## 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)

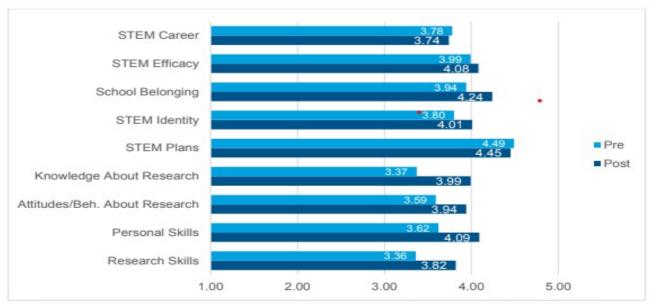


Figure 21. Pre/Post Mean Subscales Scores for 2020 Internship Survey