

AM-ME Research Group Meeting Agenda

August Team Meeting

August 16, 2023

1:00 to 4:00pm (CST)

Location: *[a meeting room in the school district's office]*

Remote option: *[zoom link]*

Meeting Objectives:

- Begin to define math engagement for the AM-ME research group.
- Begin to create the initial AM-ME survey.
- Discuss how we will gather student and teacher input on the initial AM-ME.

Pre-work:

- Finish the survey Individual feedback to the emergent theme groupings (linked in Analyze, Year 1 quantitative results group meaning making meeting (July 2023).
- Bring your Chromebook or Laptop, if you have one!

- **Meeting Documents**

- Slides
- Norms and Expectations
- DRAFT AM-ME Research Group Engagement Categories
- Defining Math Engagement Activity
- Creating the initial AM-ME Activity
- Survey to express interest in joining the Gathering Feedback Small Group
- Exit Ticket

Time	Item & Notes
15 minutes	<p>Welcome <i>Facilitated by:</i> Samantha Holquist <i>Timekeeper:</i> Diane Hsieh</p> <ul style="list-style-type: none"> • Introductions of new people • Note that we recognize 3-hour meetings are too long. All future meetings will be a maximum of 2 hours. • Reflection on the pre-work.

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>.

Adapted Measure of Math Engagement

	<ul style="list-style-type: none"> • Go over the project timeline. • Review of norms and expectations.
<p>20 minutes</p>	<p>Team Building Activity <i>Facilitated by:</i> Alyssa Scott <i>Team notes taken by:</i> Samantha Holquist <i>Timekeeper:</i> Diane Hsieh</p> <p>As a warm up for our next activity, we want to gauge how each of you feel about all the categories. Similar to our June icebreaker, you'll be asked to move as if you're on a scale to show how important you think each of the six categories are and answer a get-to-know you question with someone near you.</p> <p>As a reminder the six categories are:</p> <ul style="list-style-type: none"> • In-class engagement • Classroom culture • Future aspirations • Feelings • External resources • External factors
<p>30 minutes</p>	<p>Let's Define Math Engagement for Our Team <i>Facilitated by:</i> Samantha Holquist <i>Timekeeper:</i> Diane Hsieh</p> <p>We have talked a lot about math engagement! We know how students and their teachers talk about math engagement. However, we have not defined it.</p> <p>Today, we are going to begin to define what we mean by math engagement. The purpose of this activity is to help us define math engagement as a team using what we have learned so far.</p> <ul style="list-style-type: none"> • We will begin by reviewing the DRAFT AM-ME Research Group Engagement Categories from the last meeting and provide an example of how to complete the activity. • We will then divide into 2 groups: Students [facilitated by Sammy] and Teachers [facilitated by Alyssa] • Using the Defining Math Engagement activity sheet, we will have 20 minutes to begin defining math engagement for your group. • Start by writing down examples of math engagement. • Next, write down examples of math DISengagement. • Then, draw what math engagement looks like to you. • Finally, write down definitions for math engagement. • <i>If you get stuck, review the DRAFT AM-ME Research Group Engagement Categories to reflect on all the different ways in which students and teachers talk about math engagement.</i> <p>We will take the information shared on the student and teacher activity sheets to create a</p>

	<p>common definition of math engagement for our team. We will share this definition with the group for feedback prior to our next meeting!</p>
<p>10 minutes</p>	<p>Break</p> <ul style="list-style-type: none"> • Stretch, go to the bathroom, grab more snacks.
<p>10 minutes</p>	<p>Let's Start to Create the Initial AM-ME, Part 1 <i>Facilitated by: Diane Hsieh</i> <i>Timekeeper: Alyssa Scott</i></p> <ul style="list-style-type: none"> • Why do we want a new survey of math engagement? <ul style="list-style-type: none"> ○ The “old survey” (the one with 38 questions that we did last time as homework) is how researchers typically measure how engaged a student is. From talking to Bloomington students and teachers, however, we know that the survey is missing a few important things about engagement, for example, <ul style="list-style-type: none"> ▪ Bloomington teachers talked about having <i>basic resources</i> as an important part of engagement, but the “old survey” asked nothing about basic resources, so we need to add questions about that. ▪ Bloomington students talked about ‘feeling judged’ as a barrier to engagement, but the “old survey” asked nothing about being judged, so we need to add questions about that. ▪ In our last meeting, we broke into small groups and went through each of the questions on the “old survey” one by one. Y’all had great ideas to make the questions better, so we’ll make those changes in our new survey. • Some general guidelines for creating the new survey... <ul style="list-style-type: none"> ○ Survey length: <ul style="list-style-type: none"> ▪ We want a survey that can be completed within 15 minutes, otherwise students will likely not take it, or be upset that it’s too long. ○ Reverse coded: <ul style="list-style-type: none"> ▪ We want some questions that ask about engagement, and some questions that ask about the opposite of engagement. This will help us catch people who say “strongly agree” for all questions. ○ Double barreled questions: <ul style="list-style-type: none"> ▪ In the same questions, we don’t want to ask two or more things that are actually different (for example, “I feel discouraged or challenged in math”). ○ Questions need to be specific enough for the people and place. <ul style="list-style-type: none"> ▪ This survey will be used by Bloomington students and teachers, so we need to ask questions that make sense for Bloomington. ○ Need to cover some variations <ul style="list-style-type: none"> ▪ We want students who are highly engaged in math to answer “strongly agree”, whereas we want students who are not as engaged to answer “strongly disagree”. If they answer the same thing, then we

	<p>have a problem.</p> <ul style="list-style-type: none"> ○ Don't stress too much! Creating a survey is not a simple task, we'll keep working on it, and there will be opportunities to gather more input (Sammy will talk more about this at the end of this meeting)!
<p>30 minutes</p>	<p>Let's Start to Create the Initial AM-ME, Part 2</p> <p>Since the July 24 and 25 meeting, we reviewed all the engagement themes to identify if the "old survey" already had a question related to them. Of the 42 themes, 16 already had questions related to them and 27 did not already have questions related to them.</p> <p>For the 16 themes that already had questions, we used your feedback from July 25 to revise these questions to make them better. For the 27 that did not have questions, we reviewed previous research and the qualitative data to identify questions that are related to the theme. This left us with 97 possible questions across the six AM-ME Research Group Math Engagement Categories.</p> <p>Today, we are going to begin to review and revise these questions to create the initial AM-ME, similar to how we did with the "old survey" on July 25. The purpose of this activity is to create the first draft of the initial AM-ME, or the "new survey." We will continue to refine the initial AM-ME throughout the Fall.</p> <ul style="list-style-type: none"> ● We will begin by providing an example of how to complete the activity. ● We will then divide into three groups: <ul style="list-style-type: none"> ○ In-class engagement + external factors [facilitated by Alyssa] ○ Classroom culture + External resources [facilitated by Diane] ○ Feelings + Future aspirations [facilitated by Sammy] ● Each theme has their corresponding survey question(s), they come from <ul style="list-style-type: none"> ○ The old survey with changes based on your feedback last month. <ul style="list-style-type: none"> ▪ For example, "I enjoy solving hard math problems. " ○ Previous research. <ul style="list-style-type: none"> ▪ For example, "My math teacher listens to my ideas and takes them seriously." ○ The qualitative data (student focus groups, teacher interviews) <ul style="list-style-type: none"> ▪ For example, "My math teacher is patient." ● Share what you think about each theme and its survey questions: <ul style="list-style-type: none"> ○ Survey questions prompts: <ul style="list-style-type: none"> ▪ Is this survey question clear? If not, how can we make the survey questions better? ▪ Should this question be removed? ○ Theme group prompts: <ul style="list-style-type: none"> ▪ How does this theme group help us understand math engagement? ▪ Should this theme group be removed?
<p>10 minutes</p>	<p>Break</p> <ul style="list-style-type: none"> ● Stretch, go to the bathroom, grab more snacks.

<p>30 minutes</p>	<p>Let's Start to Create the Initial AM-ME, Part 2</p> <ul style="list-style-type: none"> • Continue working on the previous activity.
<p>20 minutes</p>	<p>Gathering Input from Students and Teachers on Survey Items <i>Facilitated by:</i> Samantha Holquist <i>Team notes taken by:</i> Diane Hsieh <i>Timekeeper:</i> Alyssa Scott</p> <p>Now that we have survey items, we need to begin making sure that they are understood the same by teachers and students. Therefore, we need to ask for their input.</p> <p>During Fall 2023, we will need to gather input from students and their math teachers. We have enough money to provide 25 students (5 per school) and 10 math teachers (2 per school) with \$50 for their participation. How do we want to collect their input?</p> <ul style="list-style-type: none"> • One-on-one conversations • Group conversations • Electronic feedback forms <p>We also want to invite student and teacher AM-ME Research Group members to participate in the collection of input from students and teachers if you are interested. From September to October 2023, participation would include:</p> <ul style="list-style-type: none"> • One-hour small group meeting to develop an input protocol (i.e., how we are going to collect the input). • One-hour small group meeting to learn how to collect input. • One-hour creating recruitment flyers for gathering input from students and teachers. • Two to five hours collecting input from students and teachers. <p><i>This is entirely optional and could be a fun learning experience!</i> This would be covered in your current responsibilities as part of the AM-ME Research Group. For those who do not opt-in, we will have other activities for them to participate in. If you would like to opt-in, please sign up.</p> <p>All AM-ME Research Group members will be asked to support efforts to recruit students and teachers. We are hoping to gather input by the end of October 2023.</p>
<p>5 minutes</p>	<p>Closing <i>Facilitated by:</i> Diane Hsieh <i>Team notes taken by:</i> Samantha Holquist <i>Timekeeper:</i> Alyssa Scott</p> <ul style="list-style-type: none"> • Next all-team AM-ME Research Group meeting: Maybe September 25 & 26 (Monday & Tuesday) <i>after school</i> • Overview of next steps • Complete the exit ticket

Adapted Measure of Math Engagement

--	--