

Evaluating educational programs: Common problems and practical solutions in large-scale survey research

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EERS April 2006

Presentation Overview

- **Project description**
- **Research questions/conceptual progression**
- **Issues and solutions:**
 - **Survey development**
 - **Sampling**
 - **Reaching participants**
- **Take-aways**

Project VITAL: Overview

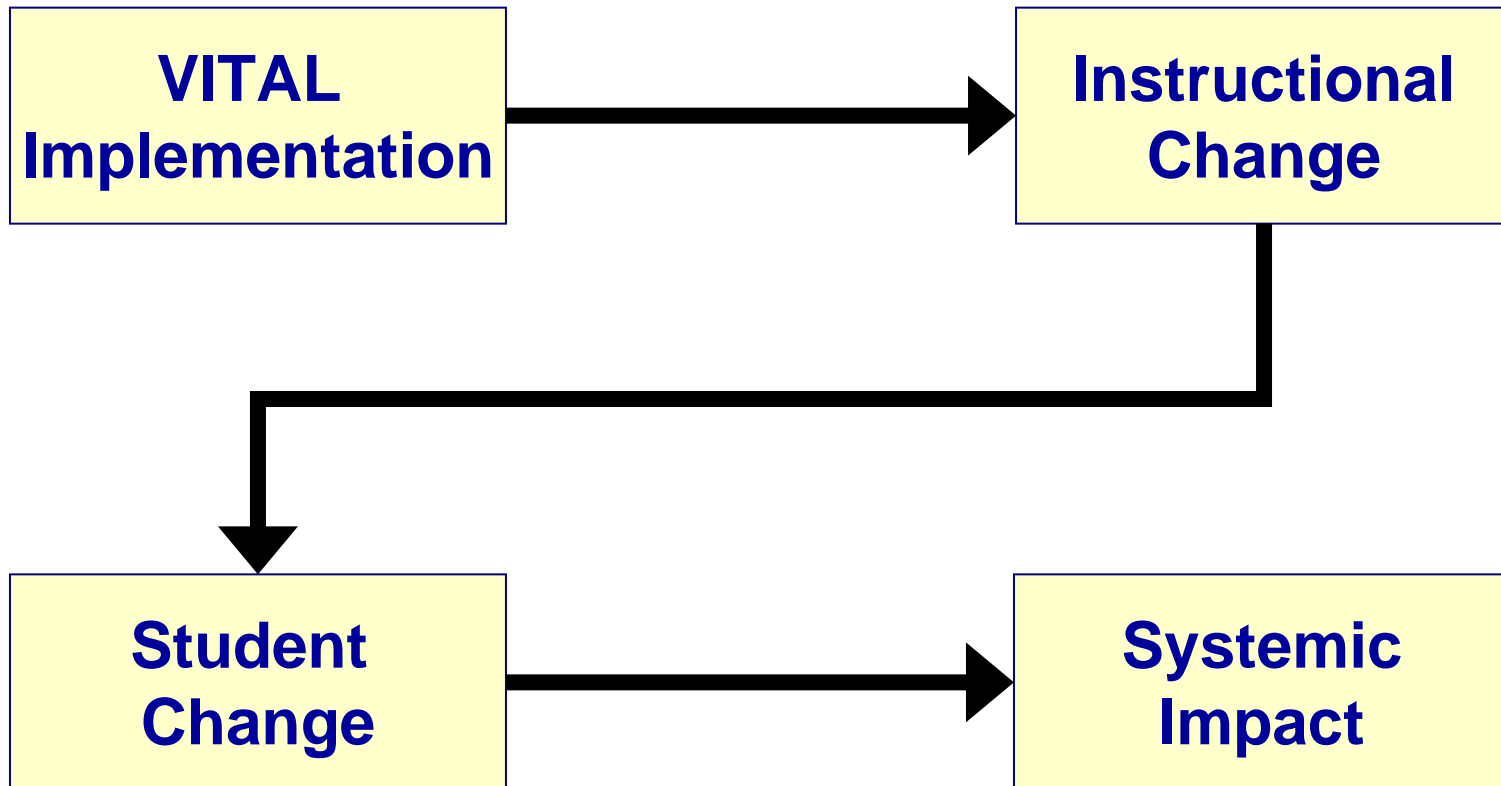
- 3-year Ready to Teach grant from the US DOE
- Goal: Help upstate NY educators target areas of weakness in student performance

<u>Project Partners</u>	<u>Role</u>
PBS Channel Thirteen/WNET	Develop digital video instructional materials
Grow Network/McGraw Hill	Produce web-based student test data (“Grow”) reports
Center for Children and Technology	Formative evaluator
Hezel Associates	Summative evaluator

Research Questions

- **How do teachers use VITAL, and what conditions and factors influence this use?**
- **To what extent does VITAL contribute to changes in teacher practice and improved student performance?**
 - **To what extent are changes consistent across content areas and grade levels?**
- **What conditions are necessary to support the integration of VITAL into:**
 - **Schools' existing professional development efforts?**
 - **Pre-service training across NYS?**

Conceptual Progression



Year 1 Activities: Formative Research

- **Goal: Describe the contexts in which VITAL will be implemented using:**
 - **Statewide survey**
 - **Disseminated to:**
 - Districts**
 - Schools**
 - Teachers, targeting grades 4-8**
 - **Issues surrounding data-based decision making for:**
 - Instructional mapping**
 - Access to technology**
 - Information needs and gaps**
 - **Follow-up case studies**

Survey Development: Issues

- **Survey development:**
 - **Plan: Design an instrument appropriate for educators in all of upstate New York's districts and schools**
 - **Issues:**
 - **State, standardized and local measures of student performance**
 - **District and school sizes and demographics vary tremendously**
 - **Transitional testing landscape in NY**

Survey Development: Solutions

- **Actions:**
 - **Feedback and focus groups from educators in diverse districts across NY**
- **Implications:**
 - **Extended timeframe**
 - **Several iterations**
 - **Branched survey design**

Sampling: Issues

➤ Sampling

- **Plan: Gather nested data from**
 - All superintendents (n = 625)
 - All principals of schools containing any grades 4-8 (n = 1273)
 - Two core content teachers from any grades 4-8 in each eligible school (n = 2546)
- **Issues:**
 - Teachers' core content area and grade level unavailable publicly
 - Obtaining accurate contact information:
Purchased vs. internally generated databases
 - Highly skewed distribution of district sizes across the state: How to account for over-representation

Sampling: Solutions

- **Actions:**

- Common district identifier to code nested participants
- Purchased teacher contact lists from an external provider that had knowledge of content area specialties and grade levels
- Decision to conduct a population sample and weight responses based on the number of eligible schools per district
- Acquired analysis software that can handle complex samples

- **Implications:**

- Surveyed less teachers than originally planned
- Delays
- Record changes and rationales periodically
- Involve more than one person in each task

Reaching Participants: Issues

➤ Reaching Participants

- **Plan:** Reach all participants in the sample, but no more
- **Issues:**
 - Typically low response rates – commonly 10%
 - Technological limitations: access to computers and certain websites varies across schools
 - Winter break
 - “Passing on” surveys to non-targeted participants

Reaching Participants: Solutions

- **Actions:**
 - **Multiple survey formats**
 - Online
 - Hard copy
 - **Incentive: \$50 gift certificate to Barnes & Noble**
 - **Multiple communications**
 - E-mail (2)
 - Postcard with survey URL (2)
 - Personalized letter with URL
 - Hard copy
 - **Involved someone early-on who can help plan the direct-mailing campaign**

- **Implications:**
 - **Delays**
 - **Response rates greater than 10%**
 - **Internal check and balance for collating incentives**
 - **Matching respondents with sample**
 - **Record keeping**

Statewide Survey: Take-Aways

- **Give yourself lots of time**
 - Coordinating resources
 - Making decisions
 - Unforeseen changes to the plan
 - Communicating with vendors

- **Communicate with participants multiple times, in multiple ways**

- **Subcontract when possible**
 - Contact lists
 - Direct mailing services
 - Incentives

Statewide Survey: Take-Aways

- **Use technology to your advantage**
 - Electronic communications with participants when possible
 - Online survey
 - Use a program that will auto-download survey responses into a compatible database

- **Keep accurate and up-to-date records**
 - All changes made and corresponding rationales
 - Involve more than one person for every task

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