

LITERACY INSTRUCTION IN A MIDDLE SCHOOL SCIENCE CLASSROOM



Background

- I taught **seventh** and **eighth** grade science at a K - 8 Catholic School
- The majority of the students are **English Language Learners (ELL)**
- Reading levels are a **school wide issue**
- Testing during the previous year revealed that **75%** of the current 8th grade class read **below or well below grade level**
- This was coming across in **class** as being **unwilling to read**, in addition to **comprehension issues** on assessments and other work
- **Research Question:** How does a novel study, aligned with the science content, build science knowledge and literacy skills?
- **Sub Question:** To what extent does implementing real text application in my science classroom build comprehension skills?

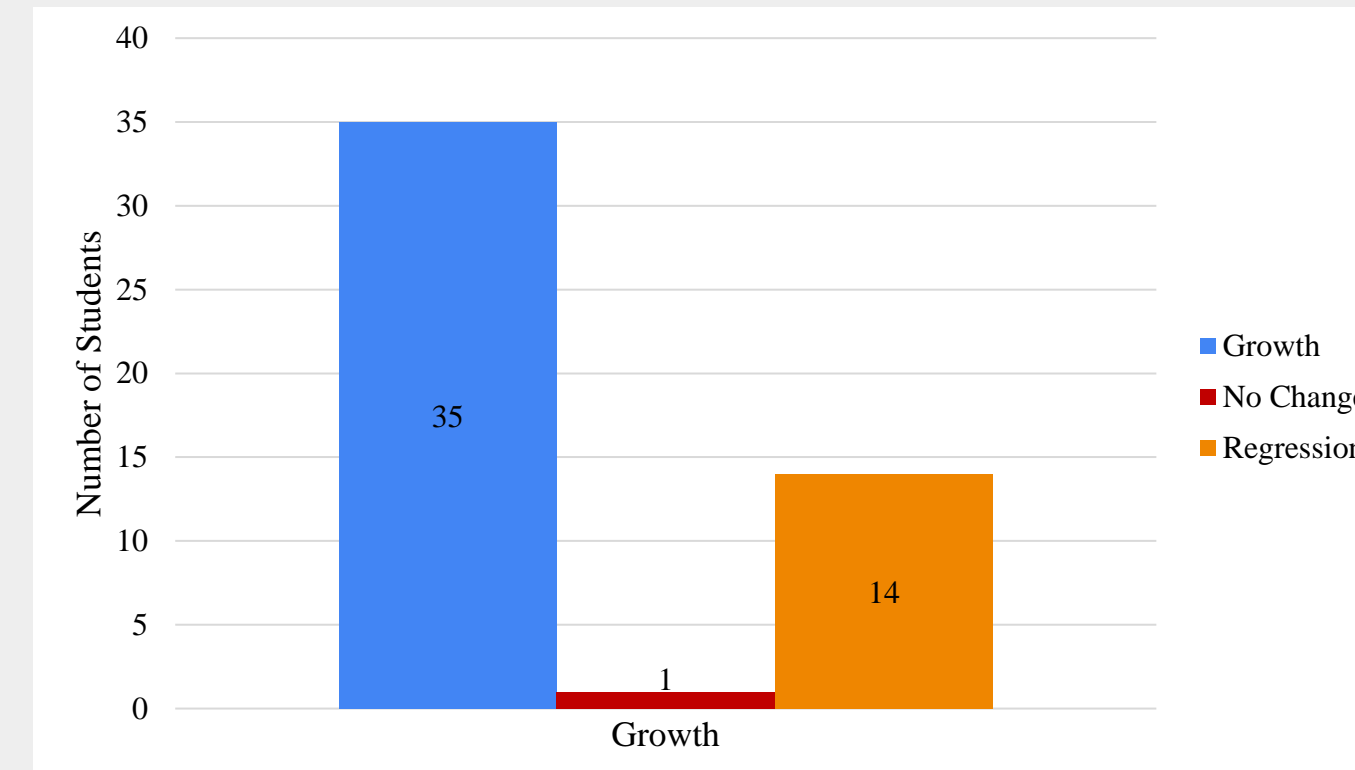
Methods

Alongside regular science content instruction:

1. Students are taught ELL directed evidence based close reading strategies in small group
2. Students directly apply that close reading strategy to reading and summarizing on topic articles
3. Students read a fictional novel connected to the science unit and answer comprehension questions

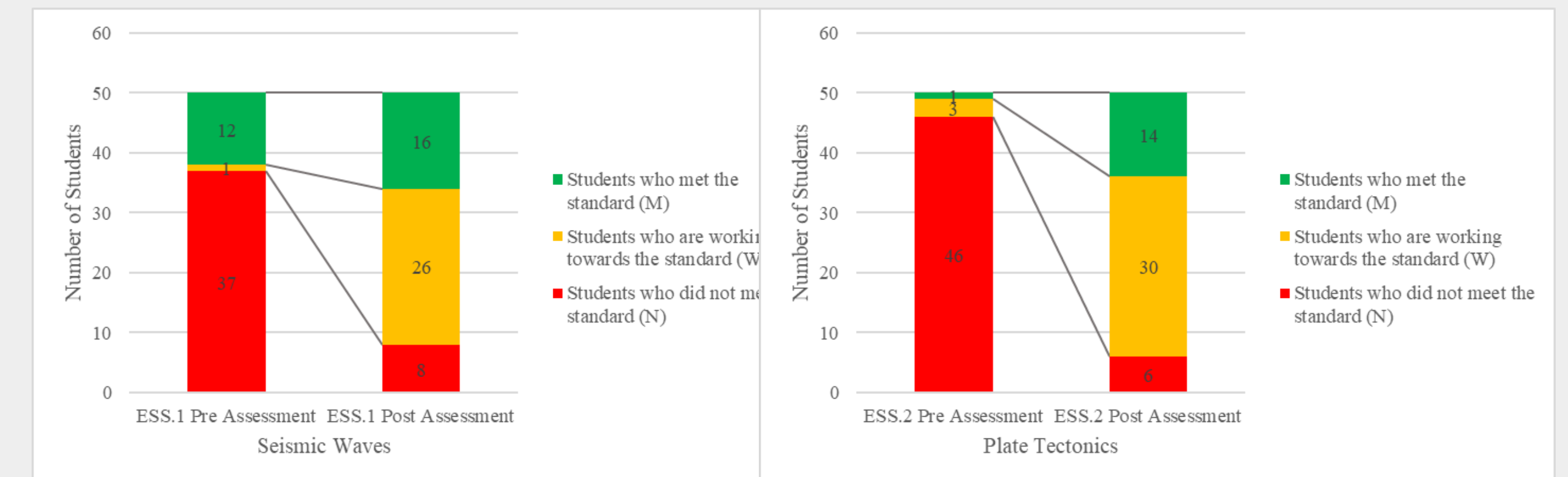
Key Findings

Figure 1: Number of students with reading score growth (N=50)



70% of students in the treatment group saw growth in reading scores.

Figure 2: Student Mastery Comparison (N=50)



The majority of 8th grade students were shown to be working towards mastery of both science standards assessed. The number of students who did not meet standards was significantly reduced

Results

- Although many students are still not reading at grade level, STAR reading scores grew for over half the treatment group
- The majority of students in the treatment group were able to “pass” science content assessments by showing they were either working towards meeting standards (W) or meet standards (M)
- Student comprehension levels were assessed at or near mastery throughout the treatment time.
 - ◆ Article summaries and Chapter comprehension questions were used as assessment tools

Impacts on My Teaching

- I chose to assign more close reading activities
- I realized that I can have an impact on reading instruction within the science classroom.
- I learned how important it is for students to interact with text so that they can gain a deeper understanding of science content.

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