SAMPLE 1 - SCIENCE
Areas of Strength

Indicator 3.6: (for this rubric, 3.6 focuses on the ***use of questioning and discussion techniques to enhance student learning***)

Teacher engages students in higher order thinking through varying levels of questioning and discourse with both teacher and peers.

Clearly, you have been working to build inquiry within the NGSS model through the discussion step I observed. As a result, Group 2 had a very effective set of stems "We thought...but it was actually..." and "You would expect, ...but..." – these could maybe be used as an example for the other students when presenting discoveries?

You had one member from all groups share their data and worked to engage them with questions (clarifying to Group 1, "What did you see to know pressure was released?" to Group 3; "Why is lower pressure colder?" to the class "Does everyone agree?") Students were googling to further their understanding and the discussion as well. You encouraged Ss participation in the question formation on the shared doc: "Should we add to that? (pressure), and you have also created norms with them that they are helping to enforce (S-class "please be quiet...) —and 1 encouraged her friend to share, "you had an idea...". 3 groups built on the others: "We essentially did the same thing everyone else did..." and "we didn't necessarily use different temps, we used different amounts."

You are close to getting the discussion to occur **between** them vs. just a share out and you are tracking and asking for "someone I haven't heard from..." to try to increase engagement, with 3-4 who will willingly think and debate with each other respectively. While you are obviously impacting those students in this way, you still have those 4-5 who are reluctant and as this model is new for them, there were varying levels of thinking demonstrated in their answers (could also be related to the prep time before heading in?). 1 who did not participate told me she was absent the day before and I noticed she didn't use the prep time to review with her table. They told her she didn't miss much.

Before heading in, I asked 2 students if they needed to contribute or how the discussion worked. One shared, "The same 3 people talk." And the other said when I asked what he was going to need to contribute, "I don't know...I should know the lab we are doing." Continue to build on what you are doing to develop their questioning and discussion skills to further engage those who don't readily share. Does the whole group share out with no think time prevent some from participating? Are they taking notes while others present?

SAMPLE 2 – SOCIOLOGY
Areas of Strength

Indicator 3.3: (for this rubric, 3.3 ***use of instructional strategies engages students in constructing new knowledge and understanding.***)

Teacher uses strategies that consistently engage students in the inquiry process, critical thinking, and real-world problem- solving tasks that require analyzing, synthesizing, and constructing new knowledge and understanding.

Because you design projects that directly relate to students and real-world connections, clearly communicate expectations, organize Classroom with resources, turn learning over to students to construct an understanding through discussion and research, and scaffold lessons, students were critically thinking about their topics, engaged with their group members—and you have created an experience for discovery learning and where the assessment is the learning (rather than just the measurement OF the learning). 4/4 groups I asked could articulate to me the progression and scaffolding of the content and concepts leading up to this project: examination of "bad data" or "bad correlations" (the shark and ice cream connection), they showed me the "bad" survey questions and were able to explain the project was to help them "understand correlation and causation", "different sociological perspectives," and how to create a survey "that makes sense" (related to 3.1—their understanding of both the learning expectation and criteria).

Because you allow freedom of choice and pace (related to 3.4), there were varying levels of processing occurring. The two girls working on social life and grades had jumped to question formation without taking the time to process their topic and research. (self-admitted and they made a discovery mid-stream that they needed to drop a portion of "social life."). The Ag group also arrived at a discovery that they may need to create different surveys based on Ag and non-Ag students.

Your guide (that they were filling out) is comprehensive and promotes critical thinking before getting to work on questions. Continue to think about the time needed for the closer analysis of the chosen topic and development of research questions. (You noticed this in your feedback to flesh out "operational definition") What do students need to understand and be able to do during this step to craft questions that will provide the data they need to draw conclusions and see correlation? Do they have additional criteria beyond the important general "bad question" examples that would help them in this process?
(This is where I reached out to my friend Greg!)

One of the girls in that social activity group was losing interest "This is __" [forgot to capture her adjective on paper as I was so engaged with them! ☺] and they didn't think participants would be able to quantify the time spent on social activities. But, isn't this critical to their ability

to determine how social activities impact grades? They needed more time and prompting to think through what it was they were trying to discover—may have also increased her engagement and investment. I was also wondering if time needed to be spent on HOW they chose their topics (I also polled students about how they arrived at their choices—some had personal reasons and others (art group) just arbitrarily chose.) Would time up front with a formal process in the selection of the area for investigation have increased cognitive engagement/ or was it just about letting them choose something of interest?

The two groups of boys across from them were further along in their thinking and could process effect size with me and how other variables could impact self-esteem beyond just social media. This is a conversation other groups can engage in as they work through their research question and survey development. They are the ones who suggested that another project could involve everyone researching the same topic, but different variables to arrive at some determinations of effect size. (As educators, process this in John Hattie's work with metadata—measuring teaching practice impacts on learning.)

Through your feedback (see my comments below for 3.9), you can also further drive critical thinking and engagement.