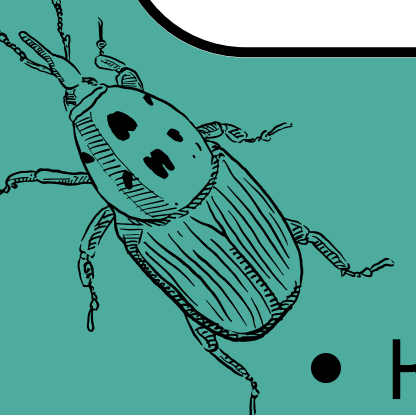




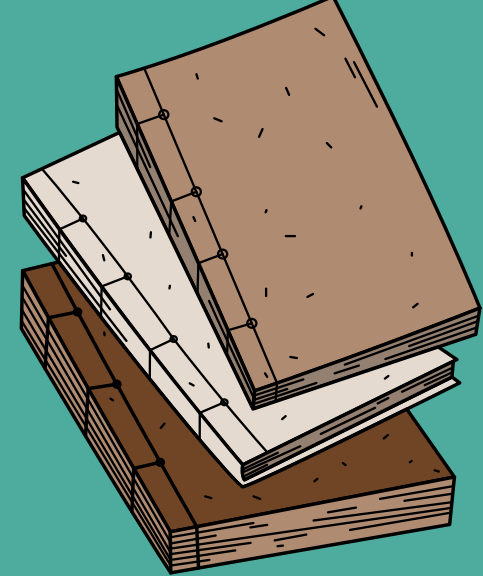
Focus Question

How does incorporating nature journaling in 6th grade science classes impact students' attitudes towards science and nature?



Materials

- Kraft nature journals
- Pencils
- Rulers
- Magnifying glasses
- Colored pencils



Methodology

This study was conducted at John Sevier Middle School in Kingsport, Tennessee. Sixty-nine 6th grade science students were recruited to participate in this study.





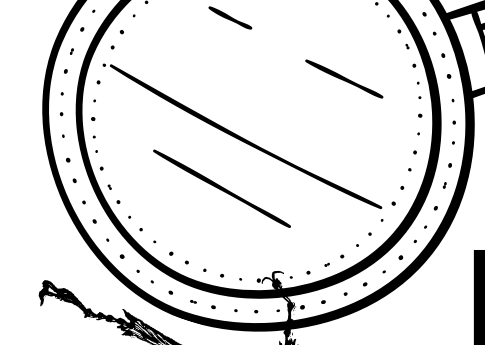
Data Collection Instruments

- Pre- and post-treatment surveys
- Teacher observations
- Student artifacts

Survey Scale

1=Very False
2=False
3=True
4=Very True

Quantitative survey data was coded on a scale of 1-4. Pre- and post-treatment surveys were compared for growth. Qualitative data was organized into common themes and analyzed.





MONTANA STATE UNIVERSITY
Master of Science in Science Education

July 2023

NATURE JOURNALS IN THE MIDDLE SCHOOL CLASSROOM

Megan Leonard
Kingsport, Tennessee






Treatment

Students participated in nature journaling sessions in addition to normal classes – weather permitted – for a total of nine journal prompts.

Journal Prompts

- I Notice, I Wonder, It Reminds Me Of...
- Comparison
- Zoom In, Zoom Out



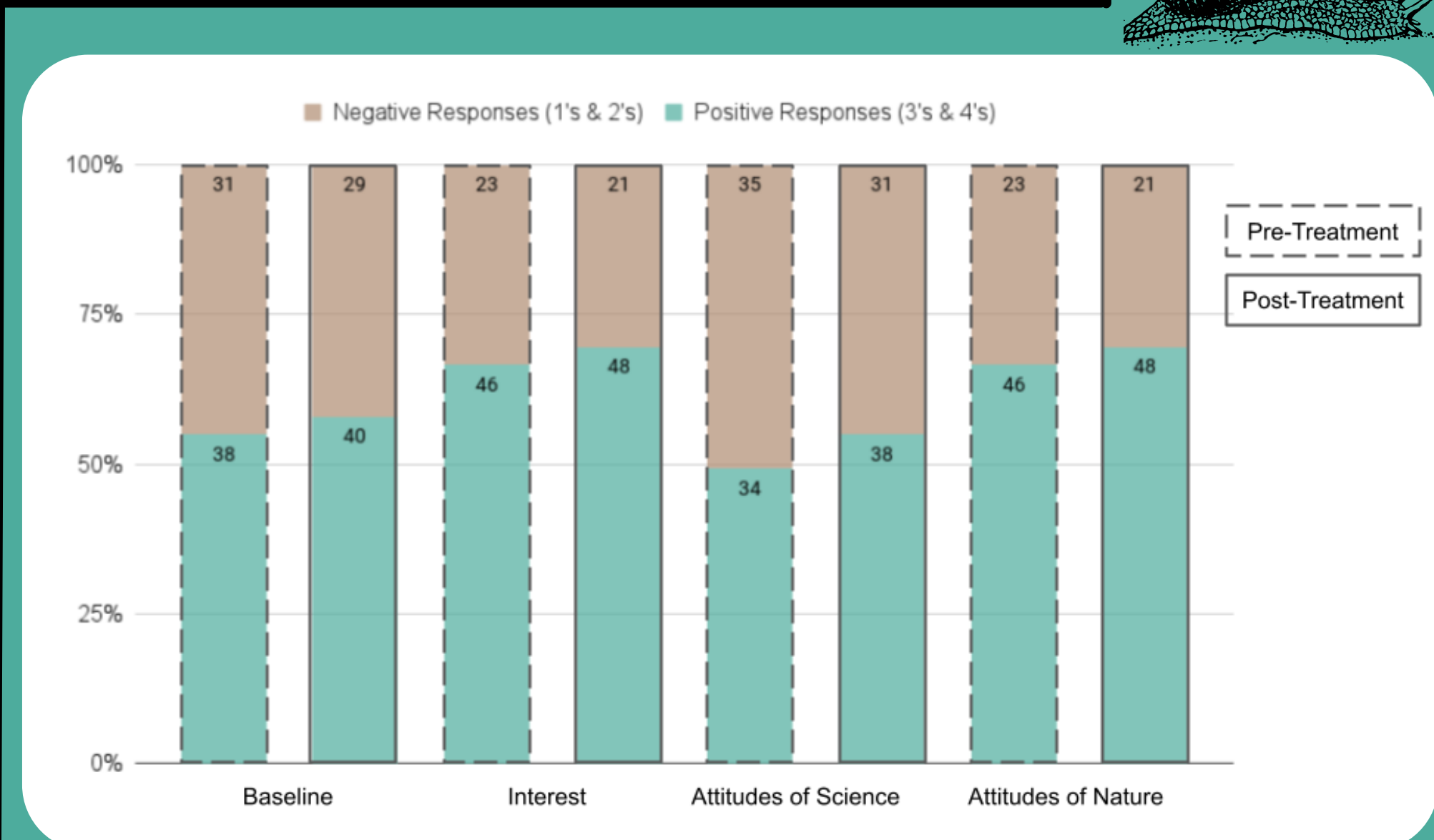


Figure 1. Positive and negative responses on the Interest and Attitudes pre- and post-treatment surveys, (N=69). Paired t-test analysis showed no significant growth, however, the positive responses in all four categories increased between the pre- and post-treatment surveys. All categories saw a increase of 2.9%, except the Attitudes of Science category; this category increased the most of all four categories - an increase of 5.8%.

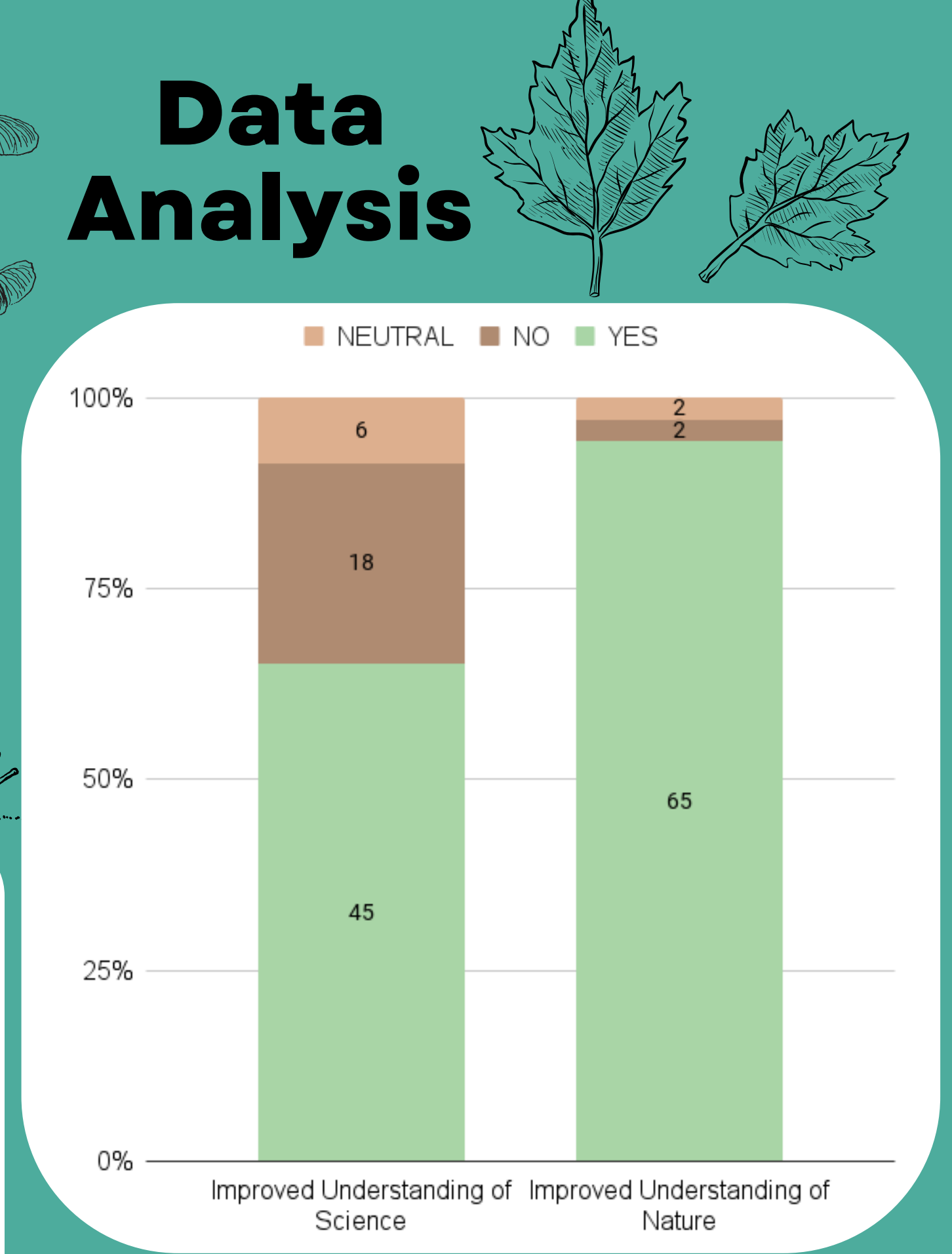


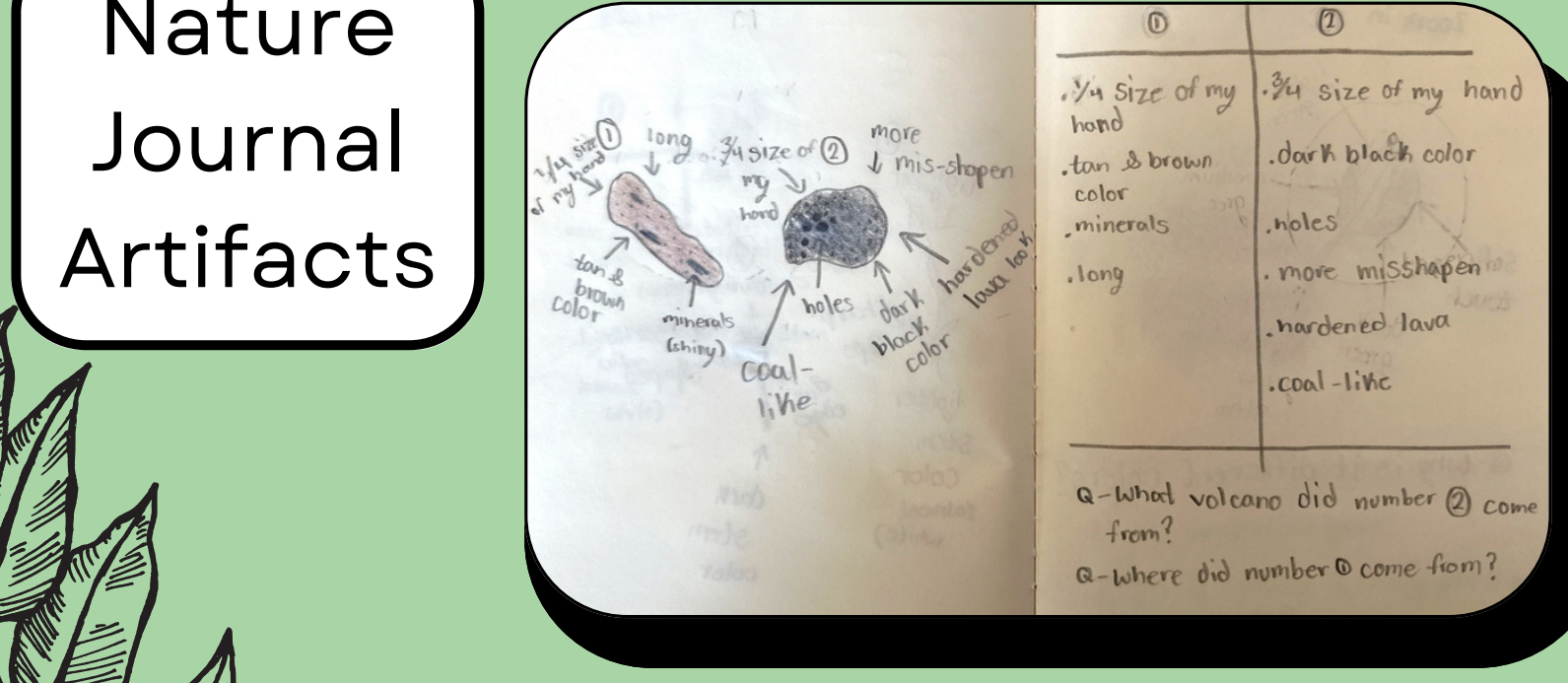
Figure 2. Student responses in regard to whether or not nature journaling had an impact on their understanding of science and nature, (N=69).

- 65.2% of students responded with Yes. Nature journaling improved their understanding of science.
- 94.2% of students responded with Yes. Nature journaling improved their understanding of nature.











Conclusion

Implementing nature journaling practices can help increase students' attitudes towards science and nature. Pre- and post- survey data showed an increase of at least 2.9% for each category. Additionally, a majority of students self-reported that nature journaling helped to improve their understanding of science and nature. A number of students commented about plans of continuing nature journaling on their own. Giving students the opportunity to connect with nature and practice observation and inquiry skills proved to have an effect on their interest and attitude levels.

