Data Discussion Guide
Use in the study phase of a PDSA
Use this guide with any change idea.
This is example uses data collected during the 2020 summer research experience for rising freshmen.

Change idea: *Summer Immersive Experiences*

Question(s) we are trying to answer: *Does participating in a summer internship have an impact on students’ attitudes, beliefs, and knowledge related to their STEM pathway?*

Data Source(s): *pre/post student participant surveys*

Observation (low-inference statements)

1. Look at the data. What do you see?
2. What catches your attention?

Interpretation (extend thinking, make connections)

1. What trends and patterns do you see?
2. What surprises or does not surprise you?
3. What do you not see?

Implications (what does this mean for our work?)

1. What do the data tell us about the question(s) we are trying to answer?
2. To what extent do the data provide evidence that the change idea is leading to desired outcomes?
3. What assumptions do the data help confirm or refute?
4. What are the limitations of the data or the conclusions we are making? Are there contextual or data quality factors that should be considered?
5. Were our predictions accurate? If not, do we have evidence about why not?
6. Do these data provide the evidence we need to move forward? Do we need to collect additional data?
**Survey Data:** Each subscale had multiple items with a scale from 1 (strongly disagree) to 5 (strongly agree)

![Bar chart showing pre/post mean subscales scores for 2020 internship survey](image)

*Figure 21. Pre/Post Mean Subscales Scores for 2020 Internship Survey*