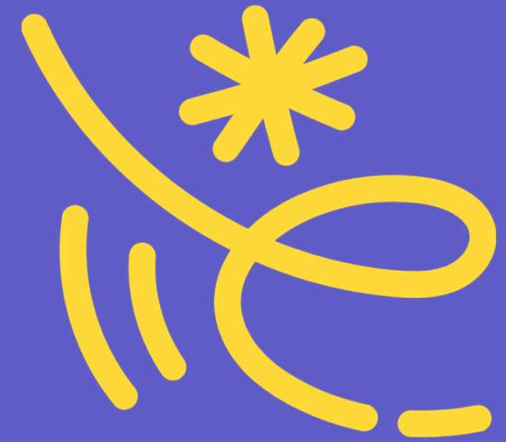


Results of our Final AM-ME Survey



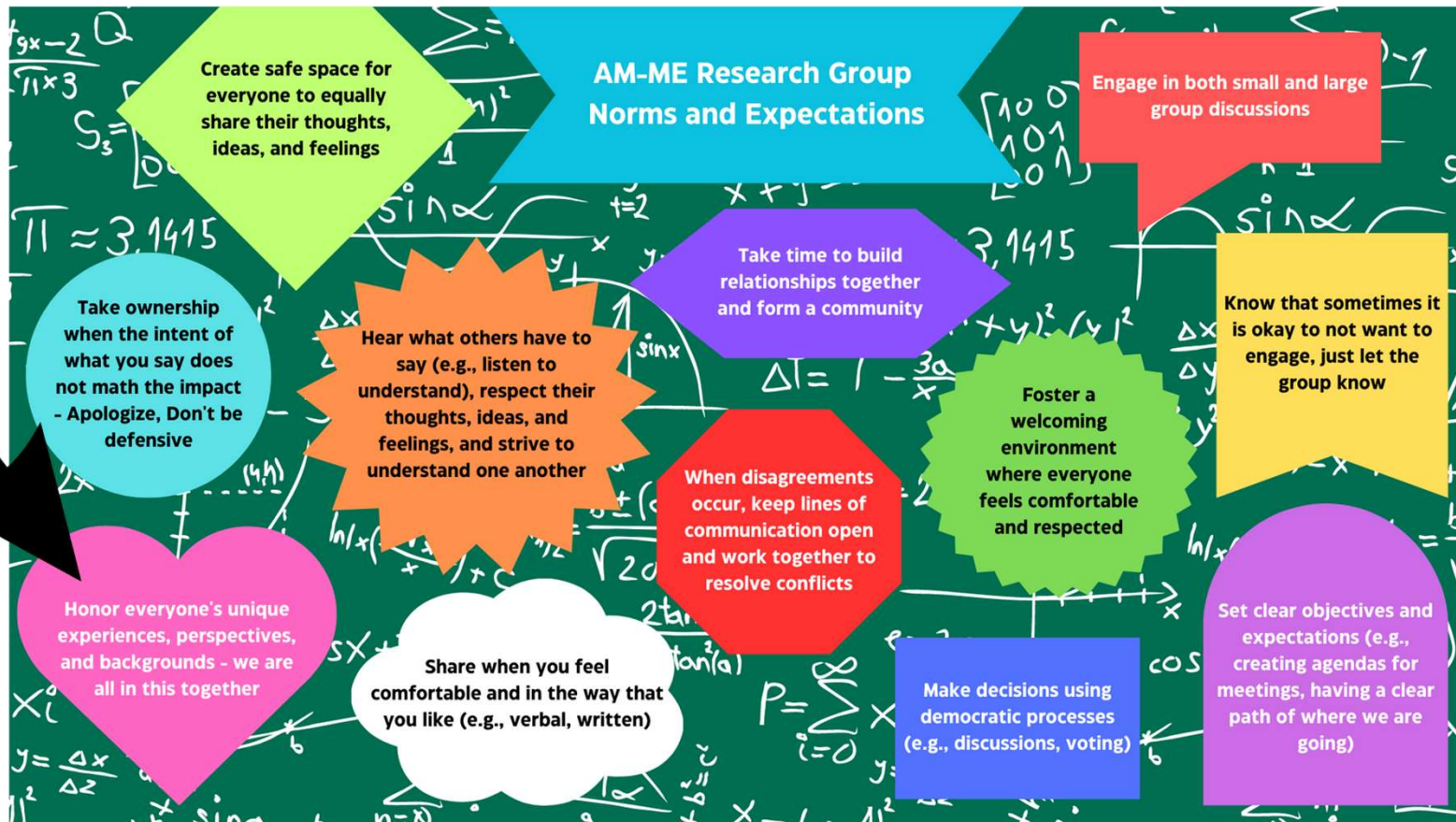
Adapted Measure of Math Engagement Research Group,
April 14



Agenda & objectives

- Team building
- Overview of final AM-ME results
- Data walk
- Naming our survey

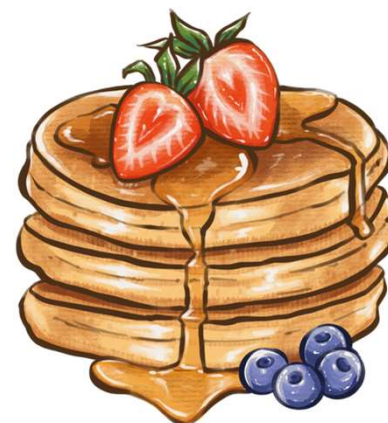
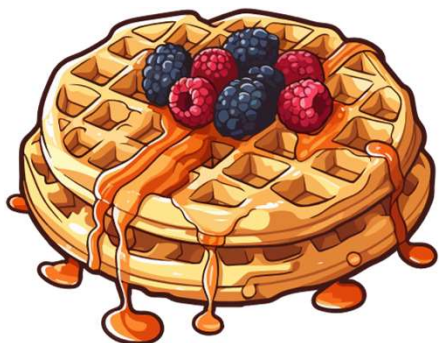
Group Norms



Team Building Activity

Waffles vs. Pancakes

- Step 1: Choose between waffles vs pancakes.
- Step 2: After giving your answer, replace the other one with something else. For example, “I choose pancakes. I get rid of waffles and replace them with puppies.”
- Step 3: Pass it to someone else; the next person has to choose between puppies and pancakes.

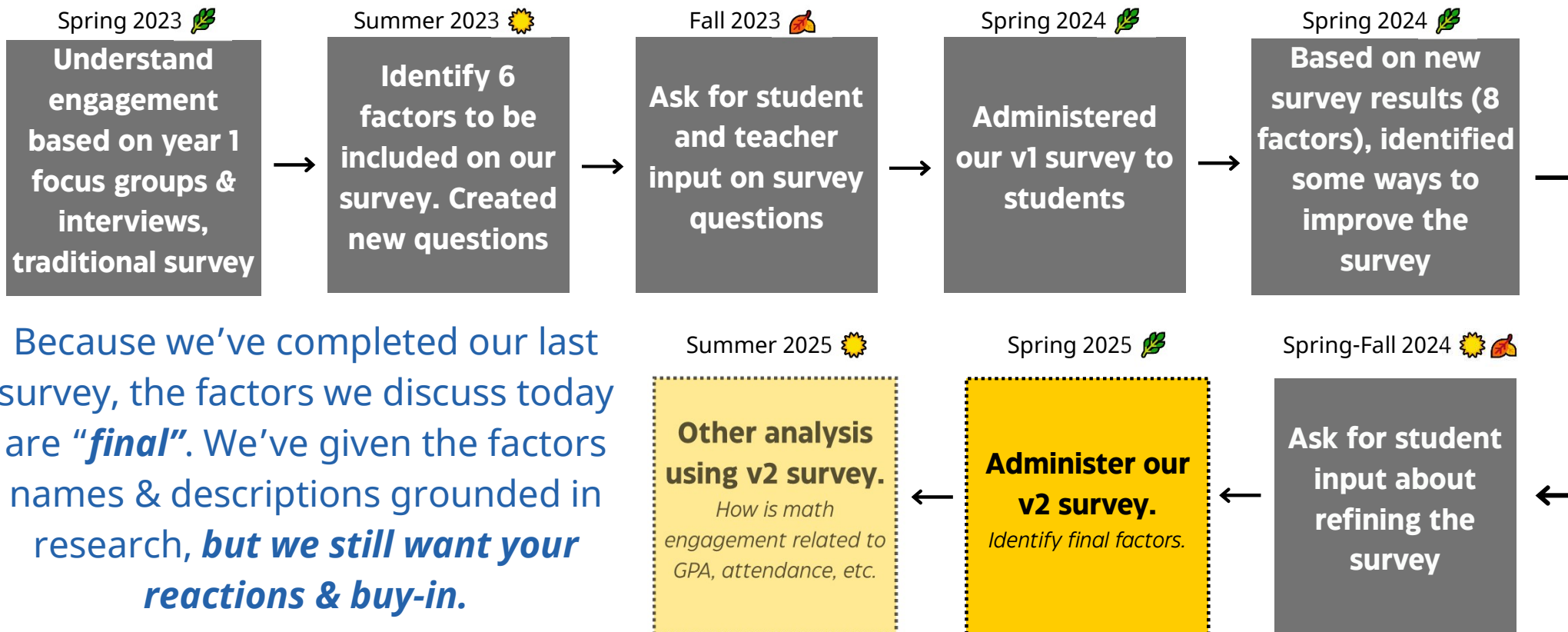


Project update: authorship!

- As we are wrapping up this project, we will be producing many outputs, and we want to make sure you are credited for your contribution.
- Do you still feel good about being named this way? If you don't want to be named, or have any other reservations, let us know. You also don't need to decide right now, Diane will be following up about this in an email, and you can change your mind at any time.

Overview of Final AM-ME Results

Where are we and why are we here?



10 factors to 8 factors

- Our survey included 70 survey questions, and we expected to capture the “10 factors” of math engagement:
 - feelings toward math, math identity, math importance, community support, math resources, classroom climate, student-teacher relationship, effective instruction, classroom behavior, math mastery
- What we found through analysis are actually **eight factors of math engagement!**

Analysis and steps that got us to 8 factors

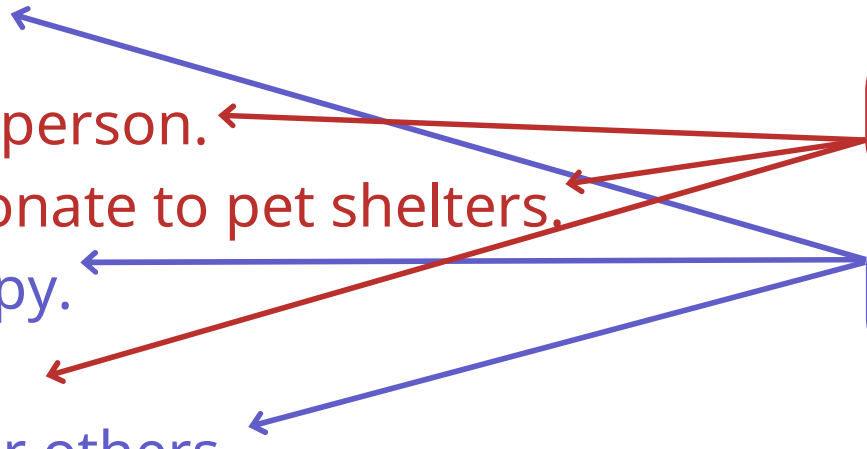
- Like last year, we did *exploratory factor analysis* to understand which survey questions go together.

For example:

- I like to try new recipes.
- I consider myself a dog person.
- I think people should donate to pet shelters.
- Cooking makes me happy.
- I love my pet.
- I enjoy making meals for others.

**Factor: Loves
Animals**

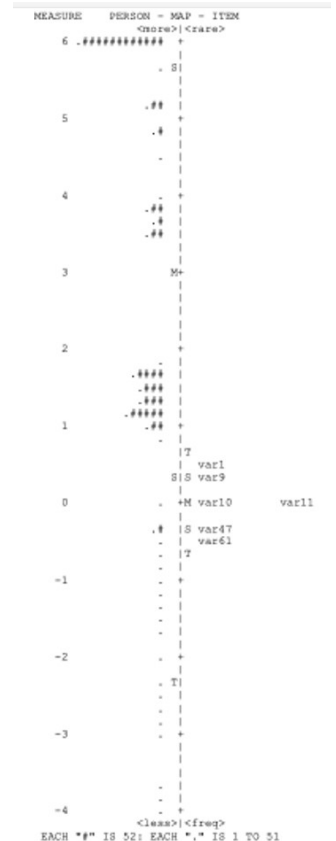
**Factor: Enjoys
Cooking**



Analysis and steps that got us to 8 factors

Once we have the 8 factors, we look at the survey questions within each factor and delete questions:

- that conceptually are too different from others in the factor
- that do not tell us additional information regarding student's math engagement that other questions already capture (think: the *item-person map* that we looked at last year)
- that seem to function differently for between Black, Latino, and White students (think: we also did this *differential item functioning* analysis last year)



Analysis and steps that got us to 8 factors

- We tried to delete as many questions as possible (to keep the survey as short as possible), while making sure that each factor has at least 3 questions.
- Finally, after deleting the survey questions that we think could be deleted, we ran *confirmatory factor analysis* to make sure that the 8-factor structure still is true and has good statistical features.

So, what are the eight factors?

- Humanizing Math
- Community Resources for Learning Math
- Growth Mindset for Math
- Positive Math Identity
- Belonging in Math Class
- Math Utility
- Quality Teaching
- Math Learning Behaviors

Data Walk, Part 1



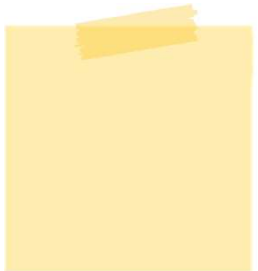
Data Walk, Part 1

- There are four stations, each is a final factor from our survey. At your **first two stations**, please spend **10 minutes at each station**:

- React to the factor title/name and description.

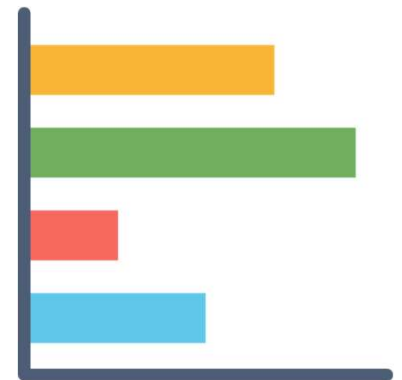


- If you like the factor title & description, put a happy face sticker next to it meaning it's good to go!
- If you don't particularly like the factor title & description, put a Post-it note next to it and write either: what about the factor name & description doesn't resonate with you or your idea to improve the name and description.



Data Walk, Part 1

- Carefully **read and reflect on the survey results.** For example, how did students respond to the different questions in this factor? Did students of different racial/ethnic backgrounds respond differently or similarly?
 - In the “important results to highlight” section of the giant Post-it note, **write two things about the results that you think are most important to share.** We’ll use your opinion here to decide what goes into our final infographic.



Data Walk, Part 1

- At your next **two stations**, please **spend 5 minutes at each** to do the following:
 - React to the factor title/name and description.
 - Carefully read and reflect on the survey results, as well as what people wrote as the two important results to highlight.
 - Among the two written, **each person puts a happy face sticker by the one that you agree with most.**





Break!



Data Walk, Part 2



Data Walk, Part 2

- There are four stations, each is a final factor from our survey. At your **first two stations**, please spend **10 minutes at each station**:

- React to the factor title/name and description.

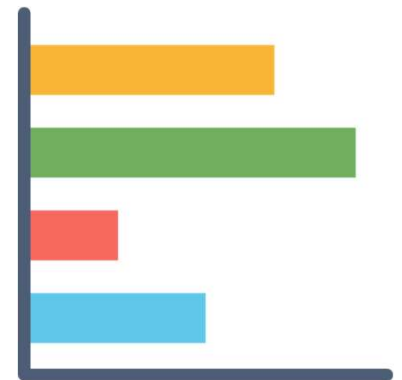


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- If you don't particularly like the factor title & description, put a Post-it note next to it and write either: what about the factor name & description doesn't resonate with you or your idea to improve the name and description.



Data Walk, Part 2

- Carefully **read and reflect on the survey results**. For example, how did students respond to the different questions in this factor? Did students of different racial/ethnic backgrounds respond differently or similarly?
 - In the “important results to highlight” section of the giant Post-it note, **write two things about the results that you think are most important to share**. We’ll use your opinion here to decide what goes into our final infographic.



Data Walk, Part 2

- At your next **two stations**, please **spend 5 minutes at each** to do the following:
 - React to the factor title/name and description.
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 - Among the two written, **each person puts a happy face sticker by the one that you agree with most.**



Name our survey

What do we want to call our survey???

- In two small groups , we'll brainstorm some names for our survey.

There are no right or wrong answers, be creative!



What do we want to call our survey???

- For the first 5 minutes, come up with as many ideas as you could to describe the fact that our survey is about the many aspects of math engagement
 - e.g., the *holistic* measure of math engagement
- For the next 5 minutes, come up with as many ideas as you could to describe the fact that our survey is specifically designed to take into account Black and Latino students' experiences
 - e.g., the *adapted* survey of math engagement

Closing

Exit Ticket

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

Next Meeting (*in-person!*)

- Next large-group meetings: April 30th or a mid-May celebration
 - What date works best for everyone?
 - What time works best for everyone? 5:30 pm?

Stay Connected



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Email



Instagram (DM)



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Email

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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>.