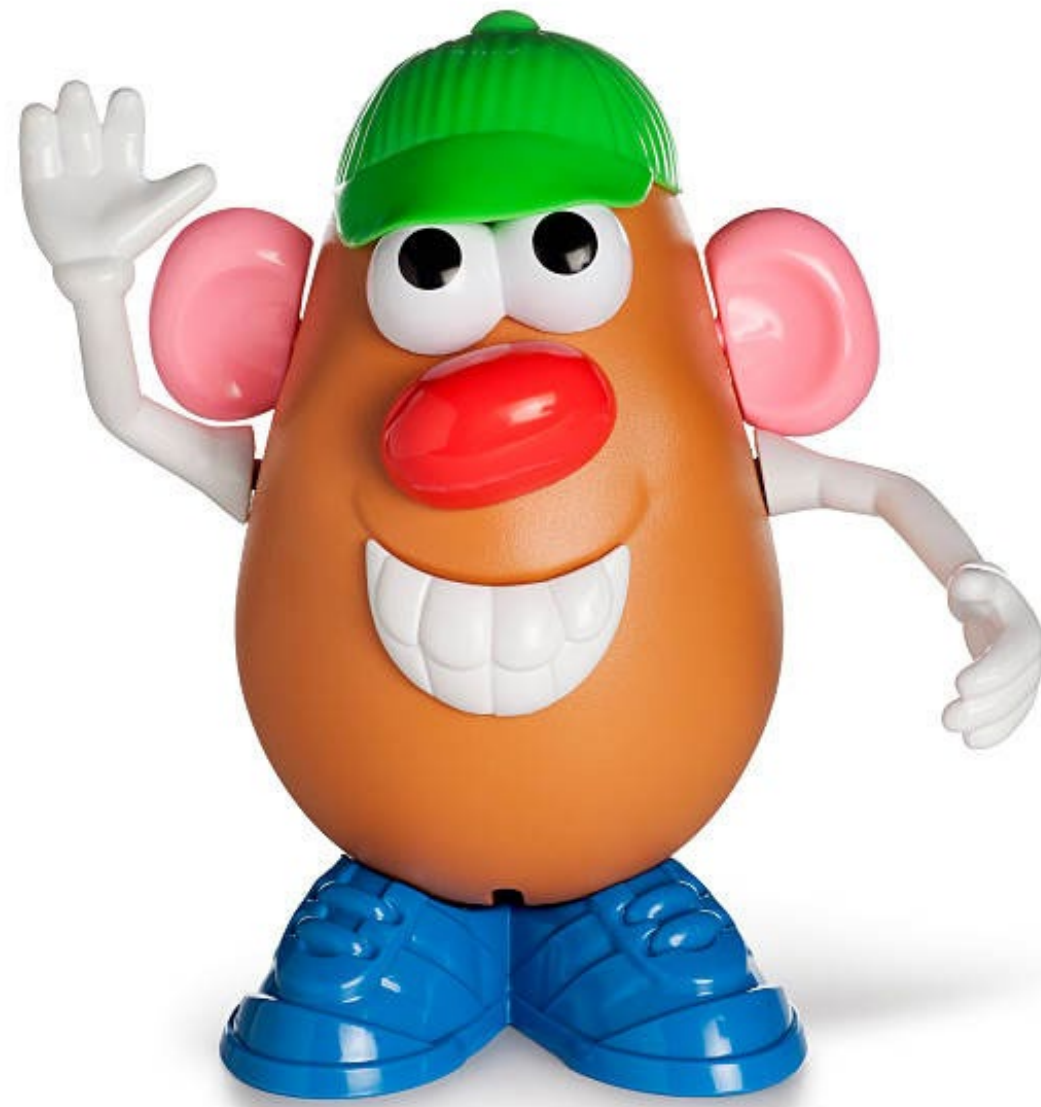
# Team Building



**Get to know each other**

Create space to get to know the members of the AM-ME Research Group.

# Team Building Activity



## Change three things!

We'll break into three teams, and you'll work together to change three things about the appearance of one team member, trying to stump the other teams.

1) Each team find space away from the others so you can make your changes secretly.

3) You'll have 5 minutes to change your three things.

# Discuss Changes to Engagement Categories



## AM-ME homework from July

Thank you to those who completed this homework! Your feedback helped us continue to make improvements to our themes and buckets.



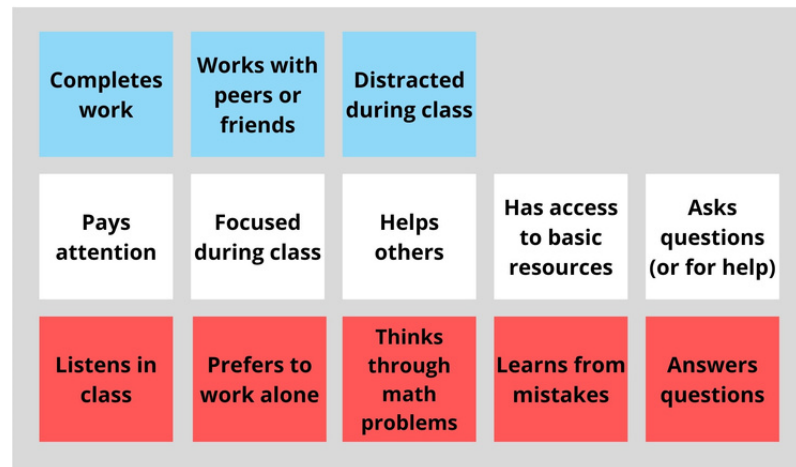
## Our Process

- [Researcher name] read over the homework, summarized it, and suggested action items based on your thoughts.
- The AM - ME researchers had the opportunity to provide comments or ideas.
- [Researcher name] revised the Canva board and marked what is different from the last Canva board we used.

# Where We're Starting From

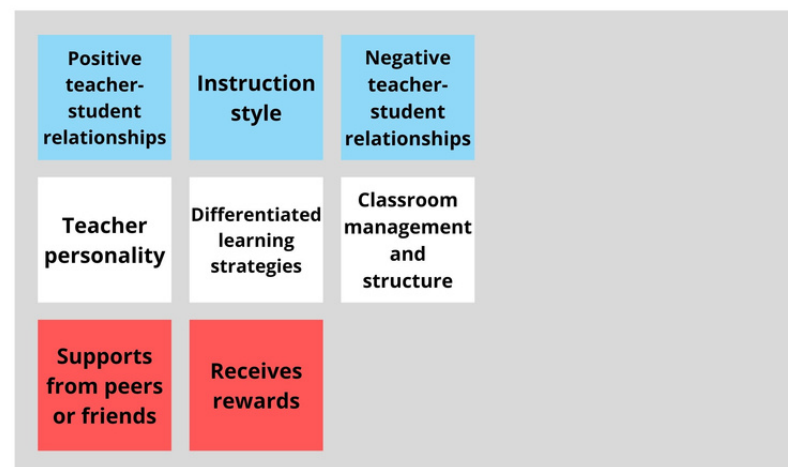
## In Class Engagement

The ways in which students visibly show and teachers encourage engagement. These occur mostly in the classroom, but could also show up in study halls, afterschool programs, or at home when students are learning math. *This form of engagement contains ideas similar to behavioral, cognitive, and social engagement.*



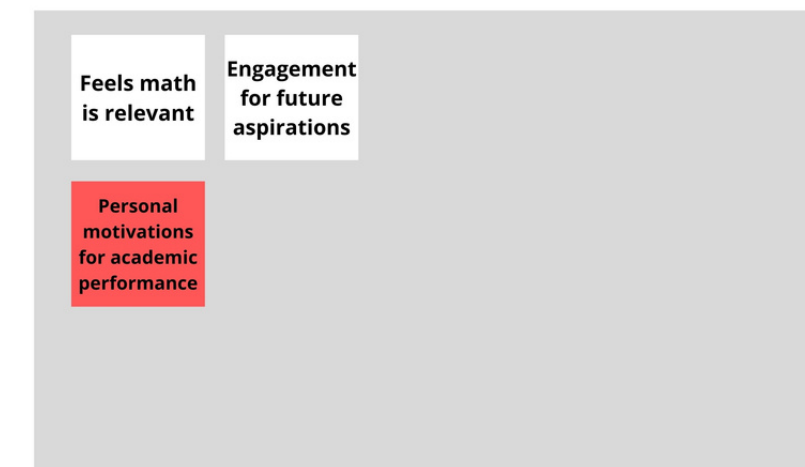
## Classroom Culture

The ways in which classroom instruction, rules, norms, expectations, setting, and relationships shape engagement. These are often created by both students and teachers. *This form of engagement contains several ideas similar to social engagement. It is seen as a new dimension of engagement.*



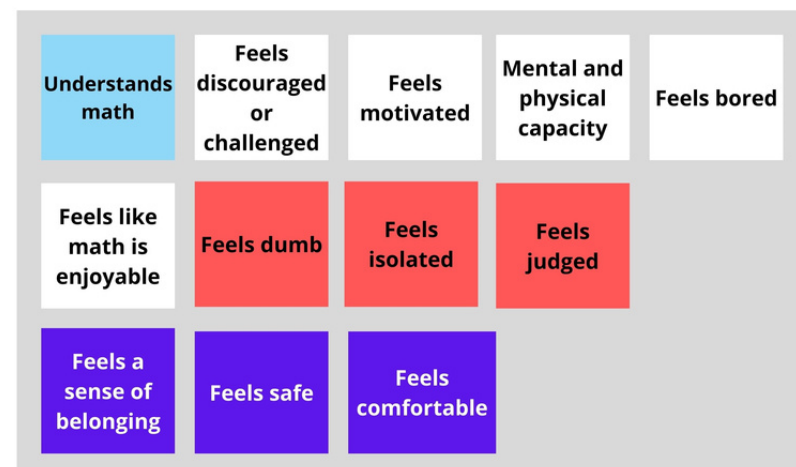
## Future Aspirations

The ways in which students' future hopes and dreams (for example, ideas for success or future careers) shape engagement. While students may develop these independently of teachers, they can also be shaped by teachers. *This form of engagement is seen as a new dimension of engagement.*



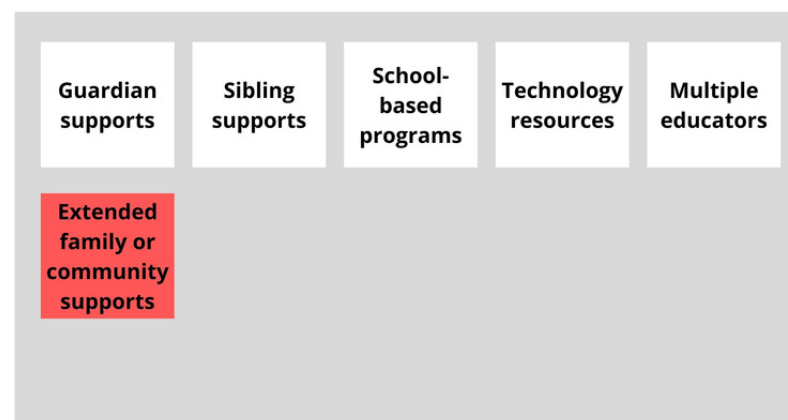
## Feelings

The feelings students have towards math or their math classrooms that shape engagement. While these are held within students, they can be influenced by teachers and peers. *This form of engagement contains ideas similar to emotional engagement.*



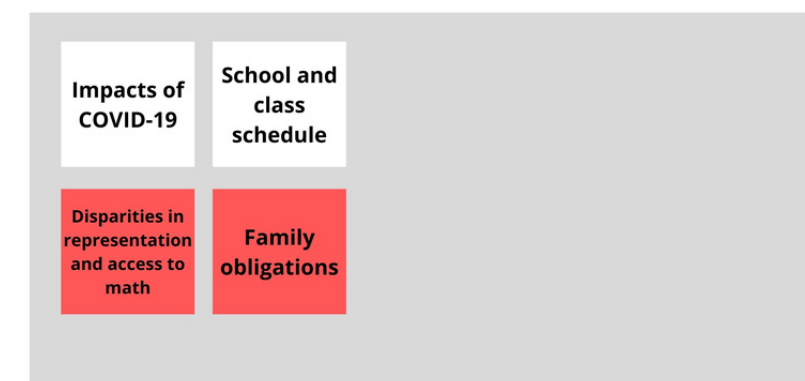
## External Resources

The ways in which external resources (for example, family, programs, or technology) outside of the classroom shape engagement. These resources often support engagement. Students or teachers can choose to use them, if they are available. The availability of these resources is not necessarily controlled by students or teachers. *This form of engagement is seen as a new dimension of engagement.*



## External Factors

The ways in which external factors (for example, school structure or family obligations) outside of the classroom shape engagement. These external factors are not controlled by students or teachers. These are often systemic barriers (for example, practices, events, or decisions that result in unequal access or exclusion for students) to engagement. These external factors often decrease engagement. *This form of engagement is seen as a new dimension of engagement.*



# What We Discovered

- As our themes evolved, the names of our buckets needed to as well.
  - 4 of 6 buckets tentatively now have new names!
- There were lots of ideas on where different themes might belong.
- There are concepts that are potential sources of inspiration for crafting focus groups next year.



# Our Current Version

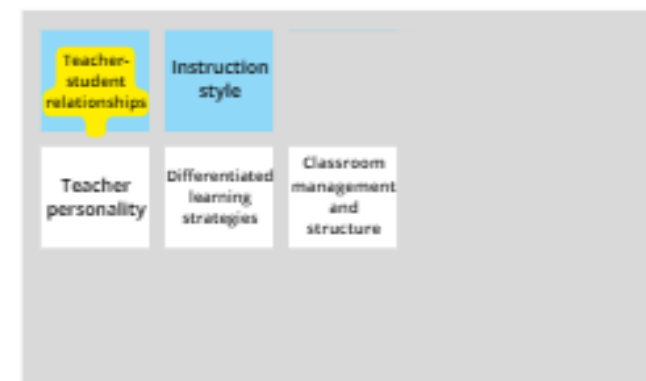
## Visible Engagement

The ways in which students show up and teachers encourage engagement. These occur mostly in the classroom, but could also show up in study halls, afterschool programs, or at home when students are learning math. This form of engagement contains ideas similar to behavioral, cognitive, and social engagement.



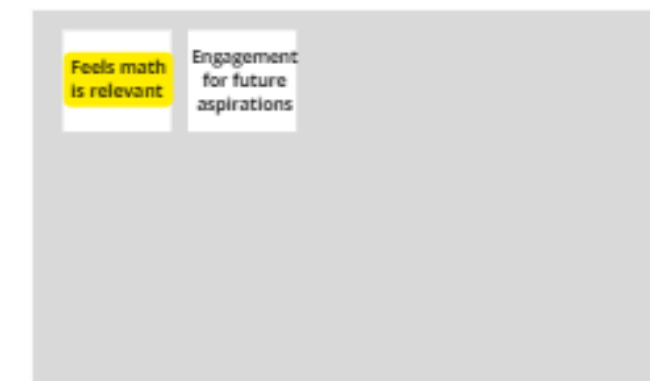
## Classroom Culture

The ways in which classroom instruction, rules, norms, expectations, spirit, setting, and relationships shape engagement. This culture is created by teachers and supported by students. This form of engagement contains several ideas similar to social engagement. It is seen as a new dimension of engagement.



## Connections to the Outside World

The ways in which students' connections to the outside world (for example, ideas for success or future careers) shape engagement. While students may develop these independently of teachers, they can also be shaped by teachers. This form of engagement is seen as a new dimension of engagement.



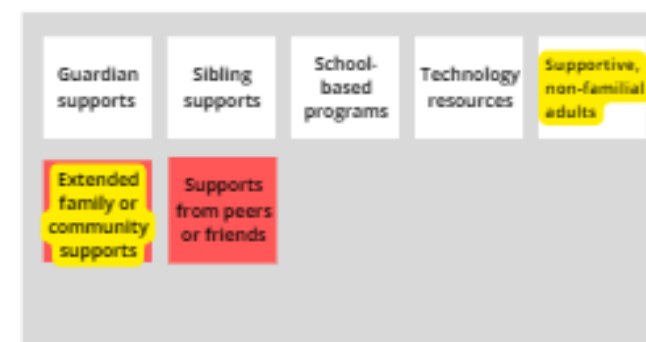
## Feelings

The feelings students have towards math or their math classrooms that shape engagement. While these are held within students, they can be influenced by teachers and peers. This form of engagement contains ideas similar to emotional engagement.



## Outside the Classroom

The ways in which external resources (e.g., family, programs, or technology) outside of the classroom shape engagement. These resources often support engagement and are not distributed equitably. Students or teachers can choose to use them, if they are available. The availability of these resources is not necessarily controlled by students or teachers. This form of engagement is seen as a new dimension of engagement.



## Systemic Factors

The ways in which external factors (for example, school structure or family obligations) outside of the classroom shape engagement. These external factors are not controlled by students or teachers. These are often systemic barriers (for example, practices, events, or decisions that result in unequal access or exclusion for students) to engagement. These external factors often decrease engagement. This is seen as a new dimension of engagement.

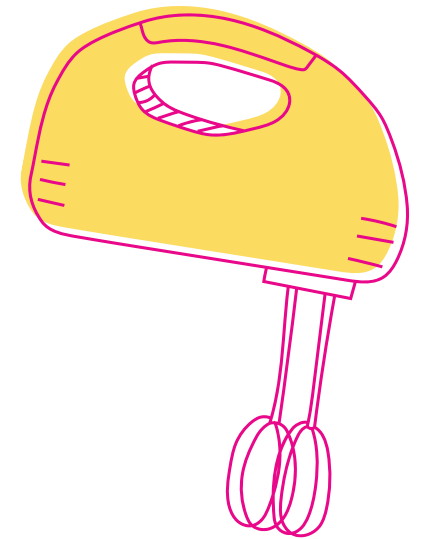


# Mixing Things Up

In three small groups, you'll have a chance to mix things up with our current Canva board of buckets & themes.

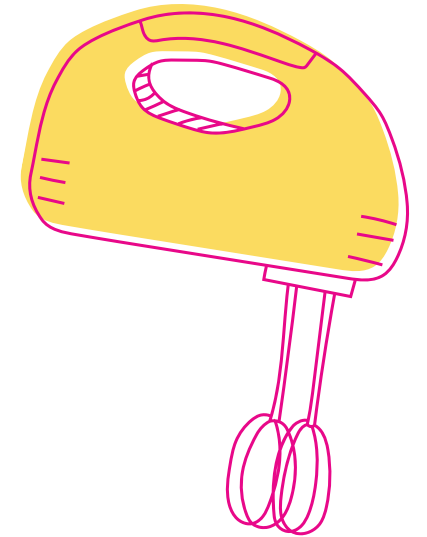
Here are some possibilities:

- Keeping things as they are
- Moving themes to different buckets
- Renaming themes or buckets
- Combining buckets
- Rewriting bucket descriptions
- Eliminating buckets



# Reflection

**Q:** Did you feel like you needed to make a lot of changes to the board to improve it? Why or why not?



**Q:** What change(s) felt really important to make? Why?

**Q:** Did you combine any buckets or themes? If so, which ones & why?





**BREAK**

# Dissemination (aka sharing findings)



## Learning about dissemination

Why, when, what, to whom, and how do we share our project findings?



## Small group discussion

Brainstorm ideas for dissemination.

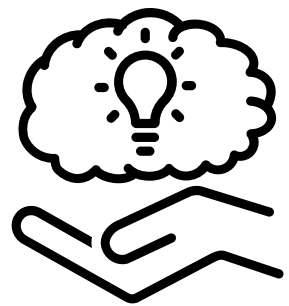
# Why?! When?! What?! Who?! How?!

**Dissemination:** the action or fact of spreading something, especially information, widely.

Basically, sharing our findings and learnings.



# Why?! When?! What?! Who?! How?!



Share with others our understanding of a complicated concept.

- Knowing what we know, what do we want others to know?



Recommend *actionable* changes and improvements.

- Knowing what we know, what changes do we want to make?



Let participants know that "we hear you" and that their voices matter.

- What do we want to share back with the people who contributed their voice to start with?

# Why?! When?! What?! Who?! How?!

**We have from now till December!**

- We want to share findings in a timely manner.
- We want to buffer in some time for approvals (e.g., Bloomington).

# Why?! When?! What?! Who?! How?!

**Share findings that *you* feel should be shared the most.**

- Top 5 ways that teachers can support students' math engagement.
- How do families support Black and Latino students' math engagement?
- Why are student-teacher relationships important for math engagement?
- How are feelings related to math engagement?
- How is (\*insert any theme\*) related to math engagement?
- .....

# Small Group Discussion

15 minutes

**What**

do we  
want to  
share?

# Why?! When?! What?! Who?! How?!

**As important as your content is your audience.**

Who do you want to share the findings with the most?

Who would benefit most?

- Students
- Teachers
- School leaders and staff
- District leaders and staff
- School board
- Community members
- Families
- Researchers
- .....

# Small Group Discussion

10 minutes

**What**

do we  
want to  
share?

**Who**

do we  
want to  
share with?

# Why?! When?! What?! Who?! How?!

Knowing what we want to share and with whom, then we think about *how (in what format)* can we share so that people will most likely receive and take in the information.

- Infographics (including data visualizations)
- Briefs
- Data party
- Blog posts
- Multimedia (audio/ video)
- Roundtables
- Presentations
- Press coverage (op-ed, podcast interview)
- .....

# Why?! When?! What?! Who?!How?!

**How are each of us part of the stories? How do we want our voices to be integrated?**



When two people read the exact same interview transcript, they will have different takeaways based on their unique experiences, knowledge, and ways of looking at things.

- Experiences example: Because Diane felt judged learning math in middle school, Diane really resonates with the students who mentioned "feeling judged" and sees this theme as one of the most important ones.

# Why?! When?! What?! Who?! How?!

**How are each of us part of the stories? How do we want our voices to be integrated?**



When two people read the exact same interview transcript, they will have different takeaways based on their unique experiences, knowledge, and ways of looking at things.

- Experiences example: Because Diane felt judged learning math in middle school, Diane really resonates with the students who mentioned "feeling judged" and sees this theme as one of the most important ones.
- Knowledge example: Because Sammy has done more research on student-teacher relationships than teacher instruction styles, Sammy has more ideas about how student-teacher relationships are related to math engagement, than how teacher instruction style plays a role.

# Why?! When?! What?! Who?!How?!

## How are each of us part of the stories? How do we want our voices to be integrated?



When two people read the exact same interview transcript, they will have different takeaways based on their unique experiences, knowledge, and ways of looking at things.

- Experiences example: Because Diane felt judged learning math in middle school, Diane really resonates with the students who mentioned "feeling judged" and sees this theme as one of the most important ones.
- Knowledge example: Because Sammy has done more research on student-teacher relationships than teacher instruction styles, Sammy have more ideas about how student-teacher relationships is related to math engagement, than how teacher instruction style plays a role.
- Ways of looking at things example: Because Alyssa thinks family is a big reason for why people do what they do, Alyssa is most interested in sharing findings around family support and external resources.

# Why?! When?! What?! Who?!How?!

Based on how you think who you are and how the ways you look at this is influencing the stories you are telling, consider how much and in what ways you want to introduce yourself.



---

I share findings that really speak to my own experiences

I am an outsider, and I only want to report what I see,  
not getting any personal emotions involved

It's important to mention who I am, that I am in a  
Bloomington school, but it does not need to be a big deal

consider writing from a first -person point of view

consider writing from a third -person point of view

consider briefly mentioning who you are in the  
beginning, and add a separate selfintroduction  
paragraph at the very end

# Small Group Discussion

10 minutes

**What**

do we  
want to  
share?

**Who**

do we  
want to  
share with?

**How**

do we  
want to  
share?

**How**

do you want  
*your voices* be  
integrated?

# Dissemination Small Group



## Join a Small Group to Share Findings

We are going to share about the ways in which you can participate in disseminating findings from Year 1.

# Closing



## Feedback for Us

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



## Next Meeting

- Late October (\*online\*): review findings from the students & teachers feedback.
- Mid-November (\*in -person\*): discuss students & teachers feedback to adjust the AM-ME.

# Stay Connected



Diane Hsieh



Email



Instagram (DM)



Samantha Holquist



Email

sholquist @childtrends.org



Instagram (DM)

This project is funded by the National Science Foundation, grant #2200437. Any opinions, findings, and conclusions or recommendations expressed in these materials are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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