

# The Effects of Inquiry-Based Learning on Students Questioning Skills

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Whittier Elementary School, Spring 2025



# Introduction

- Whittier Elementary School
- 5th grade class of students (N=14)
- Title 1 public school
- Salt Lake City, Utah

# Research Questions

How do Title 1 students perceive their own growth and development in questioning skills as a result of engaging in inquiry-based learning activities?

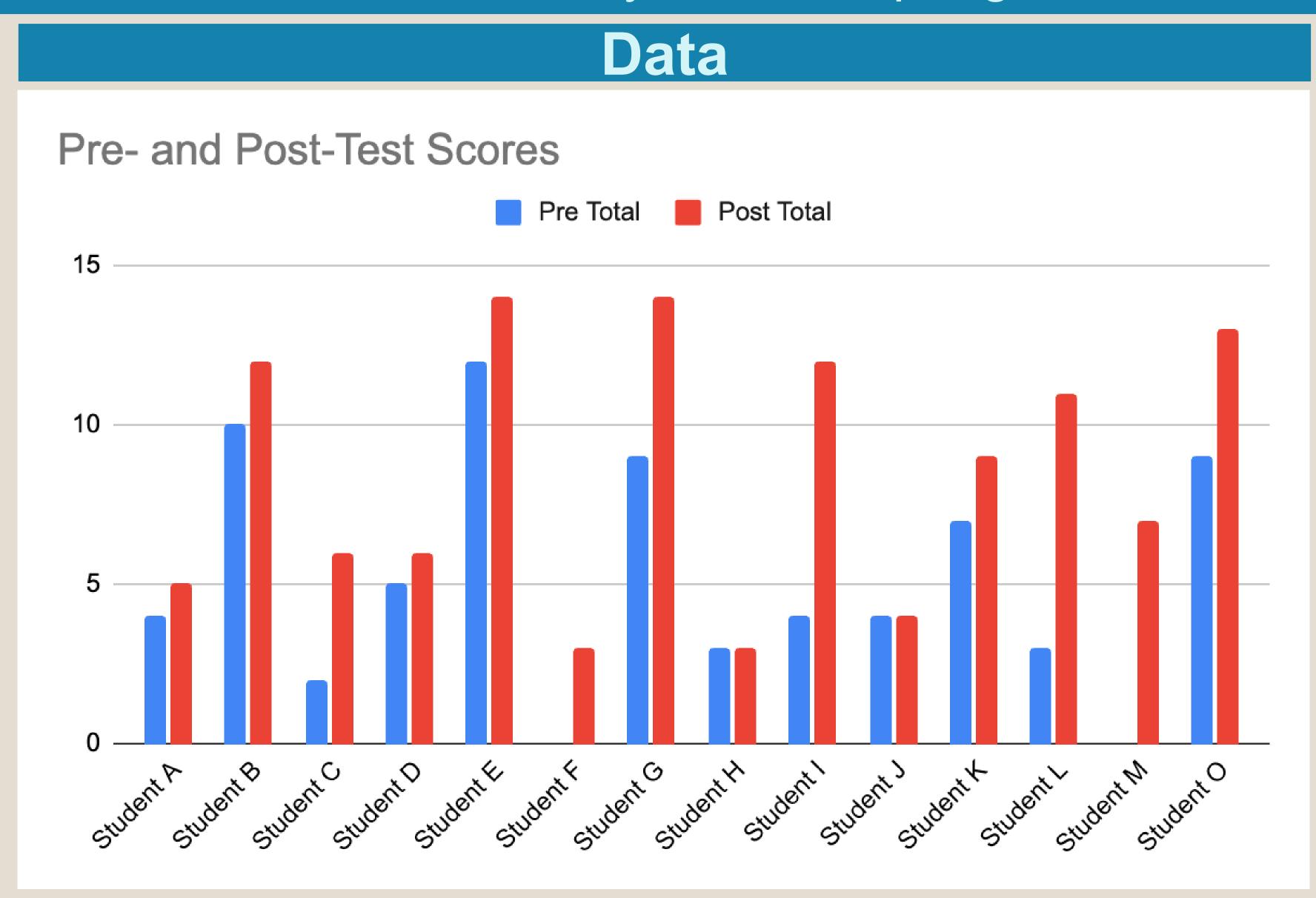
How does inquiry-based learning impact the quality of students questioning skills in Title 1 science classrooms?

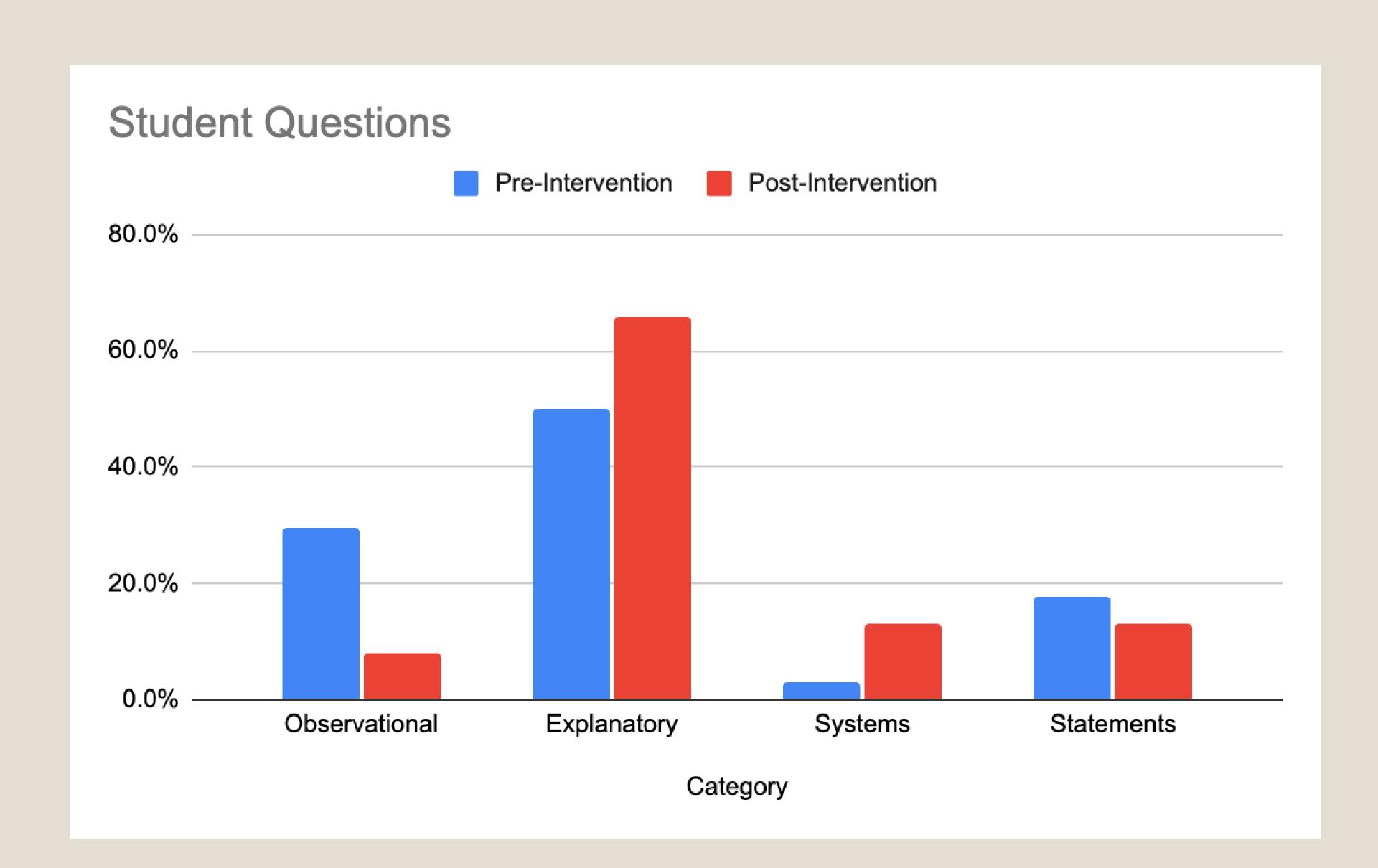
# Methodoloav

- The Great Salt Lake (GSL)
   Pre and Post-Test
- 2. Educator Observations
- 3. Student Interviews
- 4. Student Surveys Pre-and Post-Intervention

## **Contact Information**

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# Student Quotes

- "I feel proud in that I was able to figure it out myself (the question)"
- "This year, I'm starting to get better with science. I really like science now"
- "Because if I ask questions, you go into more details, and then the details will stay in my head."

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#### Claims

- Students showed significant growth in content knowledge
- Students asked higher-quality questions
- Students experienced a shift in their attitudes toward science

#### Evidence

- *t*-test significant (p<.05)
- Less observational and more explanatory and systems questions asked
- Students reported that they enjoyed science

Reasoning

 The data suggest inquirybased learning increased student perceptions and question quality

## Impact

Inquiry-Based Learning in a Title I classroom led to moderate gains in students' perceived growth and question quality. While survey results weren't statistically significant, higher post-test averages, a medium effect size, and improved question types suggest the intervention was effective.

# Acknowledgements

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