

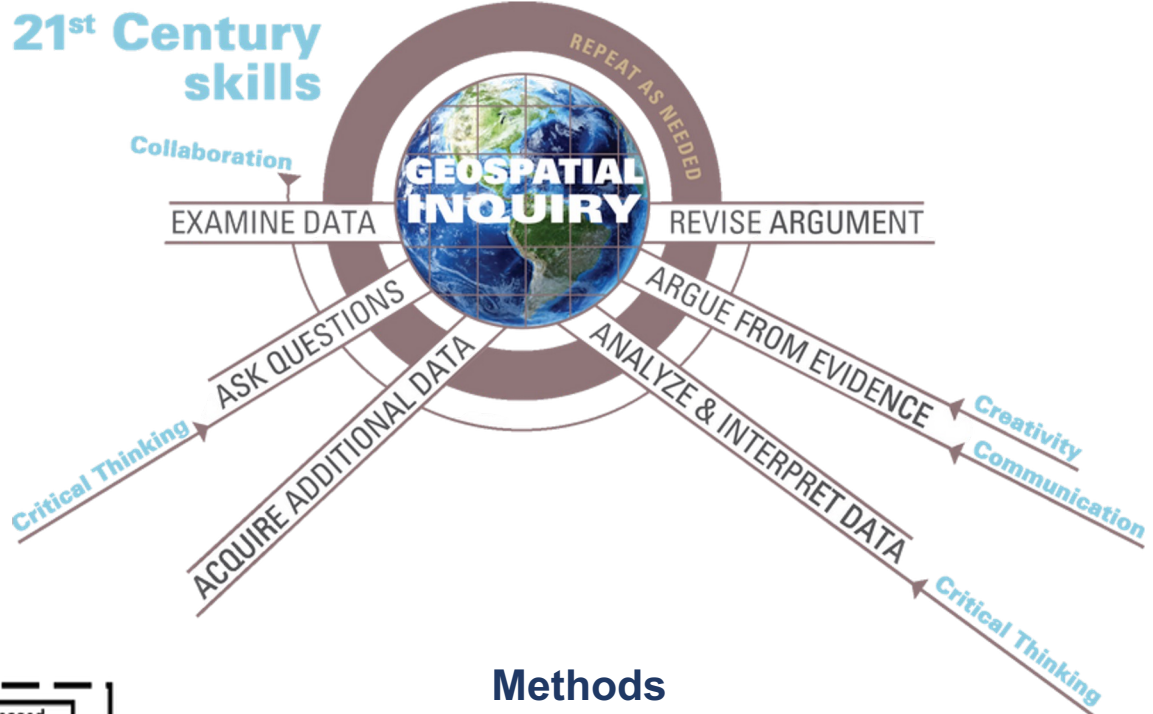
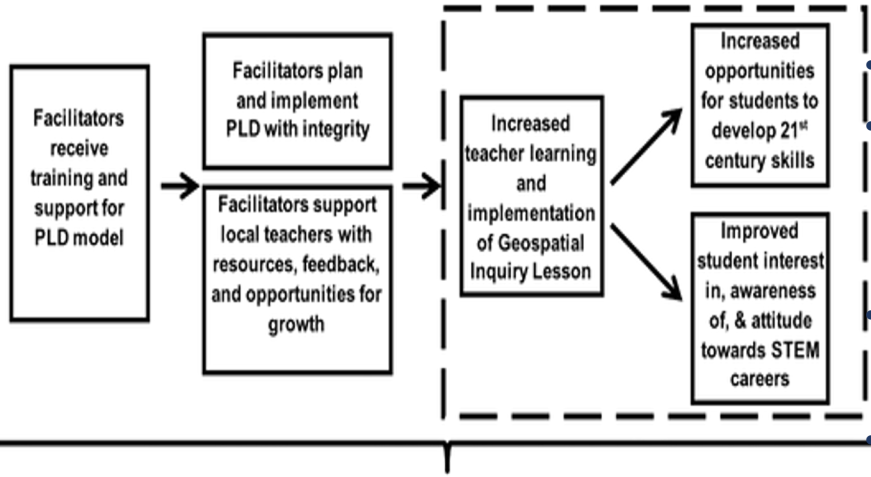
The Impact of Geospatial Inquiry Lessons on Student Interest in Science and Technology Careers

Lori Rubino-Hare, Brooke Whitworth, Francis Boateng, & Nena Bloom

Research Questions

- What relationships exist between teachers' context, knowledge, skills, abilities, implementation of Geospatial Inquiry lessons, Geospatial technology (GST) performance and a) student interest in science or technology, b) student interest in science and/or student interest in technology careers?
- What relationships exist between students' context, backgrounds, attitudes about science, and interest in science, technology, or careers in these fields?

Overview of Complete Project with Focus of Current Study Outlined



Methods

- Teachers (n=82) participated in professional learning
- Teachers' submitted Geospatial Inquiry lessons and implementation surveys to be scored for alignment with Geospatial Inquiry principles
- Students (n=1924) completed post-lesson retrospective surveys
- Generalized linear modeling and hierarchical analysis were used to analyze data

Findings

- Science:
- Career Spotlight included
 - Higher teacher GST Score
 - Female teacher
 - Female student
 - Black or Hispanic student
 - Previous science exposure
 - STEM Curiosity
 - Hold a science identity
 - Positive adult relationships
- Science Careers:
- Career Spotlight included
 - Higher teacher GST Score
 - Female student
 - Black student
 - Previous science exposure
 - Perseverance
- Technology:
- Higher teacher GST Score
 - Male student
 - Black or Hispanic student
 - Previous technology exposure
 - STEM Curiosity
 - Hold a technology identity
- Technology Careers:
- Previous technology exposure
 - Perseverance

After participating in a Geospatial Inquiry lesson, there was increased student interest in four categories



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