

# FLIPPING ELEMENTARY PROFESSIONAL DEVELOPMENT: PROVIDING TIME AND FLEXIBILITY TO LEARN INQUIRY SCIENCE



## Background

Elementary science educators voiced concerns about district science professional development. Teachers would like more PD opportunities to learn about inquiry science.

“Course content is boring. Can we please learn from each other?”

“Too much information. Wish we had time to reflect and practice new learning.”

“Scheduled district trainings are not convenient to my busy schedule.”

This action research project provided meaningful inquiry science professional development to elementary science teachers through an online platform over an extended period of time.

## Treatment

- ❖ 4 week online inquiry science PD course
- ❖ 1 face-to-face initial meeting
- ❖ Weekly online assignments
- ❖ Electronic discussion board collaboration

### Course goals:

- empower teachers to utilize a constructivist approach to teach science
- improve elementary science content knowledge
- encourage participant collaboration
- provide time for participation, reflection, and implementation

## Data Collection & Analysis

### Focus Questions:

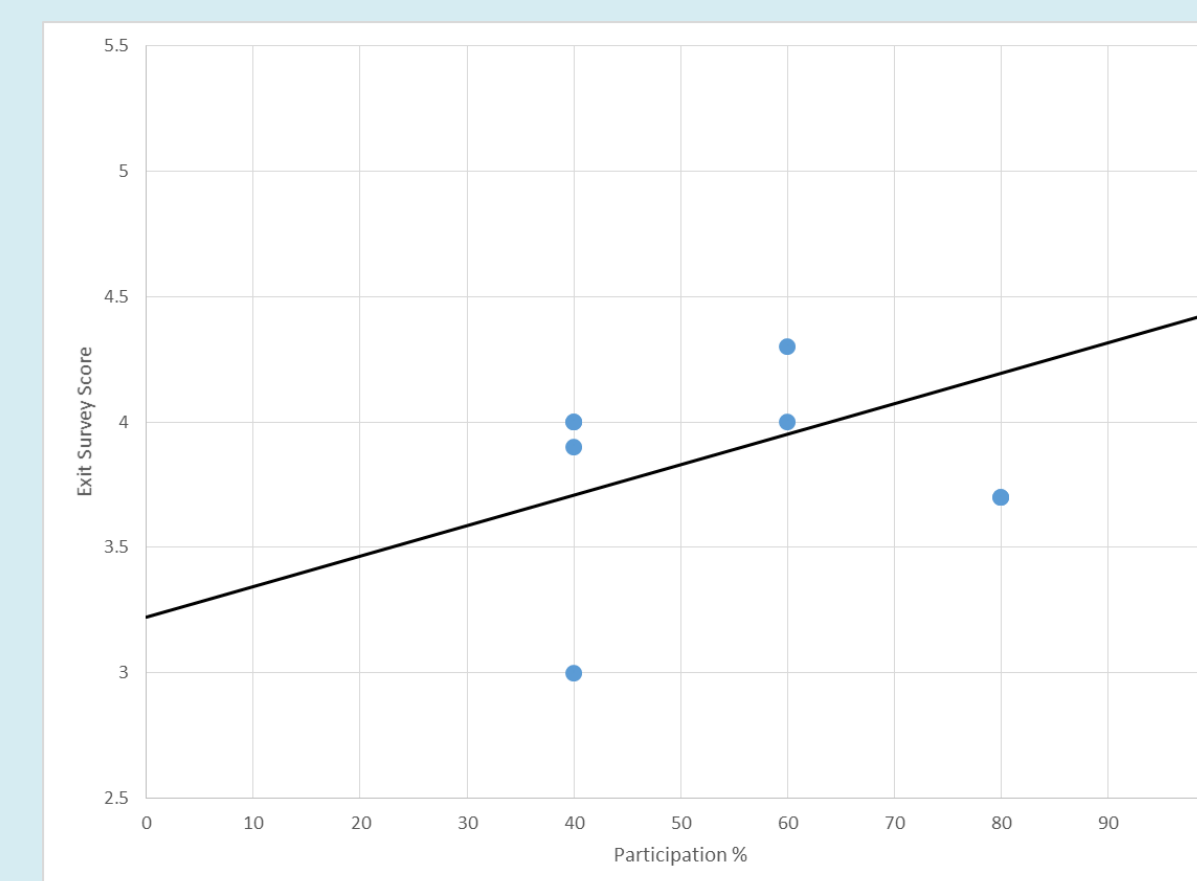
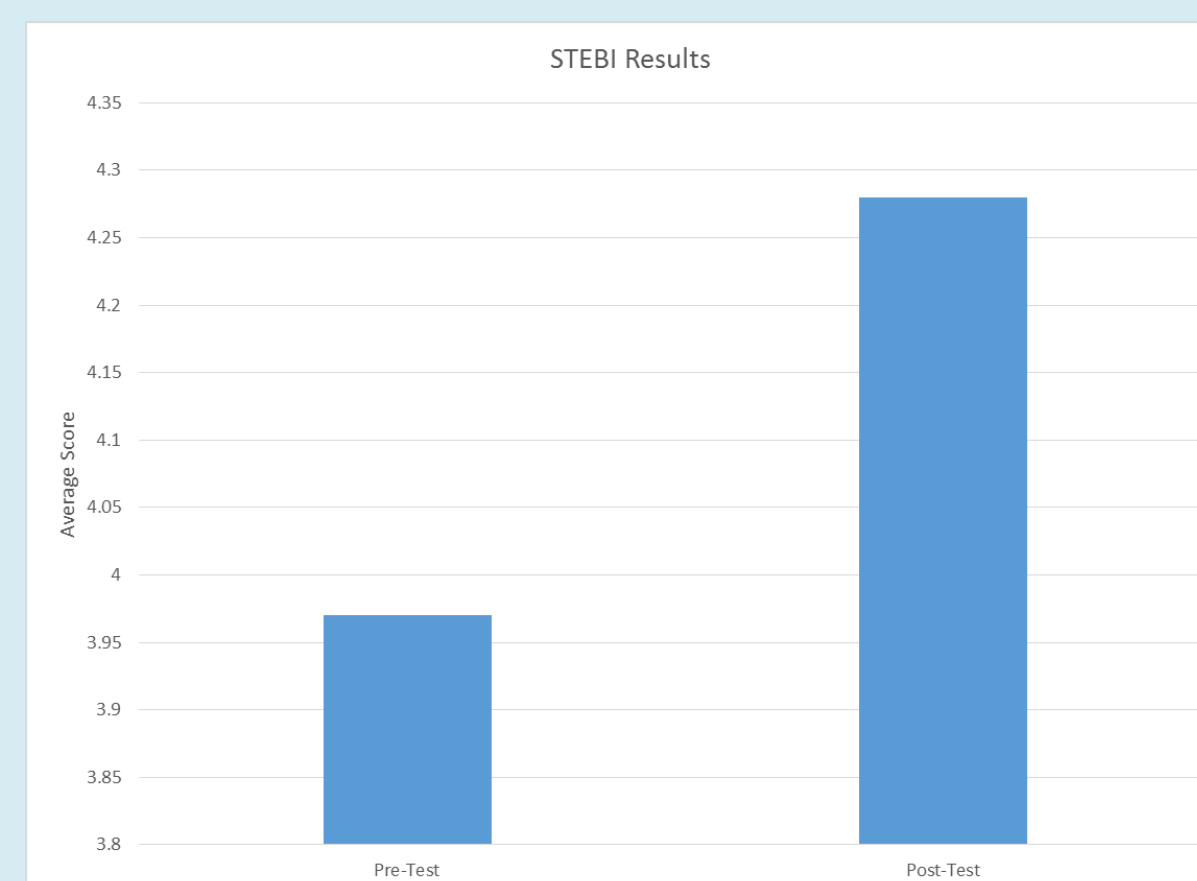
What effect does treatment have on teachers’

- beliefs in professional growth?
- self-efficacy for learning & implementing inquiry science?
- inquiry science pedagogy?
- collaboration?

### Collection Methods:

Likert Survey	Pre-Post Teacher Observations	Pre-Post Knowledge Survey
Teacher Interviews	Participant Online Discussion Board	Teacher Self Observation Rubric
Pre-Post STEBI A	Instructor Journal	

## Results



- ❖ Based on results, a district recommendation will be made to provide elementary science teachers with additional online and blended elementary science PD opportunities which extend over a longer period of time.
- ❖ This action research project proved participants believe there is value in collaborating with peers.



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