

Background: National reading scores have remained stagnant since 1992. 2019 NAEP reported 65% of 4th graders are reading below proficient levels.

Interactive Read Alouds (IRA) have demonstrated positive outcomes in oral language, print concepts, vocabulary, and incorporating science and social studies concepts.

This study examines the effect of science IRAs on reading, writing, and vocabulary outcomes.

Methods: Quasi-experimental design with assignment at the teacher level. Six teachers (3 intervention and 3 BAU) participated in the three week study.

An ANCOVA was conducted using Pretest Oral Reading Fluency and Vocabulary as covariates.

Outcomes were: Reading proficiency, Writing outcomes (standardized and researcher created), and Vocabulary.

Participants: 60 first grade students participated. The study was conducted in two schools in a Title I district within Southeastern part of Tennessee.

The Effect of Science Interactive Read Aloud on Reading, Writing, and Vocabulary Outcomes in First Grade Students

Nicole Crouch, Eric Oslund, and Amy Elleman
Middle Tennessee State University

Research Questions

What is the impact of science related IRAs delivered during the English Language Arts (ELA) time with daily writing tasks on reading proficiency outcomes?

What is the effectiveness of IRAs on content-based and standardized writing outcomes?

What is the impact of science IRAs on specific science vocabulary?

Results



No statistical Differences between Intervention and BAU

Reading Comprehension (GMRT)

Writing

Basic, Contextual, Researcher
(content, vocabulary, and overall



Statistical Difference favoring BAU Vocabulary

Summary:

- Both groups demonstrated positive growth in all outcomes
- Intervention spent large portion of time on daily writing task versus BAU on vocabulary and teaching the writing process
- Spending time engaged in daily writing is beneficial when it is accompanied with teaching the writing process and giving feedback.

Limitations/Future Research:

- Short duration-extend duration to 6-9 weeks including multiple units of study.
- Use text sets as the independent variable
- With longer intervention-include a standardized vocabulary measure
- Daily Writing task should focus teaching the writing process and given feedback rather than extensive daily writing with no feedback.