

Inquiry in Motion: Teaching Strategies for Accelerating Student Growth

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Tension in Education

- Are we to develop critical thinking or breadth of understanding?
 - The answer has huge implications for the strategies that we use to instruct
 - How do exemplary teachers answer the question?

Overview

- Inquiry in Motion Overview
- Data Collection/Analysis
- Findings
- Lessons Learned
- Next Steps

Inquiry in Motion Overview

- Inquiry in Motion (IIM) seeks to improve the motivation, potential, and achievement of students and teachers through rigorous and authentic inquiry-based learning experiences.

PD Interventions

- PDI-1: (goal: improve quality of inquiry-based instruction)
 - 2 week experiential summer program
 - 4 follow-up sessions
 - monthly follow-up in individual classrooms
- PDI-2: (goal: create a sustainable support structure in participating schools)
 - 3 weeks of summer involvement
 - monthly follow-up meetings in schools

Data

- Case studies of teacher practice
- Electronic Quality of Inquiry Protocol ([EQUIP](#))
- MAP scores in math content, science content, and science process

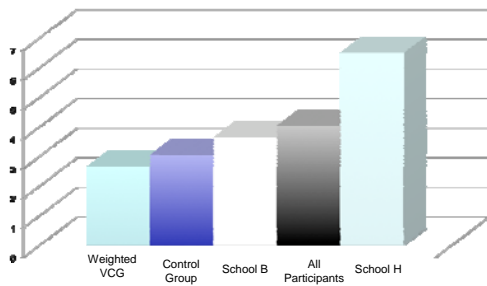
Data Analysis

- ANOVA and correlational for EQUIP
- Quasi-Experimental Design for MAP score analysis

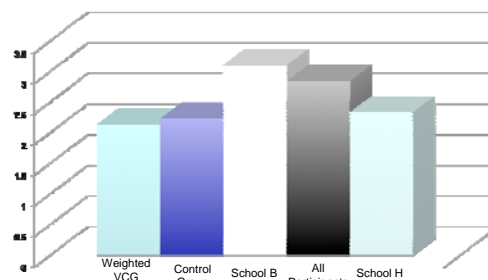
Findings

- High correlation between teacher performance (EQUIP scores) and student performance on MAP science content and science process (math not yet analyzed)
- Scores of participants in science content and science process exceed district and VCG performances.

08-09 Science Content RIT Gain for MAP



MAP Science Process Gains



Lessons Learned

- Target schools not entire districts
- Frequent, personalized follow-up is critical
- Create and implement a sustainability plan
- Involve administrators

Revisiting the Initial Question

- Are we to develop critical thinking or breadth of understanding?
 - critical thinking demands understanding but understanding doesn't demand critical thinking.
 - students who can think critically can excel on mandated tests that emphasize understanding AND demonstrate proficiency in problem-solving, deeper thinking, and innovation.



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