



# ILLINOIS SCIENCE & TECHNOLOGY COALITION

## EDUCATION

*from the classroom to the real world*

Mentor Matching Engine | 2023-2024

Welcome, New Teachers!



# GOALS AND QUESTIONS

- What/Who is ISTC?
- What is the Mentor Matching Engine?
- Setting up for success!





# MEET THE ISTC EDUCATION TEAM



**Tanvi Dharap**

*(she/they)*

Program Manager  
of Mentorship



**Jackie Navigato**

*(she/her)*

Program Manager  
of STEM  
Experiences



**Becky Goldberg**

*(she/her)*

Director of  
Education



**Jozie Crouch**

*(she/her)*

Community  
Communications  
Coordinator

# ISTC'S MISSION



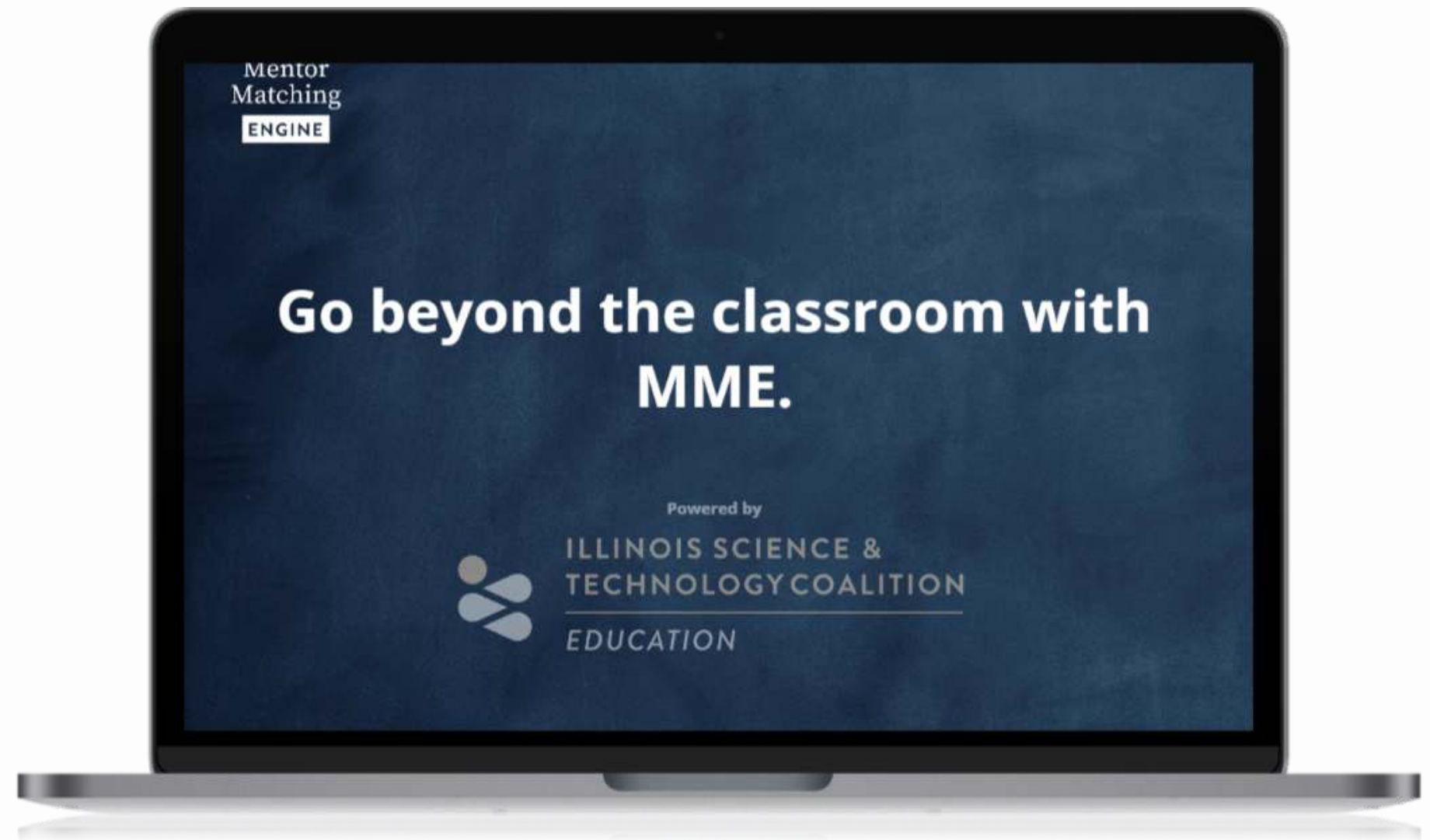
- 1 Strengthen the talent pipeline within Illinois
- 2 Break down barriers to traditional mentoring
- 3 Create access for students and promote student agency



# THE MENTOR MATCHING ENGINE

The Mentor Matching is an online platform that connects students and teachers with universities and companies.

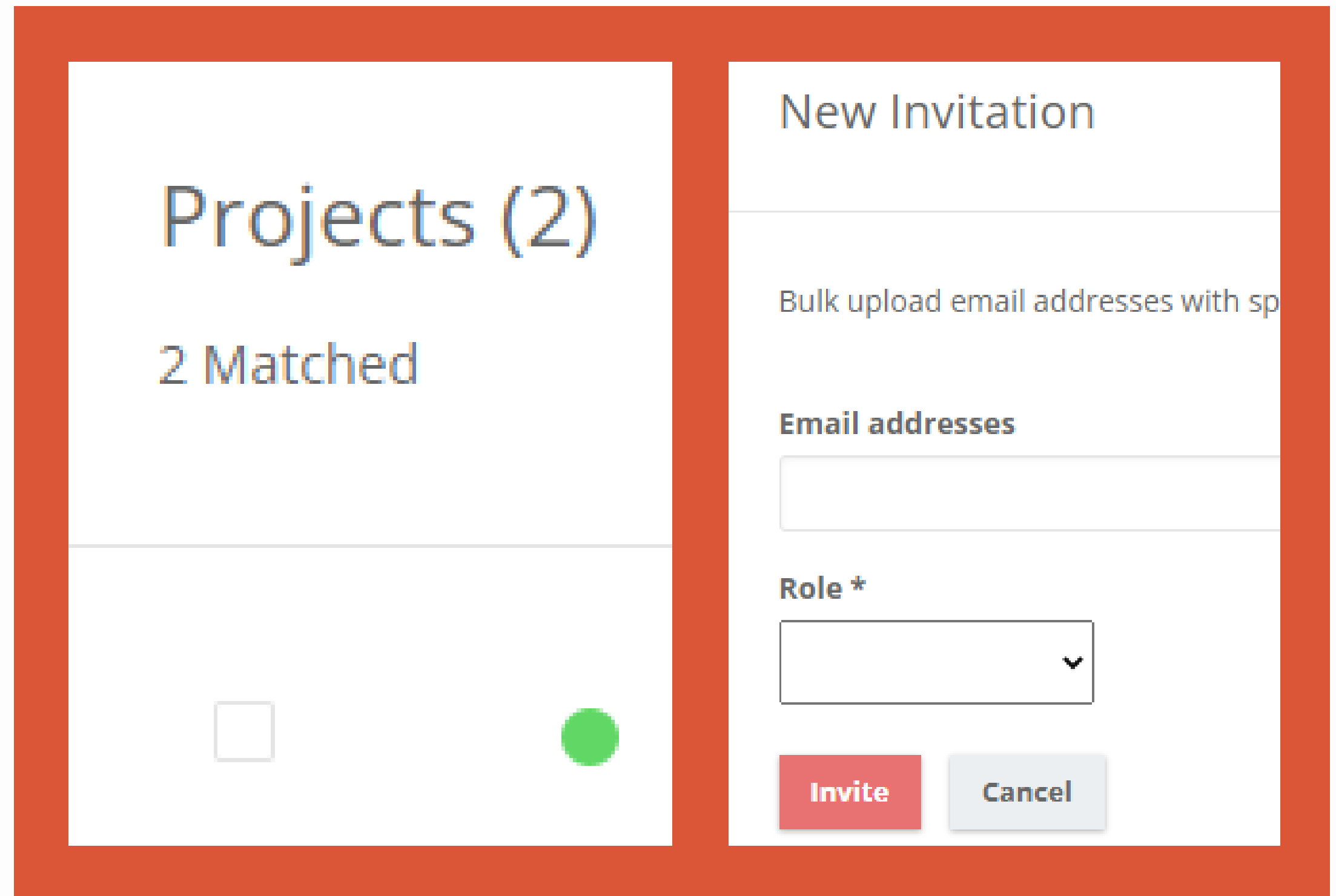
- 1 All MME projects have to be at least 8 weeks long (we recommend budgeting 10 weeks so that all students are matched before the 8 weeks of back and forth begins)
  - **Fall Deadline: October 13th**
  - **Spring Deadline: February 2nd**
- 2 All MME projects require weekly communication (if your class is set up for biweekly communication, make sure your mentor is aware)





# GETTING ON THE MENTOR MATCHING ENGINE

- Onboarding Students
- Student Project Creation
- Teacher Approval
- Notify ISTC
- Requesting Mentors and BYOM
- Monitoring & Tracking Projects



The screenshot displays two panels from the Mentor Matching Engine interface. The left panel, titled "Projects (2)", shows "2 Matched" and includes a visual indicator consisting of a white square and a green circle. The right panel, titled "New Invitation", contains a form for sending invitations. It includes a text input field for "Email addresses" and a dropdown menu for "Role \*". Below the form are two buttons: "Invite" (red) and "Cancel" (grey).

**Projects (2)**  
2 Matched

**New Invitation**

Bulk upload email addresses with sp

**Email addresses**

**Role \***

**Invite** **Cancel**



# TEACHER TOOLKIT

- From Video Demos to communication tools, and everything in between. Don't see what you need? Let us know!
- **Have you created or adapted your own documents/resources to implement MME in the classroom?**

**Email them to me and I will put them in the teacher resources section of the toolkit!**



# MME TEACHER TOOLKIT



# SETTING UP FOR SUCCESS

ISTC is here to guide you in all aspects of MME! From getting students up and ready to selecting a mentor and beyond, please reach out with any and all questions.

Most  
mentors  
ask

1.

**LETTER OF  
COMMITMENT**



2.

**COMMUNICATION**



3.

**ADDITIONAL  
RESOURCES**



# LETTER OF COMMITMENT

- Your school signed up to participate with a specific amount of projects. ISTC uses the Letter of Commitment as a broad guide to begin recruiting mentors.
- As you begin to plan your course, know that you can't exceed this number, but you can fall beneath it.
- Types of project/Subject matter review. Keep us posted as you learn more!





# COMMUNICATION IS KEY



Students and Mentors

Expectation: Weekly communication. If your classroom will be communicating less frequently than that, establish it either in the research details or in the very first post.



Students and Mentors  
(Again!)

Communication schedule: (STEM Fridays, Mentor Mondays). They should tell their mentor when they plan to post.



Teachers and ISTC

Monthly emails: Updates, deadlines, important tasks and awards!



# KEY PLAYERS IN COMMUNICATION



Teacher

Role: Teammates with the mentor!  
Goal: Developing workforce and research skills in the student.



ISTC

Role: Point of contact for any breakdown in the project process.  
Goal: ISTC aims to support all parties through the mentoring process.



Mentor

Role: Primary resource for students.  
Goal: Support research process and create bridge beyond high school.



Student

Role: Students are the primary communicators on MME and the project leads.  
Goal: Build agency.



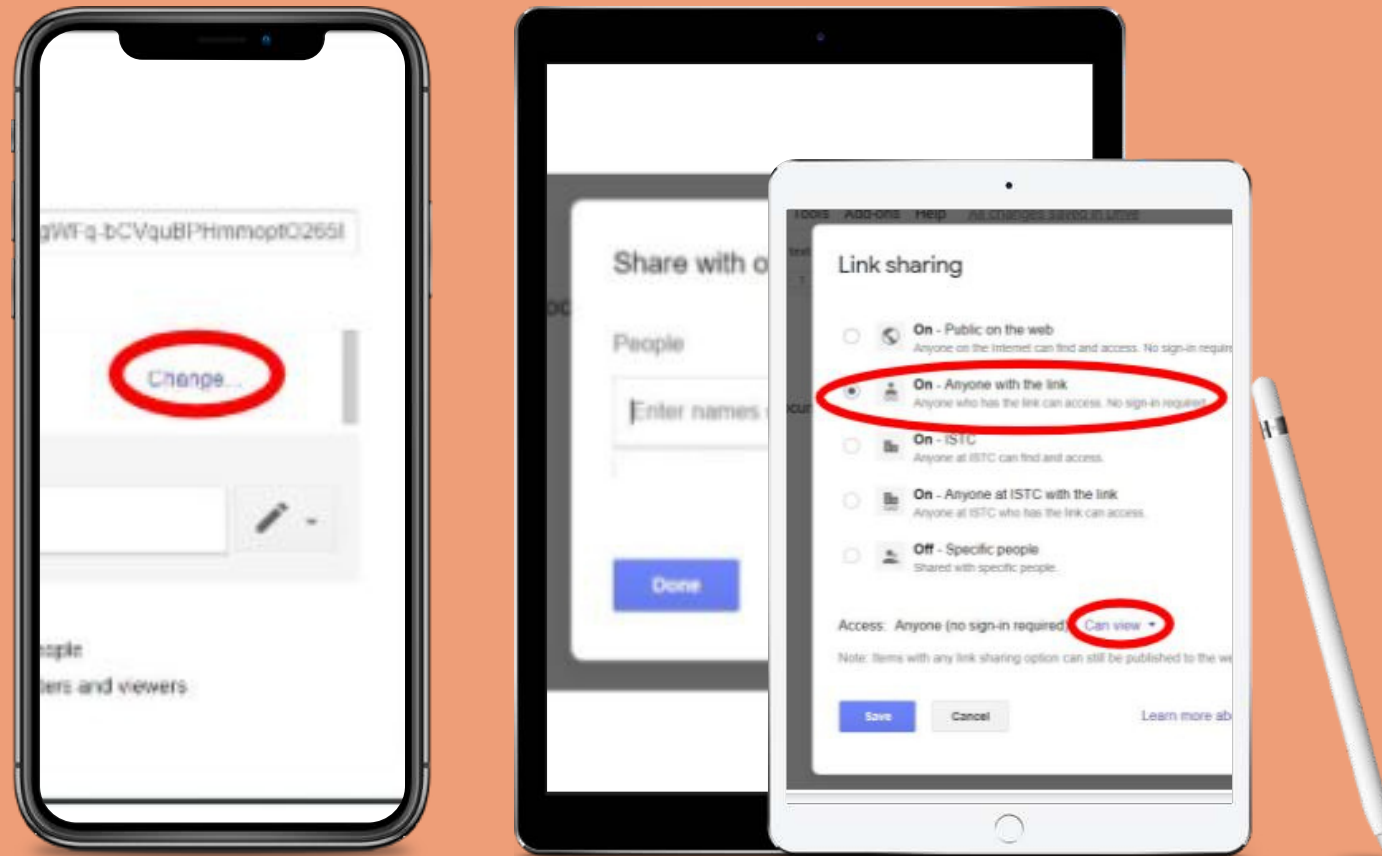
# ISTC CHECK INS AND SUPPORT

ISTC will communicate via monthly emails and supplemental connection points when the following occur:

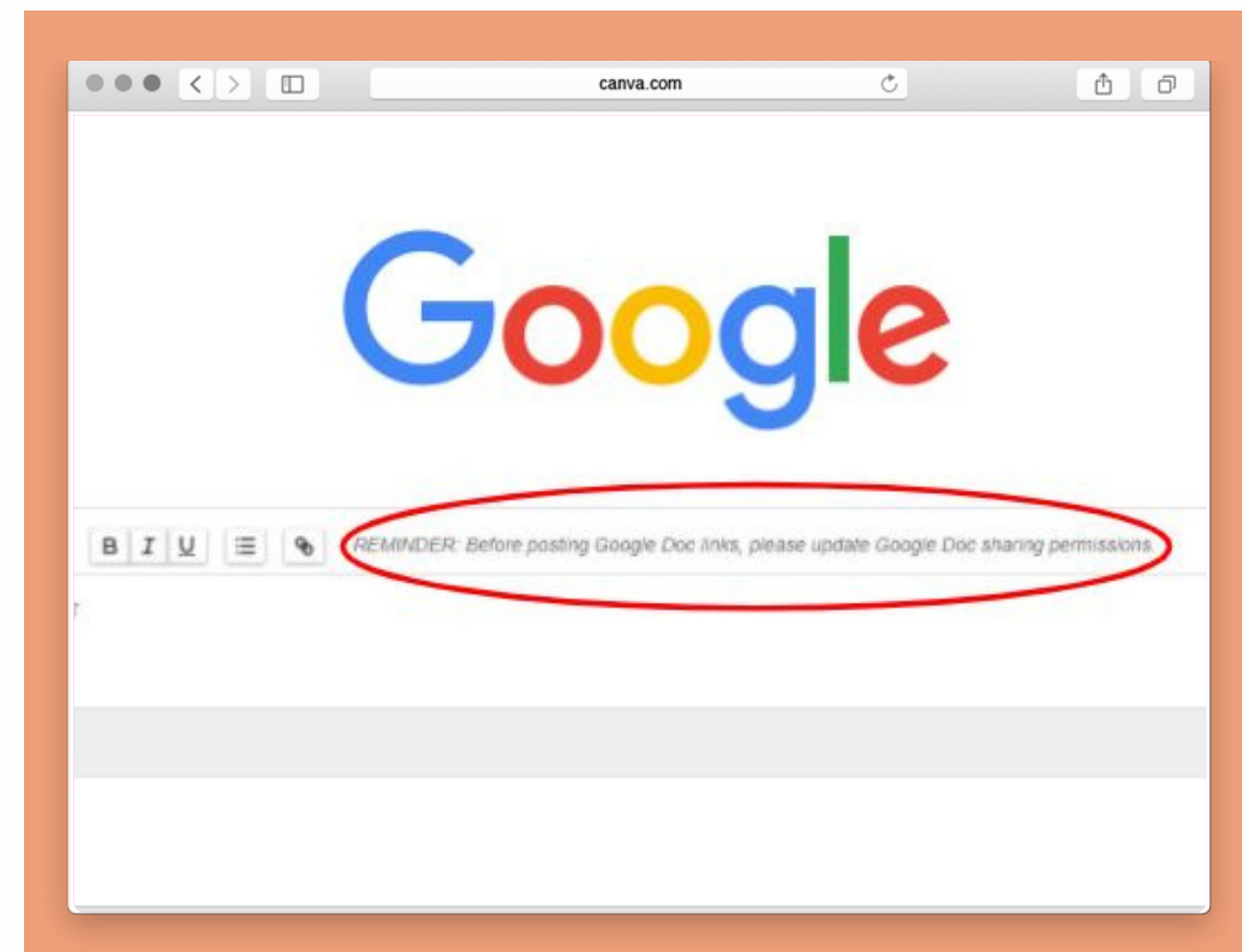
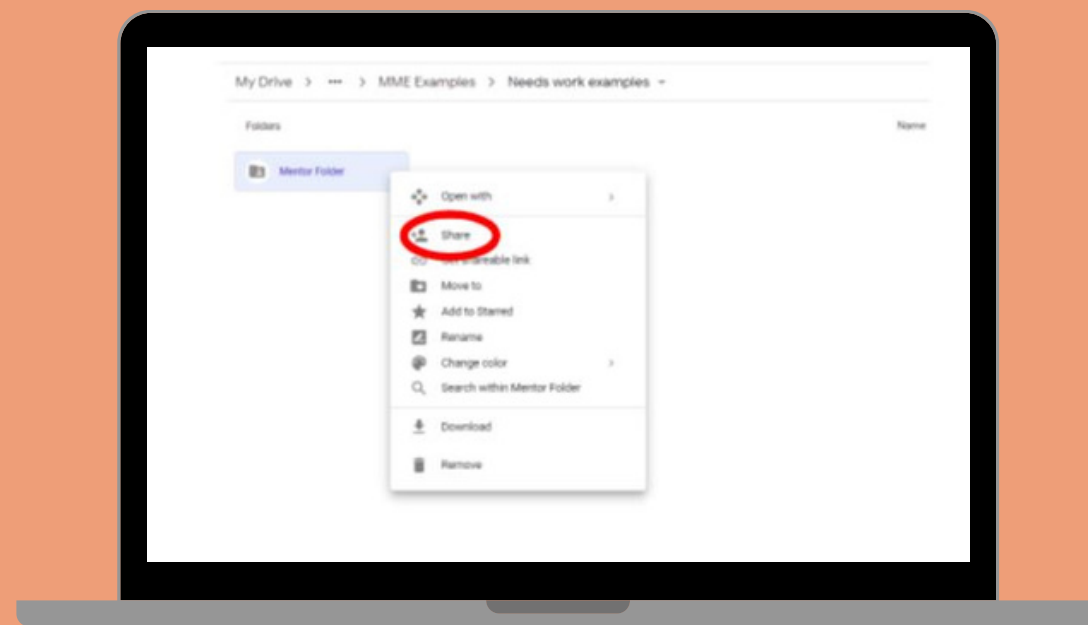
- Necessary Nudge (Break in communication)
- Security Precaution



# GOOGLE LINK SHARING



- When posting links, PLEASE ensure that link sharing settings are set to "Anyone with the link can view".
- (Depending on your school's security guidelines for student accounts, you may need to open link sharing for them)





# TEACHER COMMUNICATION

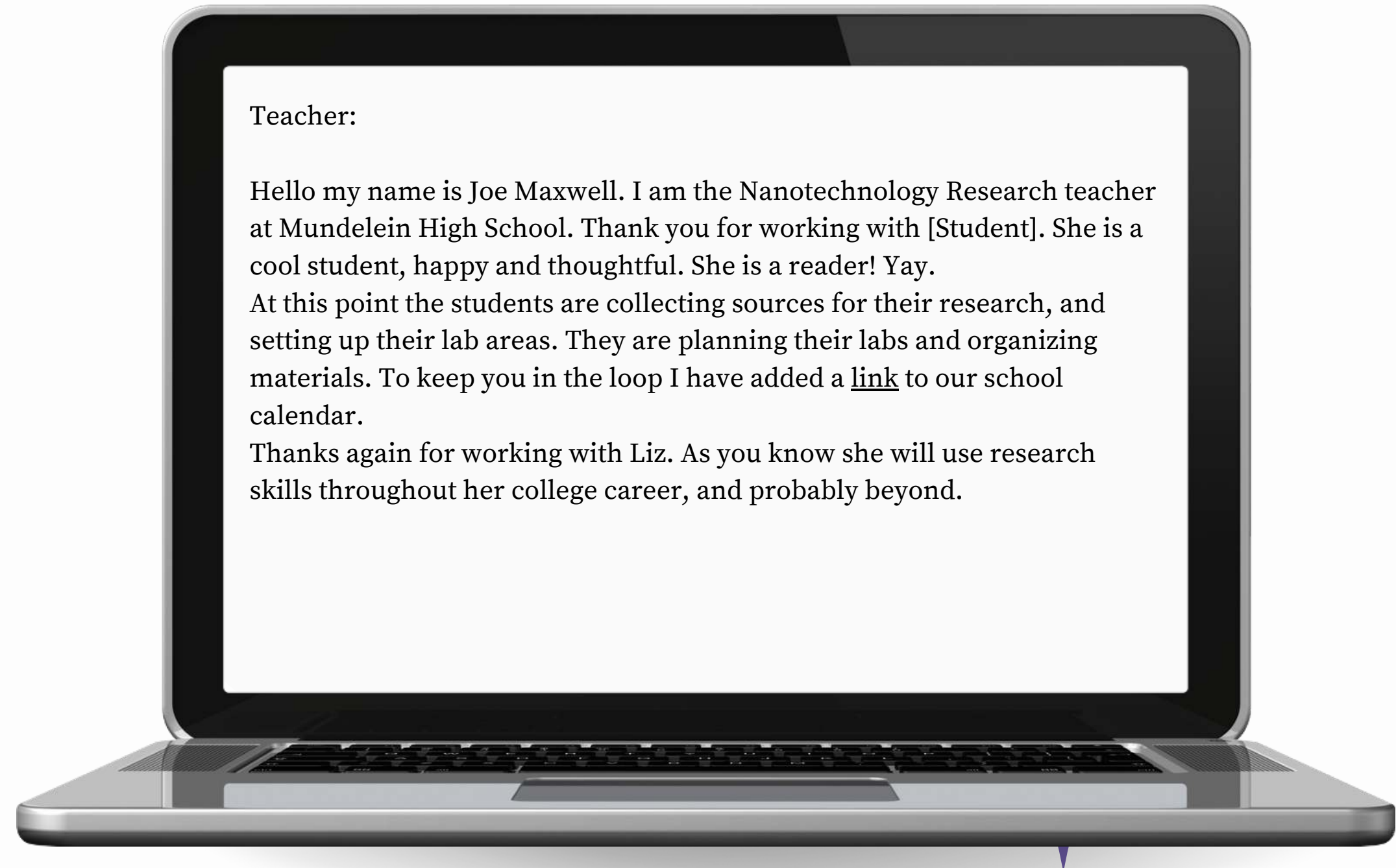
## How to utilize your mentor as a teammate:

- 1** First Post to Mentors  
Say hello, introduce yourself, and set the tone.
- 2** Check-ins with Students  
Continue to establish oversight.
- 3** Direct Communication  
Use the Participants tab and reach out.



# TEACHER FIRST POST

- Some form of first post is required
- Teacher first post establishes a line of communication
  - Parameters and expectations
  - Mentors appreciate this!
- Mentors may not know which student, school, or type of class they'll be working with. Context is always helpful!
  1. Rubrics, documents, general guidelines
  2. Introduces the course
  3. Timeline
  4. Establishing oversight and direct line of communication



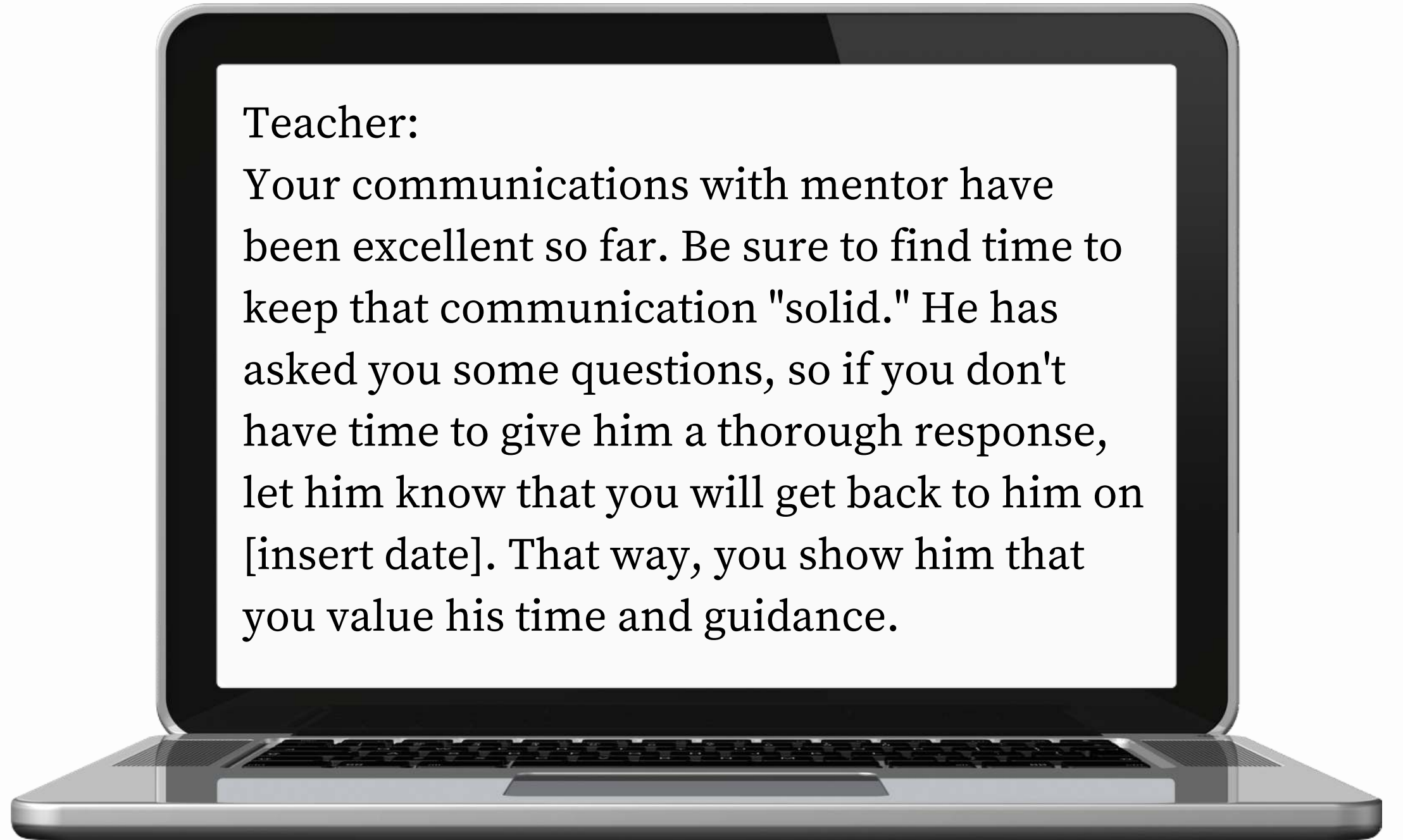


# CHECK INS

Checking in with your student over MME in addition to in person/in class time signals to the mentor that there is movement within the project.

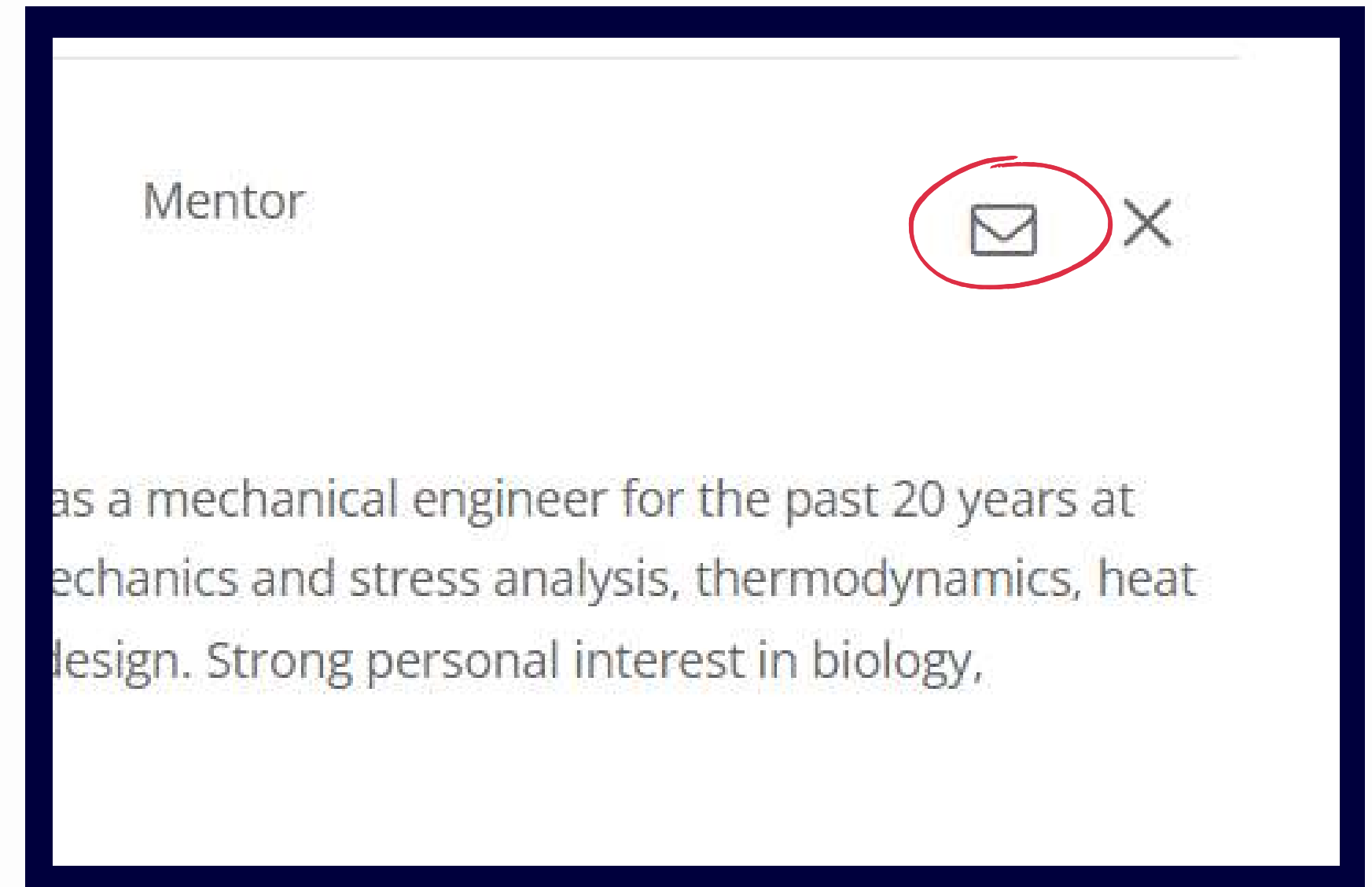
Teacher:

Your communications with mentor have been excellent so far. Be sure to find time to keep that communication "solid." He has asked you some questions, so if you don't have time to give him a thorough response, let him know that you will get back to him on [insert date]. That way, you show him that you value his time and guidance.



# DIRECT OUTREACH

- You can send messages directly to the mentor through the Participants tab.
  - These messages will be delivered directly to their email inbox.





# TEACHER AND STUDENT

How to support your  
students through the  
project process!



# ONBOARDING

Some stellar tips and tricks from the classroom of Kristen Masse

1.

## BEFORE MATCHING

Mentors see the project description before accepting a project

2.

## MENTOR SHOPPING

Strategies to help students think broadly and choose their mentors

3.

## FIRST STUDENT POST

Students should post within 48 hours of a mentor agreeing to take on their project



# 1. BEFORE MATCHING



## Creating a Wishlist

Students create a profile of their "dream mentor"



## Drafting Profiles

Students draft their research description and letter of introduction



## Setting Up

Students set up a folder on Google Drive with all documents and materials that are shared on MME



# CREATING A WISHLIST



Questions	Wish List
<b>Demographics</b> Would you be more comfortable working with someone of a particular age, gender, etc.? Justify your response.	
<b>Discipline</b> Which discipline does your project fit? Explain how you know this is the correct discipline. Consider: Art, history, social science, natural science, formal science, applied science, etc.	
<b>Expertise</b> What sort of expertise would you like your mentor to have? Would you prefer a mentor working in academia as a graduate student or professor? Or would you like someone who is currently working in a field related to your project topic? Be as specific as possible!	
<b>Role</b> What role do you hope your mentor will play in the inquiry process? In what specific ways do you hope your mentor will help you? Think about how they might help <b>now</b> and <b>over the next six months</b> .	



# DRAFTING RESEARCH DESCRIPTION

## Subject Matter

Introduces the subject matter the student is interested in exploring - either a specific question or a general interest

## Timeline

Gives a concrete timeline

## Establish Expectations

Clearly explains what the student is looking for help from their mentor regarding (This also helps the student jump right in when they're matched with a mentor!)

- If video conferencing is required as a part of their grade, please include those expectations in their research descriptions

## Background

Gives the school and course that the student will be working in

### Step 2: Draft Your Profile!

Before shopping for a mentor, you need to prepare your "profile." Remember that you are trying to make a good impression! Convince potential mentors that working with you will be a fulfilling experience! Follow the directions below to draft your Research Description and Letter of Introduction.



#### Research Description (1-2 paragraphs)

Draft your "Research Description" below. Give potential mentors a brief overview of the AP Research course, including a timeline for the project. (You may want to go back to the [Course Description and Expectations](#) for some of this information.) Describe your project goal and/or research question, why you have selected the goal/question, and your current thinking about how you plan on going about your research. NOTE: Be sure to revise your "Research Description" as your project evolves! (This is especially important if you end up needing to shift to a different mentor later in the process, which happens when your topic changes significantly.)

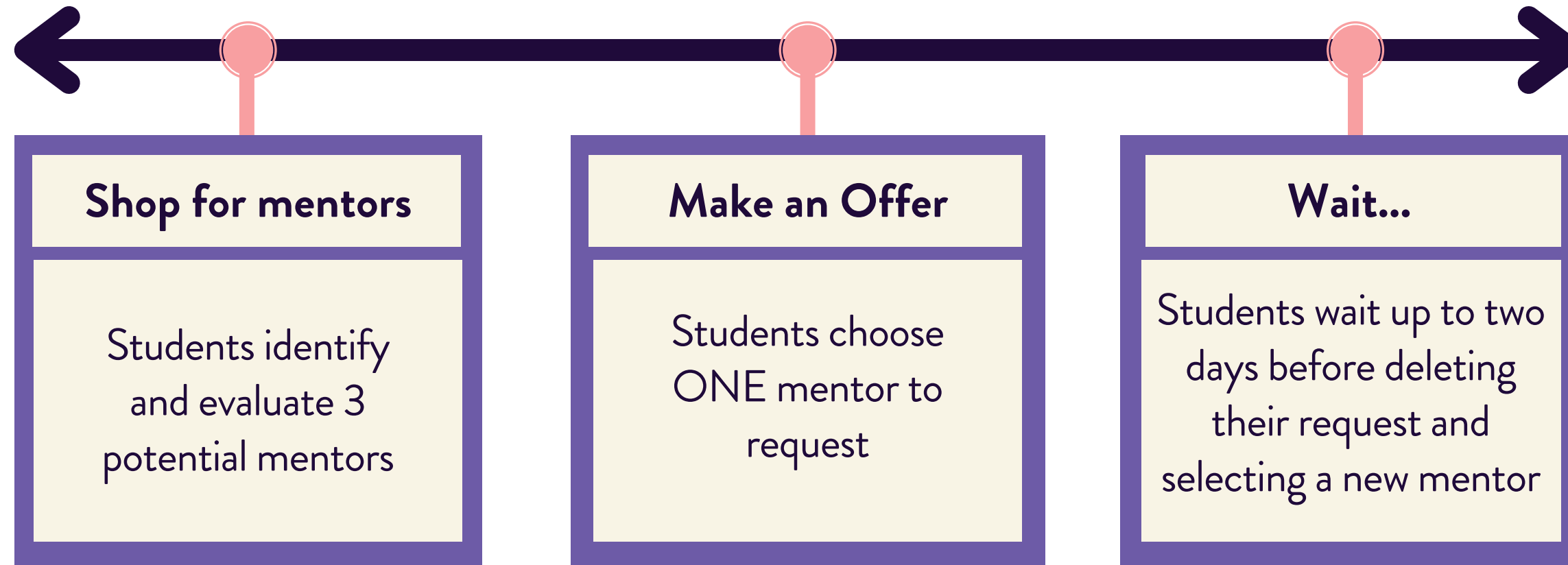
[Type your response here.]

#### Letter of Introduction (1-2 paragraphs)

Draft your "Letter of Introduction" below. Tell potential mentors a little bit about you -- beyond just your role as an AP Research student. Include information about your interests outside of school, including hobbies, activities, jobs, etc. Take advantage of the opportunity to write a compelling letter of introduction. This is great practice for professional writing! (Feel free to use text from a college application!)

[Type your response here.]

# 2. MENTOR SHOPPING



## Step 4: Go Shopping for a Mentor!

You will get a list of mentors in your chosen research categories. Now you get to “shop” for one who fits some or all of the criteria you established in your wish list in **Step 1**. Start by choosing three potential mentors. For each one, copy and paste their bio into the white box. Then, justify your choice in the gray box.

<b>Option #1</b>	[Copy & paste the mentor’s bio here.]
	[Justify your choice here.]
<b>Option #2</b>	[Copy & paste the mentor’s bio here.]
	[Justify your choice here.]
<b>Option #3</b>	[Copy & paste the mentor’s bio here.]
	[Justify your choice here.]



Melody Buyukozer Dawkins

Senior Research and Evaluation Manager  
Social Insights Research

My name is Melody Buyukozer Dawkins and my pronouns are she/her. I am currently a Senior Research and Evaluation Manager at Social Insights Research. In my current work, I work with institutions, grassroots organizations, and social justice movements to support transformation and further advancement through mixed-methods research and evaluation. Previously, I worked as a researcher with arts and cultural organizations (like museums, performing arts organizations, public spaces...) in helping them become more welcoming and relevant to their current and potential audiences and become more embedded in their communities. My academic training is in experimental psychology. More specifically, I earned a PhD in developmental psychology exploring the developmental roots of fairness, equity, and wealth-based attitudes. In addition, I have worked for four years as a labor organizer in a graduate worker labor union, helping graduate workers feel empowered to demand better and more equitable working conditions. More personally, I am bilingual, bicultural, and biracial. I was born and raised in Turkey to a Turkish mom and African American dad. I have been living in the US for the past 11 years. I enjoy watching true crime documentaries and movies of any genre as well as taking photographs. I currently live in Chicago with my wife Cris and our cat Lorenzo.

Psychology, Social Justice, Social Science

Multilingual: English, Turkish

Add +

- Students often think very specific when requesting mentors. Oftentimes students don’t need the world’s leading expert on their specific topic, but rather someone who can walk them through methodology/the research process.
- If you’re having trouble finding the correct mentor for a student, please get in contact with the ISTC team. We’re always happy to help find a good match.
- The minimum 8 week project length does not include the time it takes for a mentor and student to match.



# 3. FIRST STUDENT POST

After a mentor accepts a student's project, the student will post as soon as possible, no more than one business day later.

## Essentials

- Project details: Context, timeline, deliverables
- Response to mentor's expertise description
- How can the mentor best support you?
- Ask specific questions

Dear **Dr./Mr./Ms. Mentor's Last Name**,

My name is **Full Name**, and I am a senior at **School Name** in the Advanced Placement (AP) Capstone Research Course. I am looking forward to getting your first-hand insight about the research I am conducting on **general topic** for the course!

AP Research is the second course in the AP Capstone program and requires me to deeply explore an academic topic, problem, issue, or idea of interest to me. This academic year I will design, plan, and implement an investigation to address a specific research question. The course culminates in an academic paper of 4,000-5,000 words, along with a presentation and oral defense. If you are interested in learning more about the AP Capstone program, please follow this link to the College Board's website: <https://advancesinap.collegeboard.org/ap-capstone>. My teacher will be contacting you with additional information about the program and your role as my mentor.

The College Board encourages AP Research students to connect with expert advisers in their research fields. **Write a few sentences on how you know this person would be an expert. Share brief but specific commentary on and/or appreciation for their work. If applicable, read something they have published, and respond to it!**

Over the next six months, my goal is to communicate with you at least weekly, and I hope that you will provide general feedback about my research question, methods, academic paper, and oral defense. **Insert a few sentences here about specifically how you hope your mentor can support you. Use some of your questions from your MME\_Prep Google Doc! Be upfront about any obstacles you anticipate.**

As we get started, I have a few questions for you:

1. **Ask the mentor how they would like to be addressed.**
2. **Propose a communication schedule, and ask if the mentor is comfortable with it. (Example: "I will send you an update each Friday and respond to your messages within three school days. Are you able to commit to providing feedback within five business days?")**
3. **Ask the mentor if they have participated in other MME projects, and seek their advice on how to make the mentoring process most effective.**

Thank you for your time, and I look forward to speaking with you soon.

Sincerely,

# FIRST STUDENT POST EXAMPLE

## **STUDENT:**

**Hi, my name is L. It is a pleasure to have this experience with you and to learn more about a fascinating topic. I am interested in the topic of climate change in Australia, and its impacts on agriculture and livestock. Many impacts from climate change would be shown in Australia, such as lack of food, increase in the pricing of goods, and loss of livestock. I want to understand why climate change has such a big effect on the farms, and how it can be prevented or decreased. With your knowledge of environmental studies, I would love to gain more information to benefit my project and to adapt to my lifestyle! At the moment I am starting my research and trying to get a better understanding as to just why the "cause and effect" happens. My next challenge is to more clearly define the problem. My final project is due around the end of April. However, for a heads up, I will be out of town mid March so I will be unable to communicate then. By the way, how would you prefer I address you? Thank you for agreeing to be my mentor, and I am excited for the process!**



# NOTE: CPS VOLUNTEERS

## Teacher

Send ISTC the names of all mentors who have accepted student projects

## ISTC

Distribute the CPS volunteer form and collect ID from mentors, then provide that information to the volunteer coordinator at each CPS school

# MONITORING AND ONGOING COMMUNICATION

## Monitoring

Establishing a pattern of communication (Mentor Monday, STEM Fridays); Nudging online

## Nudging and Updates

Students can nudge their mentors as well! Mentors are full time students, employees, parents, etc. Sending a quick follow up message to hold them accountable is both efficient and a good skill for students to practice

## Final Stages

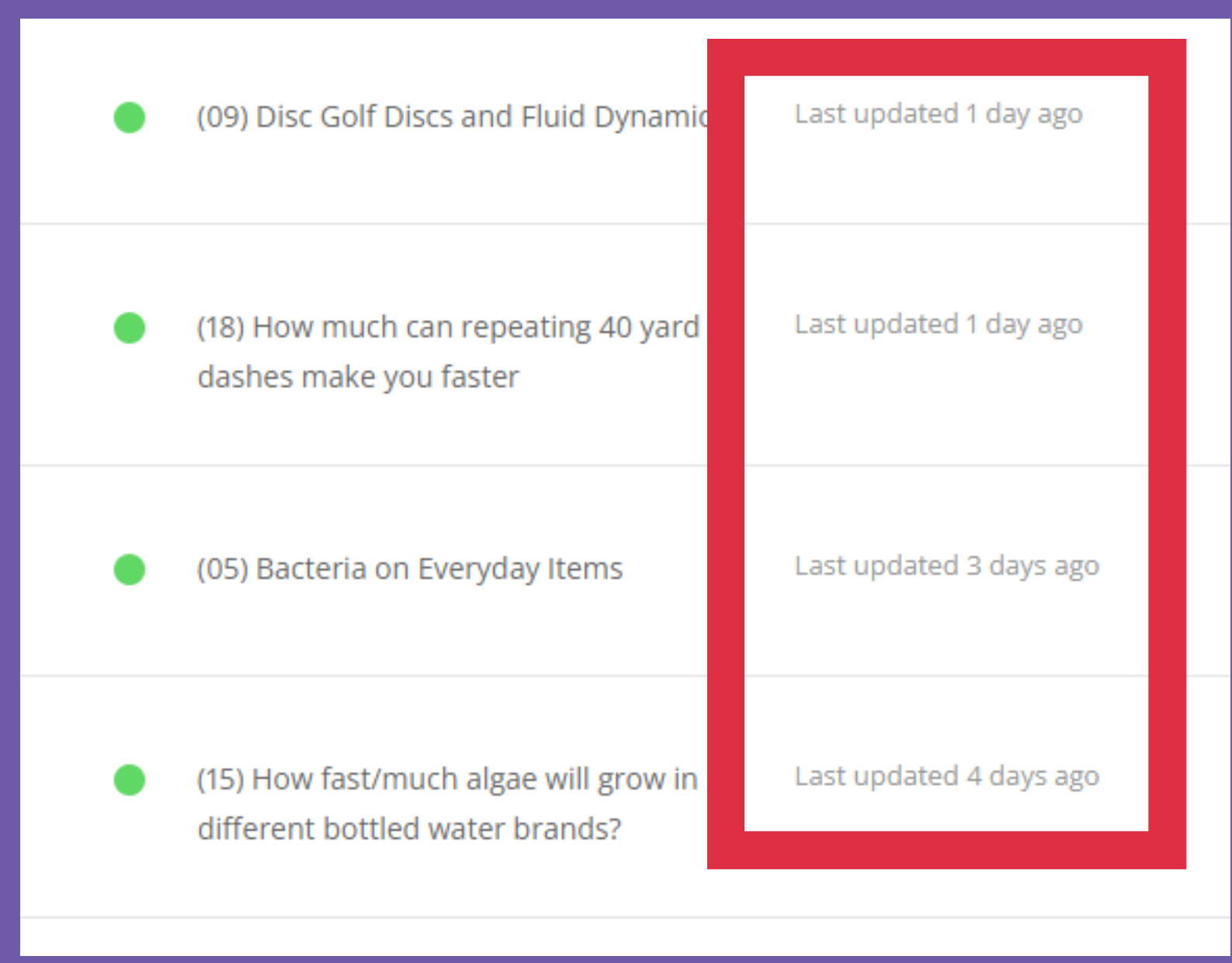
Thanking the mentor, sharing findings, final product, & keeping in touch





# MONITORING ON MME

- Tracking project updates
  - On MME, projects that are updated most recently will show up at the top of your projects page
  - For streamlined way to check which projects need communication reminders, you can check the bottom of the list
  - The projects will show how long it has been since the last update and communication in the project (but not who last communicated)
  - **Monitoring is a key responsibility! If ISTC notices there hasn't been communication in your projects, we will nudge both you and the mentor**
  - Why is monitoring important? Consistency & Communication



(09) Disc Golf Discs and Fluid Dynamic	Last updated 1 day ago
(18) How much can repeating 40 yard dashes make you faster	Last updated 1 day ago
(05) Bacteria on Everyday Items	Last updated 3 days ago
(15) How fast/much algae will grow in different bottled water brands?	Last updated 4 days ago

# MME EMAILS

- Safety - You will receive automated emails from MME...
  - every time a student or mentor posts on MME
  - when a video conference has been scheduled
- Monitoring - You will receive automated reminders from MME...
  - If there has been no communication or movement within a project for 14 days, 21 days, and 25 days (students, mentors, and ISTC will also be notified)
  - If there has been no movement within a project for 28 days, the project will be archived
- ISTC Support with monitoring





# STUDENT NUDGE

**MENTOR:**

**YES! I did.**

**For question four you should put something like 1-2 times a year or 4-5 times a year etc in order to define/ determine the difference between rarely, sometimes, etc..**

**For question 6 put i.e so that it looks like this ( i.e goodwill, salvation army). It's a small change, but it matters!**

**Other than that your survey is really good! In addition, it is not really long, so more people are more likely to take the survey.**

**STUDENT 12/02/2019 11:23AM CST**

**Have you looked at my question document?**

**STUDENT 11/19/2019 12:30PM CST**

**Here is the link to my survey question document [LINK](#) if you could go read them and give me feed back or ideas for more questions that would be great thank you.**



# FINAL POST

## **STUDENT**

**I just wanted to come back and thank you so much for this amazing mentor experience! Having the opportunity to learn from you and work with you has been so beneficial for me not only as a student, but a person in general. You went above and beyond for me and I cannot express to you enough how grateful I am for you!**

**I appreciate all of the time you spent helping me edit my paper and carry out my research from the beginning of my literature review to the ending presentation. Before working with you I had no idea how to write a research paper and especially how to find the best sources, now I am confident in my academic paper thanks to you!**

**I hope that we can stay in touch throughout the future as I enter college at the University of Tennessee. I also hope you know if you need any assistance in the future feel free to reach out, I would love to repay you for the help you have provided me if I can ever do so.**

**Thank you SO much!**



# STUDENT RESEARCH SHOWCASE





# FINAL HIGHLIGHTS

## 01 **Communication!**

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We are here for you! We can't fix a problem we don't know about--please let us know if there's anything we can support with!

## 02 **Teacher Toolkit**

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Please reference the teacher toolkit to find those wonderful worksheets to help guide your students through the MME onboarding process.

## 03 **First Posts**

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Both teachers AND students will be making a first post on MME -- the more context for mentors, the better!

## 04 **Creating a Schedule**

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Create a schedule for when students will be posting on MME weekly, and support them in communicating this schedule with mentors.



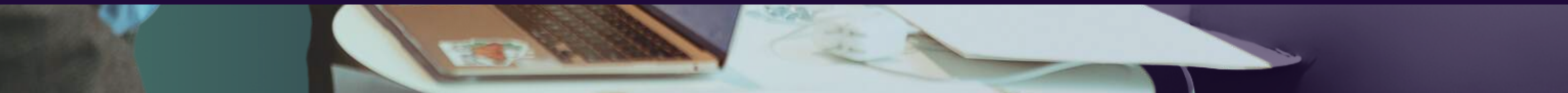


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## EDUCATION

*from the classroom to the real world*

**Mentor Matching Engine | 2023-2024      Welcome, Returning Teachers!**





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Jozie Crouch

(she/her)

Community  
Communications  
Coordinator

# AGENDA

9:45 AM New Teacher Session

11:05 AM BREAK

11:15 AM All Teacher Session

11:45 AM Breakout Session #1:

"Breaking Down Barriers" Led by Yujia Ding

12:30 PM Mentor Panel and Lunch

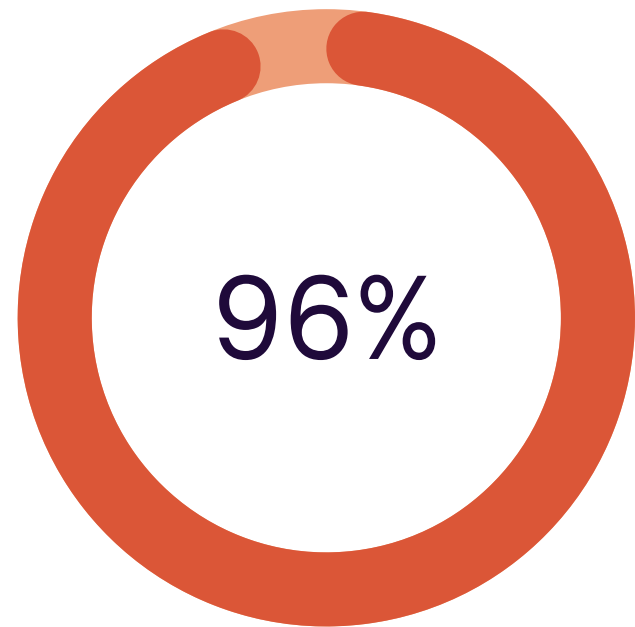
1:30 PM Breakout Session #2: Discussion - MME Implementation in the Classroom

Led by: Kristen Masse & Alyssa Walser

2:15 PM Wrap Up



# IMPACT 2023-24



Students reported an increased confidence in their STEM and/or research skills



79% of students reported it was their first time working with a mentor.





# COMMUNICATION IS KEY



Students and Mentors

Expectation: Weekly communication. If your classroom will be communicating less frequently than that, establish it either in the research details or in the very first post.



Students and Mentors  
(Again!)

Communication schedule: (STEM Fridays, Mentor Mondays), students should tell their mentor when they plan to post.



Teachers and ISTC

Monthly emails: Updates, deadlines, important tasks and awards!



# COMMUNICATION IS KEY

“I think what was important was that we identified a day that I would respond to any questions, or be available to meet. Once we did this, it made our communication pretty consistent.”

*-MME Mentor, 2022-23*

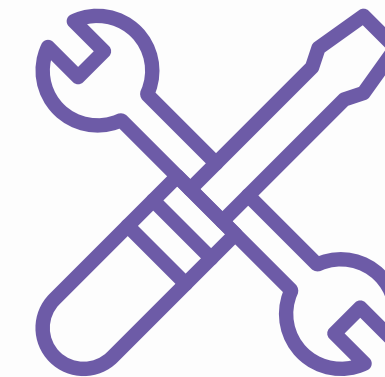




# TOOLKIT RESOURCE: SENTENCE STARTERS

## Project Timeline and Logistics:

- My project will span \_\_\_\_\_ weeks. Within that time, I have deadlines on the following dates: \_\_\_\_\_.
- Throughout this project, I need to turn in drafts on these dates: \_\_\_\_\_.
- At the end of my project, my final product will be a \_\_\_\_\_ (*research paper / presentation / survey / prototype*).
- I plan to post to MME on a \_\_\_\_\_ basis (*weekly / biweekly*) on \_\_\_\_\_ (*day of the week*). Will you be able to check MME following that schedule?
- **I plan to use \_\_\_\_\_ as a resource to share documents. Does that work for you?** (*Google docs / pdfs / microsoft Word / etc. Please be mindful not all mentors can use google docs. Make sure to find a compatible method of communication.*)



## Networking & Getting to know your Mentor:

- I noticed in your expertise description that you have experience in \_\_\_\_\_. Would you be willing to share a little more about what that experience was like?
- I am interested in pursuing \_\_\_\_\_, and I am always looking for opportunities to grow my skills in this area. Do you know of any internship opportunities available in this field?
- Would you be open to starting each post with a fun question? (*Before each update, you can include an icebreaker question—for example, “what’s your favorite candy?” or “what is your favorite video game?”* )

# MONITORING ON MME

- ISTC will be focusing MME tracking reminders on supporting new teachers this year
- Tracking project updates:
  - For a streamlined way to check which projects need communication reminders, you can check the bottom of the list
  - The projects will show how long it has been since the last update and communication in the project
  - Monitoring is a key responsibility! If ISTC notices there hasn't been communication in your projects, we will nudge both you and the mentor
  - Why is monitoring important? Consistency & Communication

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# MENTOR EXPECTATIONS

- Mentors attend 2 required training sessions
  - MME Best Practices, led by ISTC
    - Communication tips, MME functionality, student context, safety
- Weekly communication & scheduling expectations
- Mentors are expected to stay on a project for the entire duration of the project (timeline stated in research description)



# CPS VOLUNTEER PROCESS

## Teacher

Send ISTC the names of all mentors who have accepted student projects

## ISTC

Distribute the CPS volunteer form and collect ID from mentors and provide that information to the volunteer coordinator at each CPS school



# MME PLATFORM - NEW THINGS

- Teachers now have access to the "create" button
- Participant names listed instead of icons
- If other changes roll out, we will let you know as they happen!

NEW  
NEW  
NEW  
NEW



# STUDENT RESEARCH SHOWCASE





# STUDENT RESEARCH SHOWCASE

- ISTC's goal is to represent at least one student per school at the showcase
- Student Panel & Presentations
- Judges & Feedback
- Networking Practice
- Public Speaking Practice
- Culmination of a long project!
- Applications open in February
  - Process over product!
- **Date: Friday, April 26th, 2024 AT GOOGLE**





# STUDENT ADVISORY BOARD

## Goal:

- Student leadership and voice across ISTC programming

## Timeline:

- 1-2 times per month, November-May

## Meeting topics:

- Networking
- Development and Marketing
- Professional Writing
- Interviewing
- ISTC Special Projects

**Applications will open in October!**





# BREAK(IN?) SESSION #1

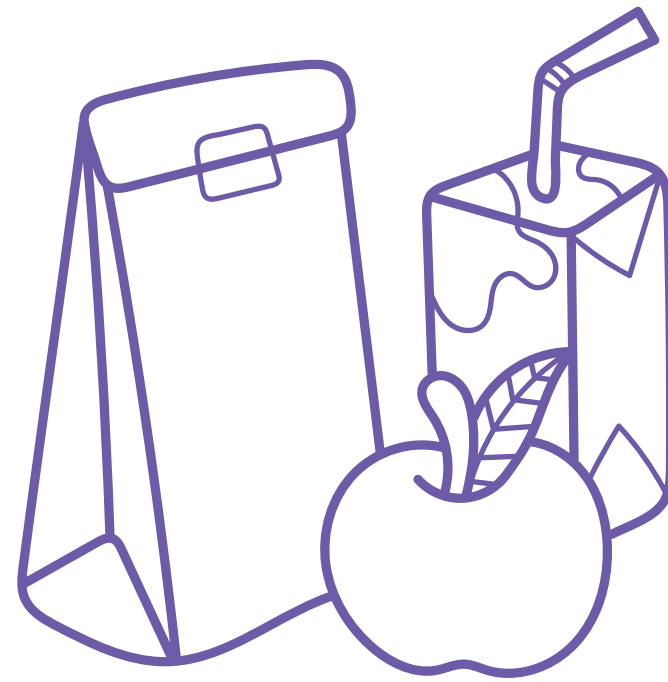


"Breaking Down  
Barriers in STEM &  
Research"

*Led by: Yujia Ding*

# LUNCH!

Please take 10 minutes to grab some food and get comfortable before we transition into our Mentor Panel!





# MENTOR PANEL



## SPEAKERS:

*Rob Klein*

*Sophia Bonjour*

*Irma Advic*



# BREAKOUT SESSION #2

## Discussion: MME Implementation in the Classroom

### AP Courses

Led by: Kristen Masse

Room X

### Non-AP Courses

Led by: Alyssa Walser

Room A



# FINAL HIGHLIGHTS

## 01 **Communication!**

---

We are here for you! We can't fix a problem we don't know about--please let us know if there's anything we can support with!

## 02 **Teacher Contract**

---

Please complete the teacher contract!

## 03 **First Posts**

---

Both teachers AND students will be making a first post on MME -- the more context for mentors, the better!

## 04 **Student Advisory Board**

---

We are so excited for the return of our MME student advisory board! Please let your students know when applications open!

# TEACHER CONTRACT

Please fill out your teacher contract! The contract will collect information on the following:

- What is the timeline for your MME project?
- Which days of the week will you be using MME in the classroom?

[bit.ly/MMETeacherContract](https://bit.ly/MMETeacherContract)



# THANK YOU!

Welcome to MME--we are so excited to get started with you all!

[bit.ly/MMETeacherContract](https://bit.ly/MMETeacherContract)

