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.

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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