**Breakout Group 8 Metacognition and Interest**:

## Start Here: Instructions

Your group will follow 4 steps to examine and discuss 2 lessons (Metacognition and Interest). Each person in your group will be assigned one of the lessons and will explore that one lesson on their own. Then you will discuss the lesson you explored with your group members. The 4 steps your group will follow and the durations for how long you should take for each step are in the table below. You might take longer or less time on each step in the table. That is ok as long as you stick to the overall time.

|  |  |
| --- | --- |
| **Overview of Steps** | **Duration** |
| **STEP 1:** Complete the **Community Building** activity below | 8 minutes |
| **STEP 2:** Review the **Group Norms and Important Information** | 2 minutes |
| **STEP 3:** Individually **explore the lesson** assigned to you | 25 minutes |
| **STEP 4:** **Discuss your lesson** with your group | 15 minutes |
| **STEP 5: Summarize discussion** to prepare to share in large group | 5 minutes |
| Break (Take a break during your breakout group meeting. Your group can take the break at the same time or you can each take a break at your own individual times.) | 5 minutes |
| **Overall time** | 60 minutes |

We will also check in with groups during the breakout sessions to see if more or less time is needed overall.

Move on to Step 1 below.

## STEP 1: Community Building (8 minutes)

1. Type your name in the column on the right in the table below. Remember your group member # as you will use it later.

|  |  |  |
| --- | --- | --- |
| **Member #** | **Type Name and Pronoun (optional)** | **Your Current Professional Role (e.g., faculty, graduate student, K-12 teacher, and the like)** |
| Group member #1: |  |  |
| Group member #2: |  |  |
| Group member #3: |  |  |
| Group member #4: |  |  |

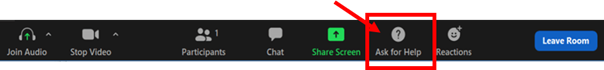
1. To get to know each other, please have each person share your name, professional role, where you are (e.g., where you work or are in school), and your answer to the following question**: If you could only eat one food every day for the rest of your life, what would it be?**
2. Select someone in your group to serve as a timekeeper to ensure you move through the breakout group steps and stay on track. Write their name below.

|  |  |
| --- | --- |
| Timekeeper name: |  |

1. Move on to Step 2.

## **STEP 2:** **Group Norms and Important Information (2 minutes)**

* Video: To encourage community connections, please turn on your video during discussions. However, not everybody has video and sometimes technology doesn't work, so it is ok if you are unable to use video. When working individually to review your lesson it is ok to turn off your video.
* Communication norms: Please allow each person to contribute during discussions.
* Breaks: Please include a short break into your time. You can coordinate and take your break at the same time or each member can take a break when they need it. Please let your team members know when you are taking a break.
* Need help or have a question for a facilitator? Your room has been assigned a facilitator. It will be Dina, Jen, Julie, or Molly. If a facilitator is not in your breakout room, you can invite the host to your room, select "Ask for Help" in the Zoom menu bar and invite the host to your room.



* Link to this page: <https://docs.google.com/document/d/1nTe1EImr4PitKg4xK3czBtMgsoKQwz_tJnkpYBlkCxw/edit?usp=sharing>
* Link to the main workshop slides: <https://docs.google.com/presentation/d/1CXBpxfU082sYgJcoKzRr0uPxRrX5hfVZf6z0UMtzKuo/edit#slide=id.g7b35009f20_0_173>
* Please feel free to modify these norms if your group has additional norms and/or wants to change the norms.
* Now move on to Step 3.

## STEP 3: Individually explore a lesson (25 minutes)

1. Use the same group member number that you used in community building in Step 1.
2. For this step, you will scroll down in this document to find the page associated with your group member number. You will find your group member number in the table in Step 1.
3. Note: We added several blank pages into the document so you might have to scroll down a long way to find the page associated with your group member number.
4. Once you have found the page associated with your group member number, follow the instructions on that page.
5. After you have completed Step 3, move on to Step 4.

## STEP 4: Group discussion (15 minutes)

1. Once your team has completed your individual lesson exploration OR the facilitator has asked you to come back together as a breakout group, you will discuss your responses to the questions in Step 3.
2. Please select someone in your group to serve as a reporter. The reporter will identify 1-2 main points from your breakout group discussion to share with the larger group when we come back as a large group.
3. In your breakout group, please discuss the following questions (refer to your responses in Step 3 to guide your discussion):
   1. In which class or lab unit could you envision implementing this lesson? Explain your reasoning for why you think it fits into that unit.
   2. In what ways would the lesson benefit your students?
   3. What modification(s) do you suggest to the lesson to make the lesson more beneficial to your students and/or to make it easier to implement/adopt?
4. Group reporter: Please take notes in the table below to capture your breakout group discussion.

|  |
| --- |
| **Discussion Notes** |
| **Group Reporter. Type name of reporter:\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  |

1. After you have completed Step 4, move on to Step 5.

## STEP 5: Summarize discussion (5 minutes)

1. You will share 1 to 2 main points of your breakout group discussion with the larger group.
2. Before we wrap up the breakout groups, please identify 1 to 2 main points from your group discussion that your reporter will share with the larger group.
3. Use the table below to write the 1 to 2 main points that your reporter will share with the large group.

|  |
| --- |
| **1 to 2 main points from your breakout discussion that the reporter will share** |
|  |

## Group Member 1

**Step 3: Individually explore a lesson**

**Lesson you will review: Metacognition and Learning**

**Instructions to Individually explore a lesson**

1. You will explore all aspects of the lesson listed above.
2. The lesson is fully online and accessed via a link provided in Part A below.
3. You will review the lesson online at the link. You will need to refer to these instructions to guide you through the lesson, so keep this page open/available.
4. There are questions we would like you to respond to in writing in Part C below. Please write your responses directly into this document. You can respond to the questions as you progress through your review of the lesson or after you have fully completed your review.
5. You will use your responses to the lesson to guide your breakout room discussions.
6. Also, our team will collect your responses to the questions in Part C to help us evaluate our lessons based on the collective feedback for everybody in the workshop.
7. Go to Part A.

### **Part A: Individual Reading and Practice Problems:**

* Follow the link to start your lesson. Link: <https://serc.carleton.edu/dev/mathyouneed/quantskillsconfES/metacognition.html>
* Read all of the text on the page.
* After you finish reading the page, click the “I am ready to practice” link at the bottom of the webpage for the lesson (large blue button) and it will take you to a page with practice problems.
* Complete the practice problems.
* Move on to Part B.

### **Part B: Individual Assessment and Application Activity**

* After you finish the practice problems, click the “I am ready to try the assessment and application activity” link at the bottom of the practice problem page for the lesson (large blue button).
* Complete the Assessment and Application Activity.
* Move on to Part C.

### **Part C: Evaluation of Lesson**

* Respond to the questions below. Use the questions below to prepare what you will share with your group based on your affective mini-lesson experience. You will discuss your responses to the questions in the table with your breakout group.

|  |
| --- |
| 1. **Question: In which class or lab unit could you envision implementing this lesson? Explain your reasoning for why you think it fits into that unit.** |
| Your answer: |
| 1. **Question: In what ways would the lesson benefit your students?** |
| Your answer: |
| 1. **Question: What would be challenging about implementing this lesson in your context (this could be a challenge from students, from your department, from the class structure, and so on)?** |
| Your answer: |
| 1. **Question: What modification(s) do you suggest to the lesson to make the lesson more beneficial to your students and/or to make it easier to implement/adopt?** |
| Your answer: |

1. **We are creating instructions for how instructors can implement the lessons in their classes/labs. In the table, there is a list of topics we are considering including. Please put an x in the cell indicating how important you think each topic is for us to include in an instruction page.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Topic** | **Not Necessary** | **Essential** | **No Opinion** |
| * When to use the particular lesson (at which point in the semester would the lesson be particularly beneficial to students) |  |  |  |
| * How to use the lesson (step-by-step cookbook) |  |  |  |
| * Resources (e.g. research studies) used to create the lesson (e.g., research and other resources used to create the lesson) |  |  |  |
| * Resources related to the topic, but not used to create the lesson that you can explore to deepen your knowledge |  |  |  |
| * Other: Please explain: |  |  |  |
| * Other: Please explain: |  |  |  |

1. **We will continue piloting the lessons in Fall 2021 and are planning a scale-up of the project to a larger number of institutions. We also are interested in continued input on how to improve our lessons. Please place an X next to items you are interested in:**

|  |  |
| --- | --- |
| **Place X if interested** | **Topic** |
|  | * I am interested in learning more about piloting the lessons in Fall 2021 |
|  | * I am interested in learning more about piloting the lessons in a future scale up project |
|  | * I am interested in providing you more input on improving the lessons |
|  | * Other. I am interested in the project in a different way. Please explain: |

|  |  |
| --- | --- |
|  | **If you expressed interest in any item in the table above, please include your contact info here so that we can follow up with you.** |
| **First Name:** |  |
| **Last Name:** |  |
| **Email:** |  |

Alternatively, you can contact Julie to express your interest: Julie.sexton@colorado.edu

### Part D.

* You have completed the individual exploration of the lesson.
* Check in with your group members to see if they are ready to discuss the lessons as a group.
* If your group members are ready or if your facilitator has asked you to return to your group for discussion, please scroll up to the first page of this document and find the instructions for Step 4 to discuss the lessons with your breakout group.

#### Go to the first page of this document and start Step 4.

## Group Member 2

**Step 3: Individually explore a lesson**

**Lesson you will review: Interest and Learning**

**Instructions to Individually explore a lesson**

1. You will explore all aspects of the lesson listed above.
2. The lesson is fully online and accessed via a link provided in Part A below.
3. You will review the lesson online at the link. You will need to refer to these instructions to guide you through the lesson, so keep this page open/available.
4. There are questions we would like you to respond to in writing in Part C below. Please write your responses directly into this document. You can respond to the questions as you progress through your review of the lesson or after you have fully completed your review.
5. You will use your responses to the lesson to guide your breakout room discussions.
6. Also, our team will collect your responses to the questions in Part C to help us evaluate our lessons based on the collective feedback for everybody in the workshop.
7. Go to Part A.

### **Part A: Individual Reading and Practice Problems:**

* Follow the link to start your lesson. Link: <https://serc.carleton.edu/dev/mathyouneed/quantskillsconfES/interests.html>
* Read all of the text on the page.
* After you finish reading the page, click the “I am ready to practice” link at the bottom of the webpage for the lesson (large blue button) and it will take you to a page with practice problems.
* Complete the practice problems.
* Move on to Part B.

### **Part B: Individual Assessment and Application Activity**

* After you finish the practice problems, click the “I am ready to try the assessment and application activity” link at the bottom of the practice problem page for the lesson (large blue button).
* Complete the Assessment and Application Activity.
* Move on to Part C.

### **Part C: Evaluation of Lesson**

* Respond to the questions below. Use the questions below to prepare what you will share with your group based on your affective mini-lesson experience. You will discuss your responses to the questions in the table with your breakout group.

|  |
| --- |
| 1. **Question: In which class or lab unit could you envision implementing this lesson? Explain your reasoning for why you think it fits into that unit.** |
| Your answer: |
| 1. **Question: In what ways would the lesson benefit your students?** |
| Your answer: |
| 1. **Question: What would be challenging about implementing this lesson in your context (this could be a challenge from students, from your department, from the class structure, and so on)?** |
| Your answer: |
| 1. **Question: What modification(s) do you suggest to the lesson to make the lesson more beneficial to your students and/or to make it easier to implement/adopt?** |
| Your answer: |

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| * When to use the particular lesson (at which point in the semester would the lesson be particularly beneficial to students) |  |  |  |
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| * Resources (e.g. research studies) used to create the lesson (e.g., research and other resources used to create the lesson) |  |  |  |
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### **Part D.**

* You have completed the individual exploration of the lesson.
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#### Go to the first page of this document and start Step 4.

## Group Member 3

**Step 3: Individually explore a lesson**

**Lesson you will review: Metacognition and Learning**

**Instructions to Individually explore a lesson**

1. You will explore all aspects of the lesson listed above.
2. The lesson is fully online and accessed via a link provided in Part A below.
3. You will review the lesson online at the link. You will need to refer to these instructions to guide you through the lesson, so keep this page open/available.
4. There are questions we would like you to respond to in writing in Part C below. Please write your responses directly into this document. You can respond to the questions as you progress through your review of the lesson or after you have fully completed your review.
5. You will use your responses to the lesson to guide your breakout room discussions.
6. Also, our team will collect your responses to the questions in Part C to help us evaluate our lessons based on the collective feedback for everybody in the workshop.
7. Go to Part A.

### **Part A: Individual Reading and Practice Problems:**

* Follow the link to start your lesson. Link: <https://serc.carleton.edu/dev/mathyouneed/quantskillsconfES/metacognition.html>
* Read all of the text on the page.
* After you finish reading the page, click the “I am ready to practice” link at the bottom of the webpage for the lesson (large blue button) and it will take you to a page with practice problems.
* Complete the practice problems.
* Move on to Part B.

### **Part B: Individual Assessment and Application Activity**

* After you finish the practice problems, click the “I am ready to try the assessment and application activity” link at the bottom of the practice problem page for the lesson (large blue button).
* Complete the Assessment and Application Activity.
* Move on to Part C.

### **Part C: Evaluation of Lesson**

* Respond to the questions below. Use the questions below to prepare what you will share with your group based on your affective mini-lesson experience. You will discuss your responses to the questions in the table with your breakout group.

|  |
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| 1. **Question: In which class or lab unit could you envision implementing this lesson? Explain your reasoning for why you think it fits into that unit.** |
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| 1. **Question: In what ways would the lesson benefit your students?** |
| Your answer: |
| 1. **Question: What would be challenging about implementing this lesson in your context (this could be a challenge from students, from your department, from the class structure, and so on)?** |
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### **Part D.**

* You have completed the individual exploration of the lesson.
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* If your group members are ready or if your facilitator has asked you to return to your group for discussion, please scroll up to the first page of this document and find the instructions for Step 4 to discuss the lessons with your breakout group.

#### Go to the first page of this document and start Step 4.

## Group Member 4

**Step 3: Individually explore a lesson**

**Lesson you will review: Interest and Learning**

**Instructions to Individually explore a lesson**

1. You will explore all aspects of the lesson listed above.
2. The lesson is fully online and accessed via a link provided in Part A below.
3. You will review the lesson online at the link. You will need to refer to these instructions to guide you through the lesson, so keep this page open/available.
4. There are questions we would like you to respond to in writing in Part C below. Please write your responses directly into this document. You can respond to the questions as you progress through your review of the lesson or after you have fully completed your review.
5. You will use your responses to the lesson to guide your breakout room discussions.
6. Also, our team will collect your responses to the questions in Part C to help us evaluate our lessons based on the collective feedback for everybody in the workshop.
7. Go to Part A.

### **Part A: Individual Reading and Practice Problems:**

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* Read all of the text on the page.
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* Complete the practice problems.
* Move on to Part B.

### **Part B: Individual Assessment and Application Activity**

* After you finish the practice problems, click the “I am ready to try the assessment and application activity” link at the bottom of the practice problem page for the lesson (large blue button).
* Complete the Assessment and Application Activity.
* Move on to Part C.

### **Part C: Evaluation of Lesson**

* Respond to the questions below. Use the questions below to prepare what you will share with your group based on your affective mini-lesson experience. You will discuss your responses to the questions in the table with your breakout group.

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| 1. **Question: In which class or lab unit could you envision implementing this lesson? Explain your reasoning for why you think it fits into that unit.** |
| Your answer: |
| 1. **Question: In what ways would the lesson benefit your students?** |
| Your answer: |
| 1. **Question: What would be challenging about implementing this lesson in your context (this could be a challenge from students, from your department, from the class structure, and so on)?** |
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|  | **If you expressed interest in any item in the table above, please include your contact info here so that we can follow up with you.** |
| **First Name:** |  |
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Alternatively, you can contact Julie to express your interest: Julie.sexton@colorado.edu

### **Part D.**

* You have completed the individual exploration of the lesson.
* Check in with your group members to see if they are ready to discuss the lessons as a group.
* If your group members are ready or if your facilitator has asked you to return to your group for discussion, please scroll up to the first page of this document and find the instructions for Step 4 to discuss the lessons with your breakout group.

#### Go to the first page of this document and start Step 4.