

### **Collaborative Inquiry**

Collaborative inquiry supports teachers in working together to interrogate their teaching and strengthen equitable practices that support meaningful, deep mathematical learning for all students. Each part of the collaborative inquiry process, from creating collaborative relationships to choosing data to examine, is designed around learning what students know and think and then using that information to make instructional decisions.



To begin, identify a wondering or question. Then identify a small group of people (we recommend 1-3 additional people) to help you analyze your data. You may choose to collect your data by yourself or enlist the help of a colleague. Using the Data Analysis Protocol as a group allows you to learn from your data by intentionally considering perspectives that are present and missing in the data, the impact of student and teacher identity on the data, and potential next steps towards achieving your goal. The suggested timings and sentence stems are good starting points and can be modified to fit your context and needs. This protocol can be used with data that is produced by students, such as written work or reflections, and with data produced by educators, such as teacher reflections or observations. We encourage you to start this work, even if you are unsure about the quality of your data because we have seen important changes come from data sets that the presenters were initially unsure about.



# **Data Analysis Protocol**

### **Focus Question:**

# **Sharing the Data**

#### 8 min

**Critical Friends** familiarize themselves with the data.

- Read the teaching replay.
- Find evidence to address the focus question (warm & cool).
- Be Prepared to share your findings with your group.
- → Record your notes.

## **Describing the Data**

#### 5 min

### What do you see in the data?

Share noticings aloud related to the inquiry question without judgment or interpretation.

During this period the group gathers as much information as possible from the data.

- Describe what you see/hear in descriptive terms, without making judgments or offering suggestions. Only share noticings. Interpreting the data is the next step!
- It is helpful to identify where the observation is being made e.g., "On page one in the second paragraph, third sentence..."
- If judgment emerges, members should push to refocus first on the evidence: What did you see that makes you say that?
- → Record your notes. You will refer to them in the next step.



### **Interpreting the Data**

#### 5 min

### What does the data suggest?

During this period, the group tries to make sense of what the data says and why. *Now you can interpret and make meaning of the data!* 

- The group should try to find as many different interpretations as possible and evaluate them against the kind and quality of evidence.
- From the evidence gathered, try to infer: What is happening and why?
- Think broadly and creatively. Assume that the data, no matter how confusing, makes sense to some people; your job is to see what they may see.
- As you listen to each other's interpretations, ask questions that help you better understand each other's perspectives.

#### Possible starters include:

- It seems like [data observation] is related to [the inquiry question] because...
- I wonder how [data observation 1] and [data observation 2] affect [the inquiry question]].
- [Data observation] means [xxx] which means [xxx in the context of the inquiry question].
- Now that I know ... it's making me think/wonder ...
- In relation to <u>[the inquiry question]</u> I now <u>[wonder/know/think]</u> ...
- I wonder how *[some aspect of equitable teaching practices]* would change if ...

	•	[Groups of students] would benefit from [specific knowledge or wondering] because
	•	[Specific act of collaboration with colleagues or sharing learnings/wonderings publicly] might impact this inquiry work because
→ Record your notes.		



# **Implications from the Data**

#### 5 min

### What are the implications for next steps?

Discuss the next steps for the inquiry. Here is where you can discuss implications as they relate to her focusing or larger inquiry. Given your analysis- what are the implications for her next steps?

### Possible starters include:

- [This type of data] could help you learn more about [this specific part of the inquiry question].
- You could take [<u>specific action around equitable practices</u>] to support [<u>fpart of inquiry question</u>] and you could collect [<u>type of data</u>] to explore that.
- You could enlist the support of [planning partner, department member,...] at school to help you explore [specific part of inquiry question] by ...