



# EFFECTS OF VIDEO SELF-ANALYSIS ON PRE-SERVICE TEACHERS' CLASSROOM MANAGEMENT SKILLS

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# Agenda

Introduction/Rationale

Literature Review

Current Study

Preliminary Results

Conceptual Model

# What's the Problem?

## Qualified teacher shortage

- Declining teacher preparation enrollment
  - *35% reduction from 2009 to 2014*
- High teacher attrition rates
  - *8% annual attrition rate*
  - *Teachers with little preparation leave at rates 2-3 times higher*
  - *Attrition disproportionately affects most disadvantaged students*
- Increasing student enrollment

# The Headlines

“Study shows many teachers not credentialed in their subjects” – The Chicago Tribune

“In Arizona, teachers can be hired with absolutely no training in how to teach” – The Washington Post

“As teachers flee classrooms, thousands of students wait for permanent instructor” – The Sentinel

“Teacher shortage equals summer school.” – The Philadelphia Inquirer

“Starting Monday, Utah schools can hire people without education training, experience.” – The Salt Lake Tribune

“Severe teacher shortage in Montana, a ‘last resort’ hiring option has been used again.” – Billings Gazette

“Teacher shortage prompts some states to lower the bar” – The Wall Street Journal

“California faces looming teacher shortage, and the problem is getting worse.” – The Los Angeles Times

# A SOCIAL JUSTICE ISSUE...



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Teacher Shortage  
Impact:

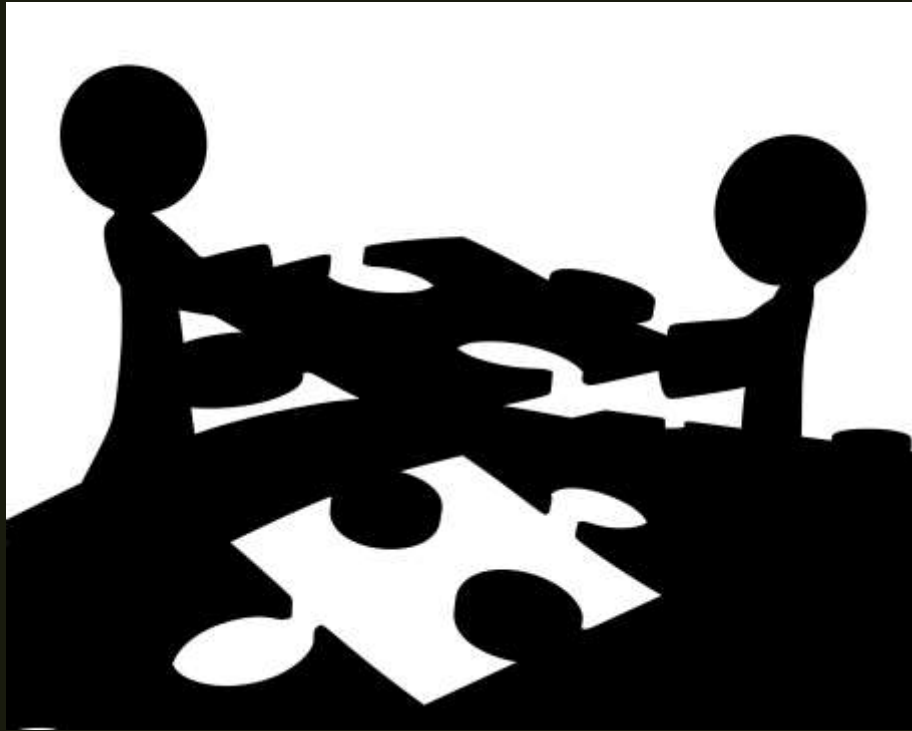
Lowered standards  
Teacher quality  
De-professionalization



What's the impact for one child?

What's the "ripple effect"?

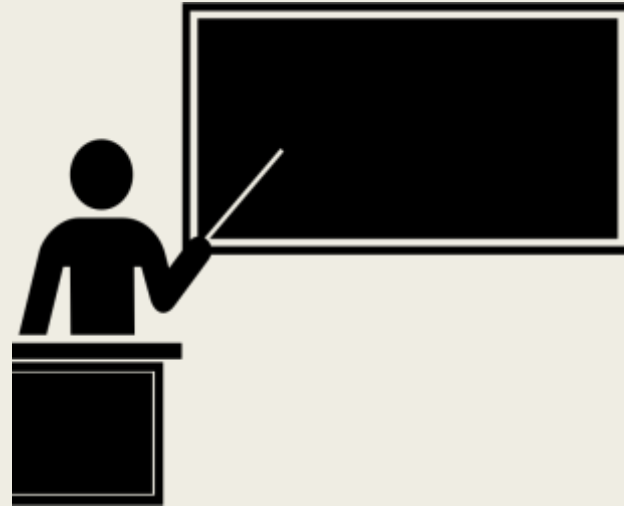




THE PROBLEM IS  
MULTI-FACETED

# Teacher Preparation is Prevention!

## Effective Teacher Preparation for ALL



- Recruitment
- Development
- Retention



How can we prepare **ALL** teachers so that they are highly-skilled, able to implement evidence-based instructional and classroom management strategies, and demonstrate/model social and emotional competence their **FIRST** year.???



**Pre-Service Teacher Training in  
Classroom Management:  
A Systematic Review of the Literature**

# What is effective classroom management?

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Focuses on prevention and being proactive

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Environments are nurturing, structured, have routines

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Expectations are clear, stated positively, and are taught

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Instruction is engaging and appropriate for the students

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Continuum of strategies for recognizing appropriate behavior

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Continuum of strategies for addressing inappropriate behavior

# Evidence-Based Classroom Management

- (1) maximize structure in your classroom
- (2) post, teach, monitor, review, and reinforce a small number of positively stated expectations
- (3) actively engage students in observable ways
- (4) establish a continuum of strategies to acknowledge appropriate behavior
- (5) establish a continuum of strategies to respond to inappropriate behavior

(Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008).

# Teacher Outcomes Related to Classroom Management

- New teacher attrition rates
  - *12% leaving after 2 years, 50% leaving after 5 years (Ingersoll, Merrill, & Stuckey, 2014)*
  - *Disproportionate impact on high needs school districts and students (Simon & Johnson, 2015)*
- High levels of self-efficacy in classroom management
  - *associated with increases in job satisfaction, motivation and commitment to teaching (Caprara et al., 2006)*
  - *decreases in stress and burnout (Canrinus et al., 2012)*

# Student Outcomes Related to Classroom Management

- Effective classroom management
  - *Improved academic and behavioral outcomes (Sutherland & Wehby, 2001)*
- Ineffective classroom management
  - *Long term life outcomes: delinquency, violence, school failure (Patterson, Reid, & Dishion, 1992)*

# Current State of the Field

## In Practice

(Ficarra & Quinn, 2014; Russ-Campisi, 2017)

Teachers are not familiar with evidence based classroom management practices, or are familiar but fail to implement practices

Most common request for assistance from teachers is related to student behavior and classroom management.

“Train and hope” professional development

## In Preparation

(Freeman et al., 2014; Flower et al., 2017)

Teachers report feeling unprepared and receiving insufficient training in classroom management

Policy and practice gaps in preparation, particularly in evidence-based classroom management practices

Reduced requirements for secondary and alternative certification programs

# Research Questions

What are the characteristics of the literature examining pre-service teacher training in classroom management?

- *Participant and program characteristics*
- *Research design and variable characteristics*
- *Study quality*

What are the common elements of effective training in classroom management skills for preservice teachers?

- *Across studies, common practices for training pre-service teachers in classroom management*



# Effective Practices in Pre-Service Teachers' Classroom Management Practices

- Systematic review of electronic databases
- Screened 1074 abstracts and 214 articles for inclusion criteria
- 24 articles met all criteria for inclusion
- Ancestral search of reference lists
- **26 articles** included in review

# Method:

## Full Coding

- **Participant Characteristics**: Program Type, Program Level, Major/Certification
- **Independent Variable**: General participation, Specific Course Content or Mode of Delivery, Component of Student Teaching, Technology, Mentor/Cooperating Teacher, Professional Development, Additional Time
- **Dependent Variable**: Direct Observation of Classroom Management Skill(s), Self-Efficacy, Self-Report of Decision Making, Supervisor Rating
- **Research Designs**: Group Experimental, Group Quasi-Experimental, Single Subject Research

# Method: Full Coding

- **Modes of Analysis**: Descriptive Statistics, Inferential Statistics, Visual Analysis, Effect Size
- **Results**: Increases in Desirable Outcome, Decreases in Desirable Outcome, Functional or Causal Relationship Not Reported, Mixed Findings
- **Quality Measure**: Quality Indicator Ratings based on Rubric:
  - *Experimental/Quasi-Experimental: Gersten et al., 2005, adapted for this study*
  - *Single Case Design: Horner et al., 2005*

# Results

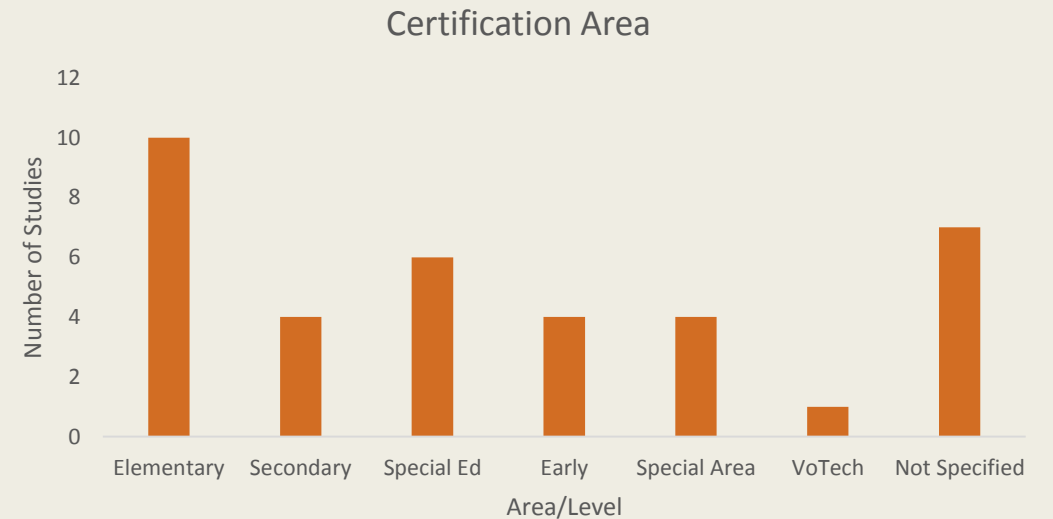
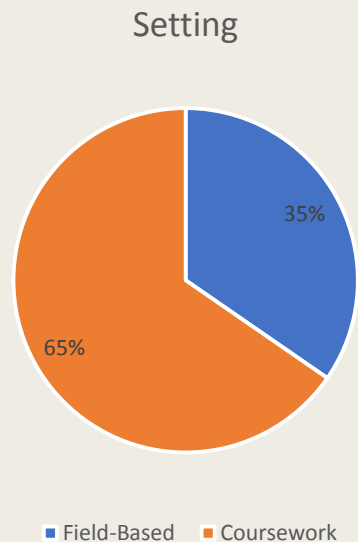
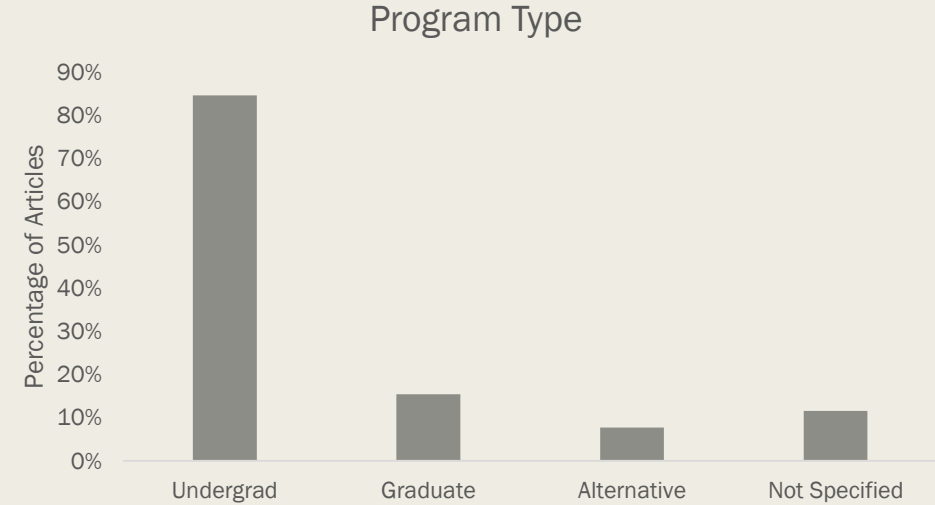
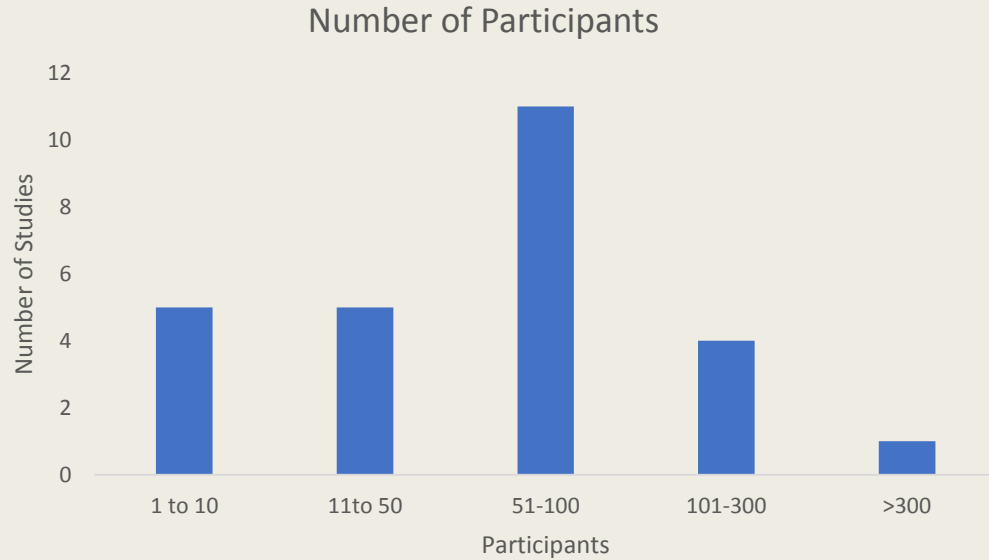
## Research Question 1:

What are the characteristics of the literature examining pre-service teacher training in classroom management?

*Results not mutually exclusive*

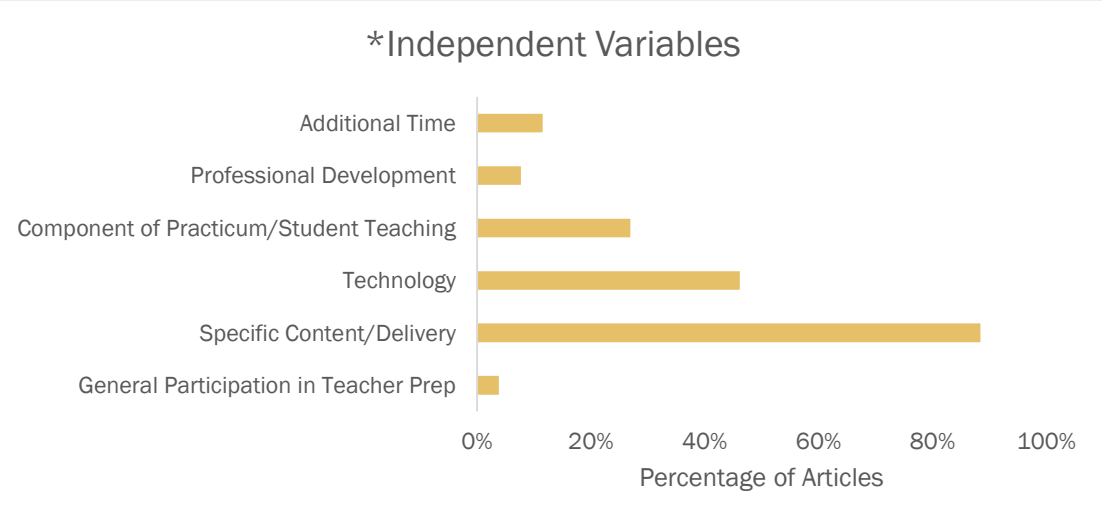
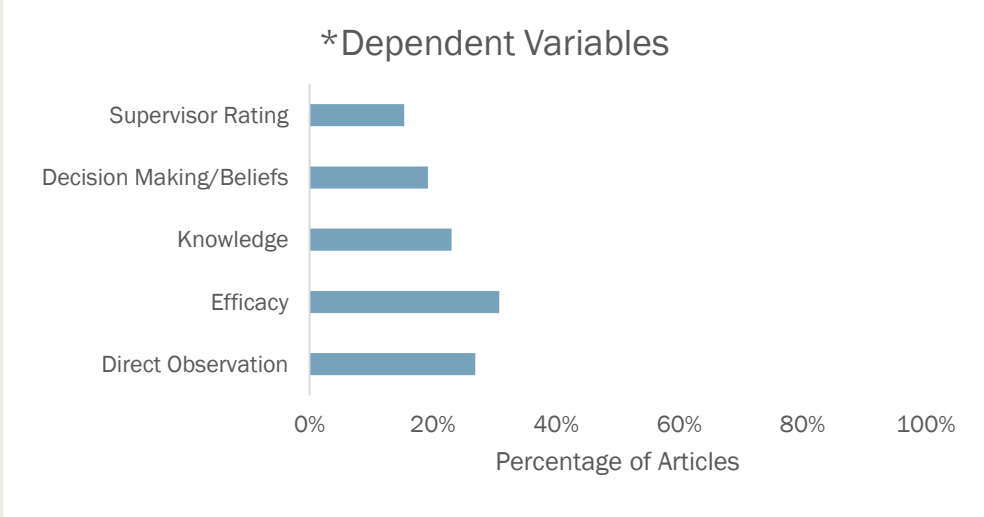
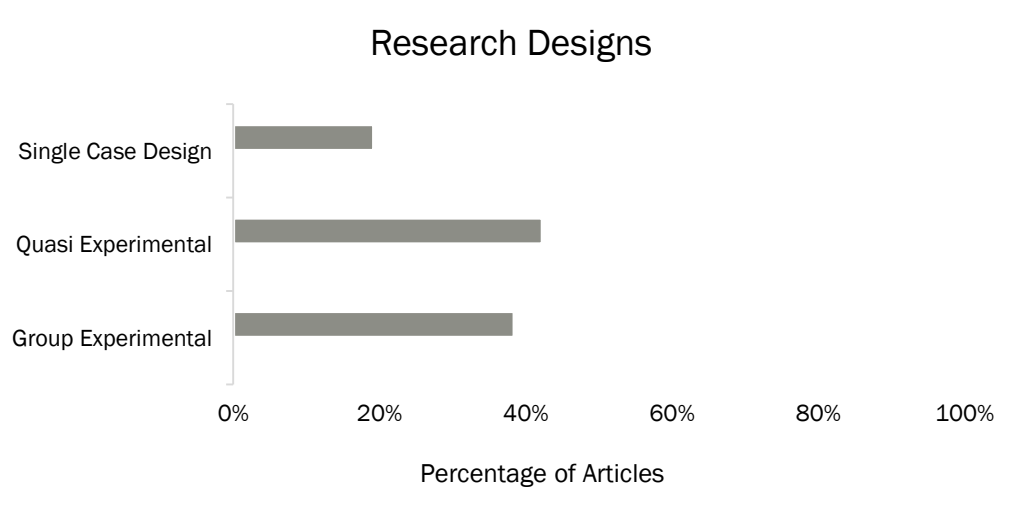
# Results:

## Participant and Program Characteristics



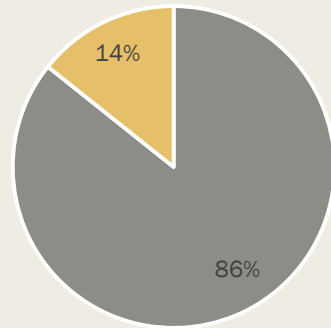
*\*Not Mutually Exclusive*

# Results: Variables across Research Designs



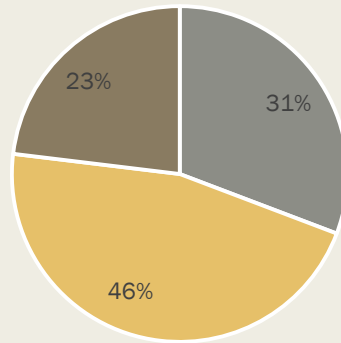
# Results: Study Results and Quality

Experimental Studies:  
Increases in Desired DV



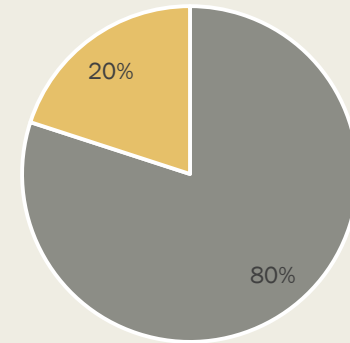
Statistically Significant    Non-Statistically Significant

Study Quality



High    Acceptable    Did not meet Acceptable

Single Case Design: Experimental Effects



Functional Relation    No Functional Relation

# Results:

## Research Question #2

What are the common elements of effective training in classroom management skills for pre-service teachers?

*Results not mutually exclusive*



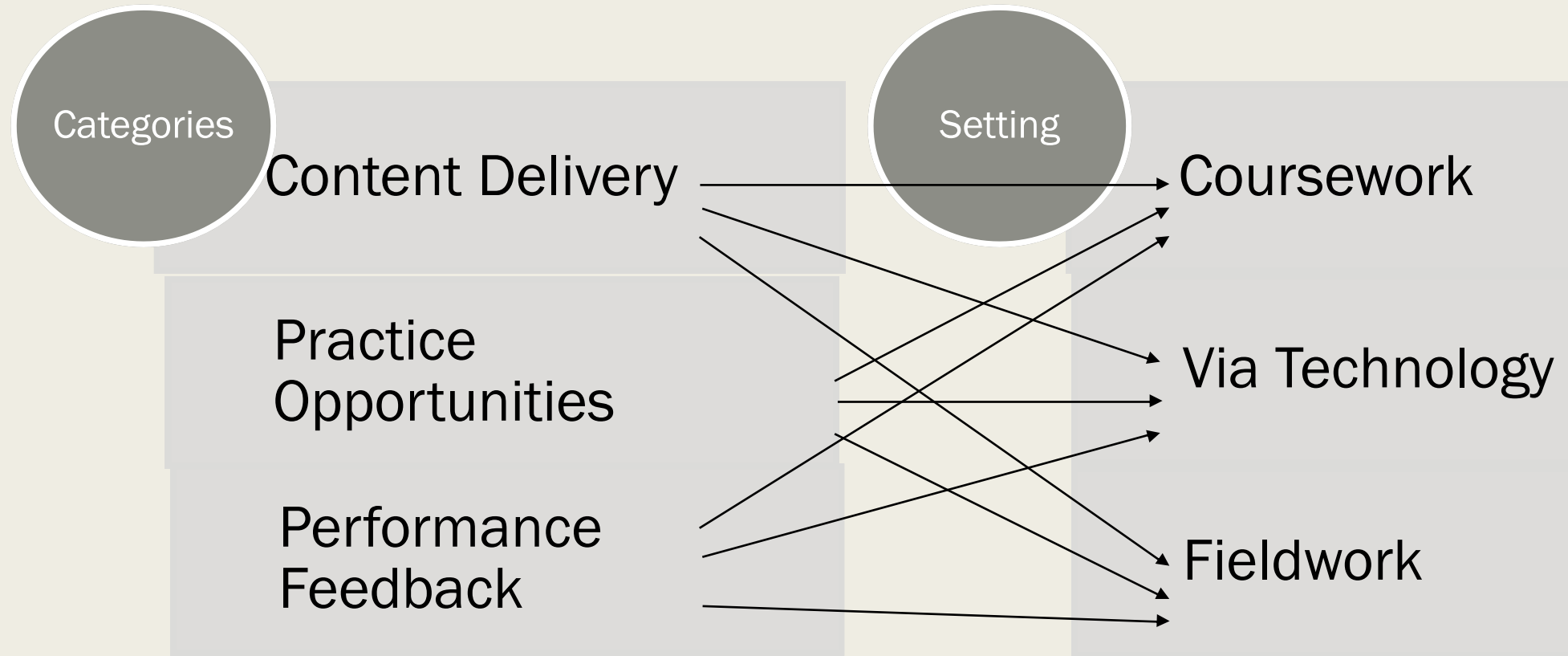
# Results: Common Elements



17 Common  
Elements of  
Effective Practices

- Explicit, content specific instruction, extended course instruction, modeling, video based instruction, computer based instruction, podcasts, interwoven coursework and fieldwork, professional development workshops, interactive group work, structured reflection, guided practice with faded supports,
- Computer simulations and virtual environments, general participation in the field, group discussion and role plays, peer feedback, email feedback, and immediate, specific performance feedback

# Results: Common Elements



Setting	Content delivery	Practice Opportunities	Performance Feedback
<p><b>Teacher preparation coursework</b></p>	<p>Explicit, content specific instruction (Tingstrom, 1989; Schelske &amp; Deno, 1994; O'Reilly et al., 1994)            Extended course instruction (Gorrell &amp; Downing, 1989)            Modeling (Gorrell &amp; Downing, 1989)</p>	<p>Interactive group work (Kurt, 2017; Hazareesingh &amp; Bielawski, 1991)            Structured reflection (Stoiber, 1991)</p>	<p>Peer feedback, as part of intervention in course (Judge et al., 2013)</p>
<p><b>Via technology</b></p>	<p>Video-based instruction (Ellingson, 1991; Hagen et al., 1998; Hazareesingh &amp; Bielawski, 1991; Judge et al., 2013; Sariscsany &amp; Pettigrew, 1997)            Computer-based instruction (Cevik &amp; Andre, 2012; Cevik &amp; Andre, 2014; Choi &amp; Lee, 2009; Gorrell &amp; Downing, 1989)            Modeling (Hagen et al, 1998; Hazareesingh &amp; Bielawski, 1991)            Podcasts (Kennedy &amp; Thomas, 2012; Kurt, 2017)</p>	<p>Guided practice with scaffolding and fading (Sariscsany &amp; Pettigrew, 1997; Choi &amp; Lee, 2009; Ellingson, 1991; Cevik &amp; Andre, 2012; Cevik &amp; Andre, 2014)            Computer-based            Simulated and virtual environments (Gorrell &amp; Downing, 1989; Judge et al., 2013; Murphy et al., 1987; Strang et al., 1986)</p>	<p>Email feedback, following simulated classroom environments (Judge et al., 2013)</p>
<p><b>Field</b></p>	<p>Observations/practice teaching linked with coursework (Merrett &amp; Wheldall, 1982; O'Neill, 2016; Sokal et al., 2013; Schelske &amp; Deno, 1994; Sharpe et al., 1997; O'Reilly et al., 1992)            Professional development workshops (Barrett &amp; Curtis, 1986; Hsu &amp; Malkin, 2013; Auld et al., 2010)</p>	<p>General participation in fieldwork over time (Stripling et al., 2008)            Discussion supported role play (Auld et al., 2010)</p>	<p>Immediate and specific data-based feedback (O'Reilly et al., 1992; O'Reilly et al., 1994; Sharpe et al., 1997; Auld et al., 2010)</p>

# Finally....

All studies used multi-component interventions and incorporated a variety of practices to improve pre-service teachers' classroom management practices.

# Guidelines for Effective Teacher Preparation

- (1) provide direct, explicit instruction in general classroom management practices and specific classroom management skills, and whenever possible, include a model or demonstration of the practice/skill
- (2) provide interactive, structured, guided practice opportunities in course and field work, and whenever possible, provide scaffolded, faded support
- (3) provide immediate, specific feedback regarding pre-service teacher performance of classroom management practice or skill
- *Additionally, many effective interventions included the use of technology and integrated content through both course and field work.*

**The Effects of Video Self-Analysis on  
Pre-Service Teachers' use of an  
Evidence Based Classroom Management Skill**

# PURPOSE OF STUDY

- multi-component intervention using video self-analysis
- Directly observed behavior



# Behavior Specific Praise

## What is it?

- An affirmative statement delivered from a teacher to a student immediately following a desirable academic or social behavior. (Musti-Rao & Haydon, 2011)
- It is a reinforcement strategy, and contingent use of BSP can increase the likelihood of behavior reoccurrence. (Thompson et al., 2012)

Example:

“I really appreciate that all students walked quietly in the hall and kept their hands to themselves”

Non-Example:

“Good job, class!”



# Method: Research Question

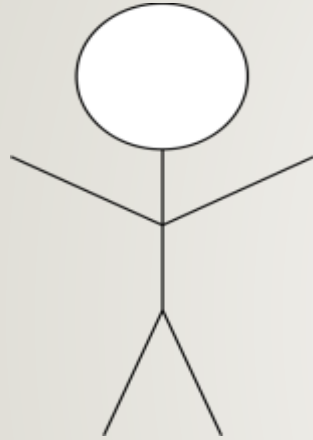
**Primary:** Is there a functional relationship between the multi-component intervention and pre-service teachers' increased use of behavior specific praise?

**Secondary:** What is the impact of increased use of behavior specific praise on student engagement?

*Additional Measurement Tools:*

*Pre-Post Knowledge of Skill, Implementation Fidelity, Social Validity*

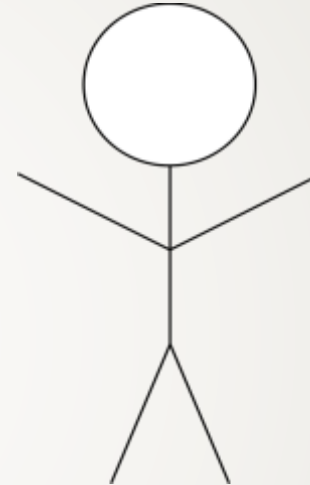
# Method: Participants and Setting



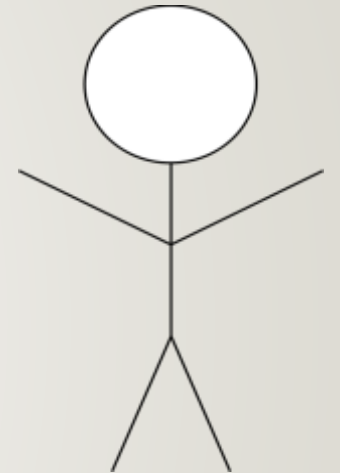
Participant #1:  
“Mary”  
Second grade  
General Education



Participant #2:  
“Mary”  
Middle School  
Music Education



Participant #3:  
“Mary”  
High School  
Music Education



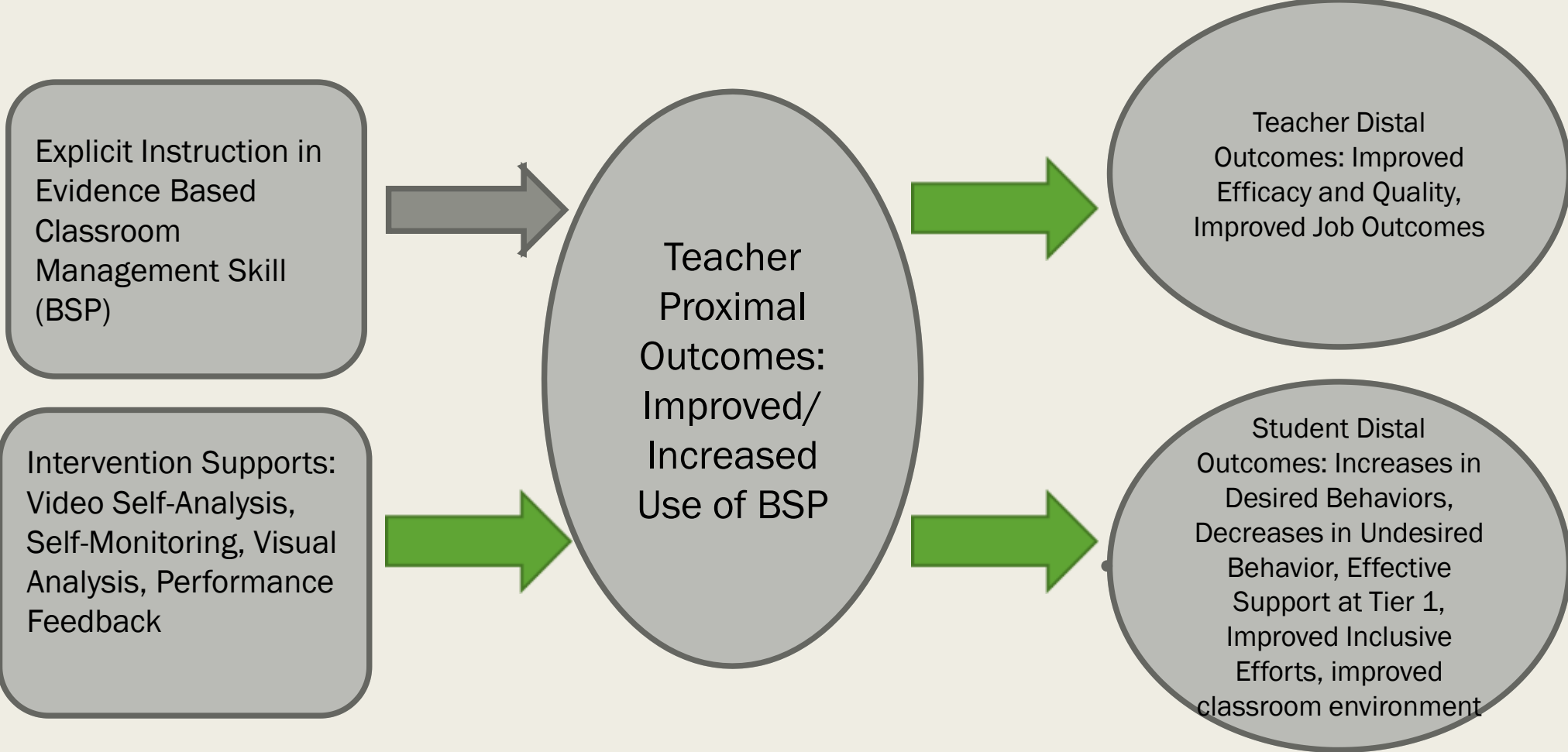
Participant #4:  
“Mary”  
Fourth Grade  
Special Education

*All participants completed one classroom management course*

*All participants are in the acquisition phase of learning*

*All participants are in inclusive settings*

# Theory of Change



# Method:

## Description of Independent Variable



# Method:

## Description of Dependent Variable

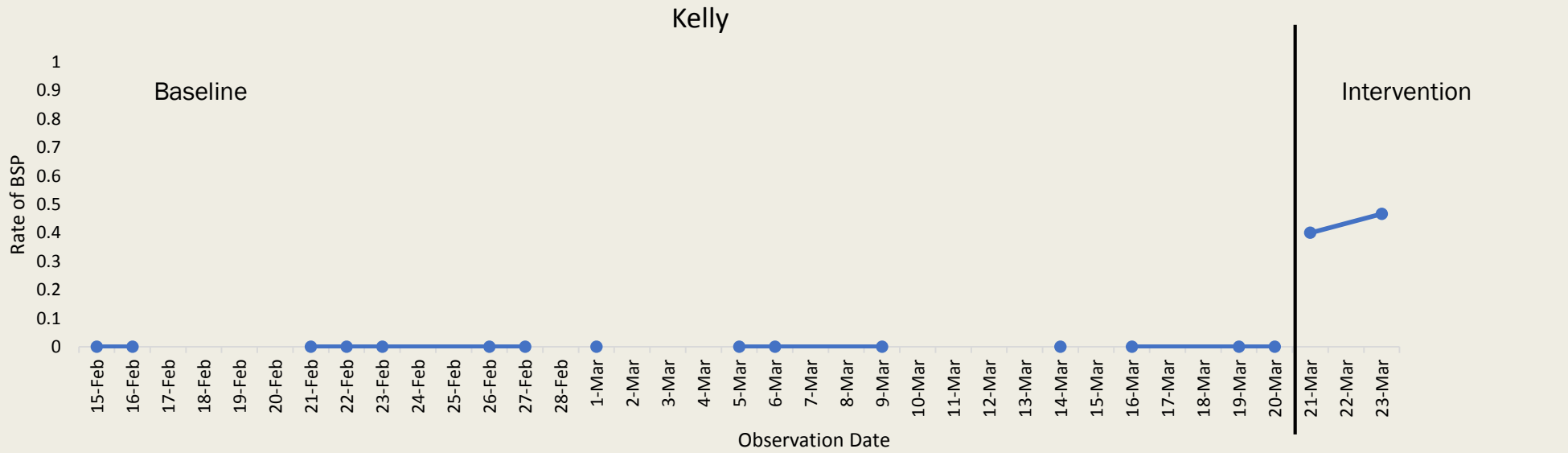
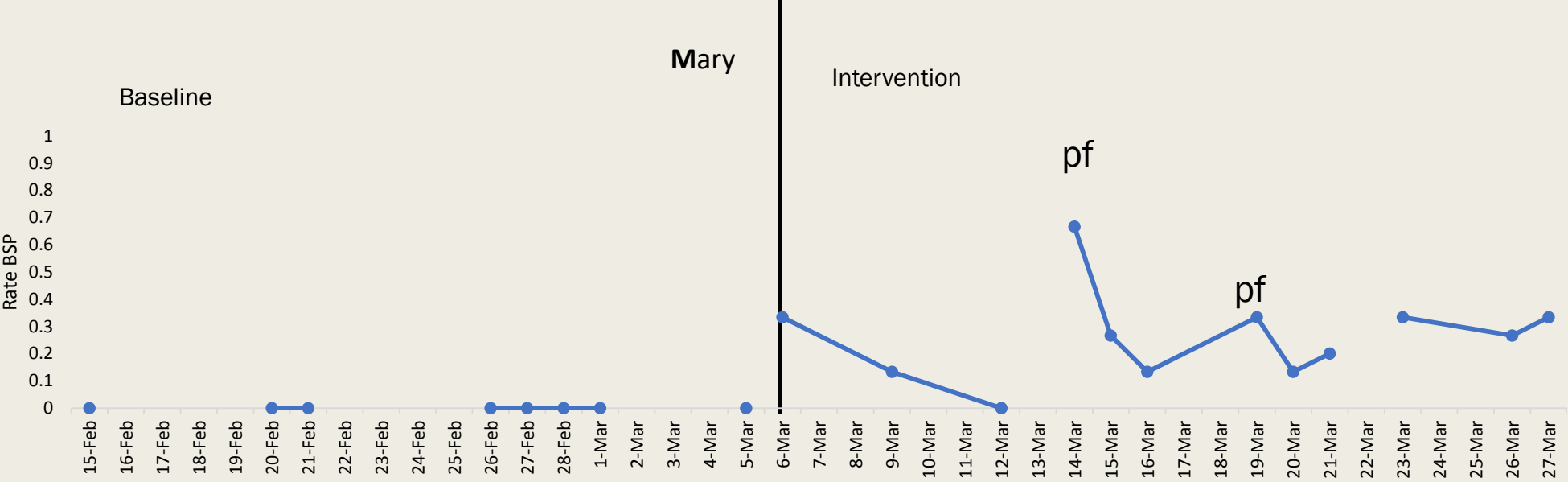
- frequency of use of behavior specific praise (BSP)
- measured through direct observation by calculating a frequency per 15 minutes.
- BSP is defined as teacher recognition of an academic or social behavior that describes the behavior being recognized as part of the praise.
- On-task student behavior

# Procedures:

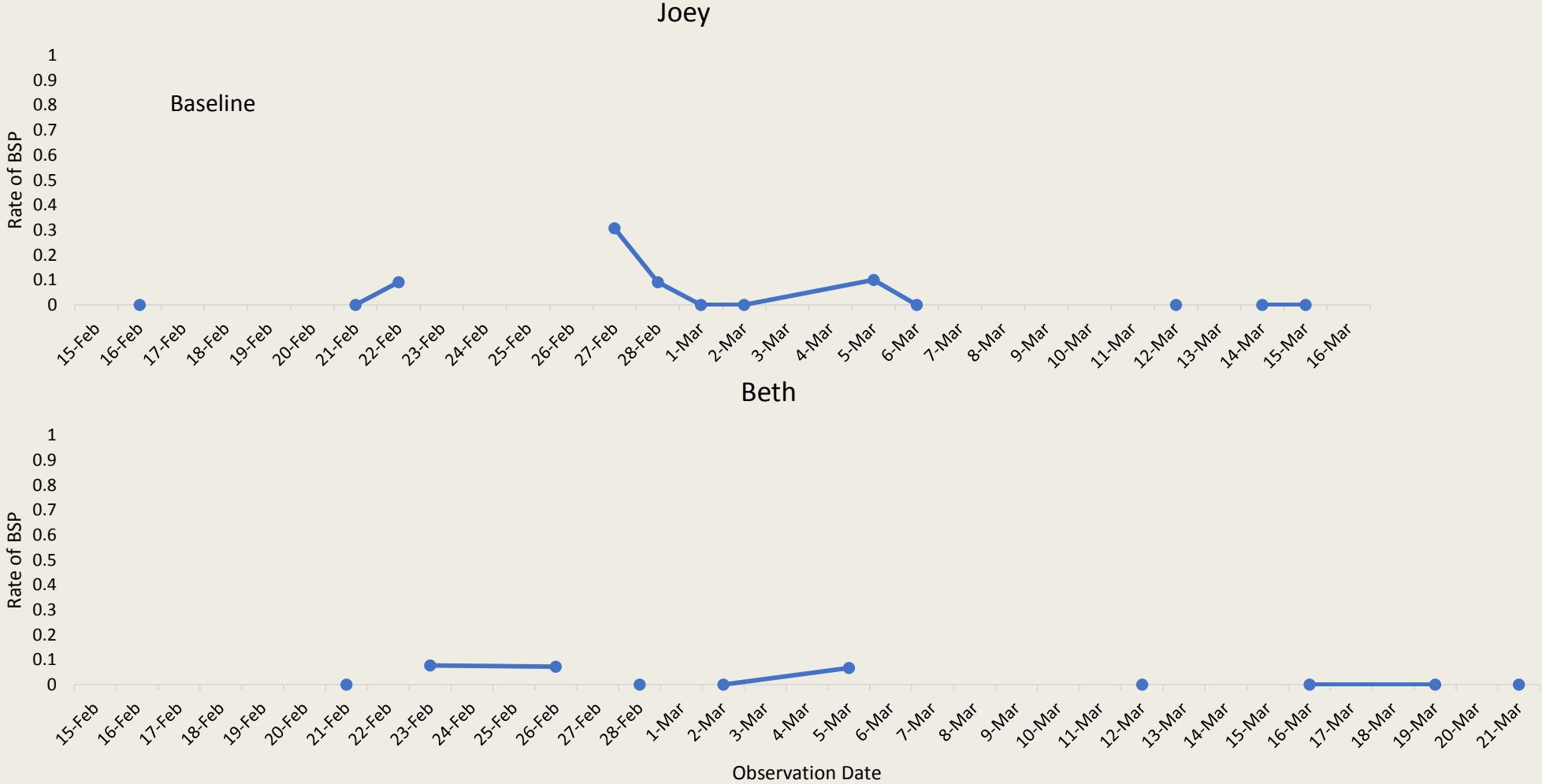
- Uses an experimental, single case (SCD), multiple baseline across participants research design
- SCD is a rigorous, experimental evaluation of intervention effects; involves repeated, systematic measurement of a dependent variable after the manipulation of an independent variable
- Baseline Phase (A), Intervention Phases (B,B1), Follow up Phase
- IOA will be calculated for a minimum of 30% of observations during this phase.

Kratochwill, T. R., Hitchcock, J., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M. & Shadish, W. R. (2010). Single-case designs technical documentation. Retrieved from What Works Clearinghouse website: [http://ies.ed.gov/ncee/wwc/pdf/wwc\\_scd.pdf](http://ies.ed.gov/ncee/wwc/pdf/wwc_scd.pdf).

# Preliminary Results: participants 1 and 2



# Preliminary Results: participants 3 and 4





# Potential Implications for Research

## In the Field

- Continued research directly measuring pre-service teachers' classroom management skills
- Continued research in using technology to support pre-service teacher development
- Research on role of student teaching supervisor and cooperating teacher in pre-service teachers' development of classroom management skills

## From Current Project

- Follow up with participants during first year of teaching with qualitative research project and maintenance check
- Testing effects of video-analysis across additional classroom management behaviors
- Testing effects of video-analysis using cooperating teacher/student teaching supervisor as coach.

# Potential Implications for Practice

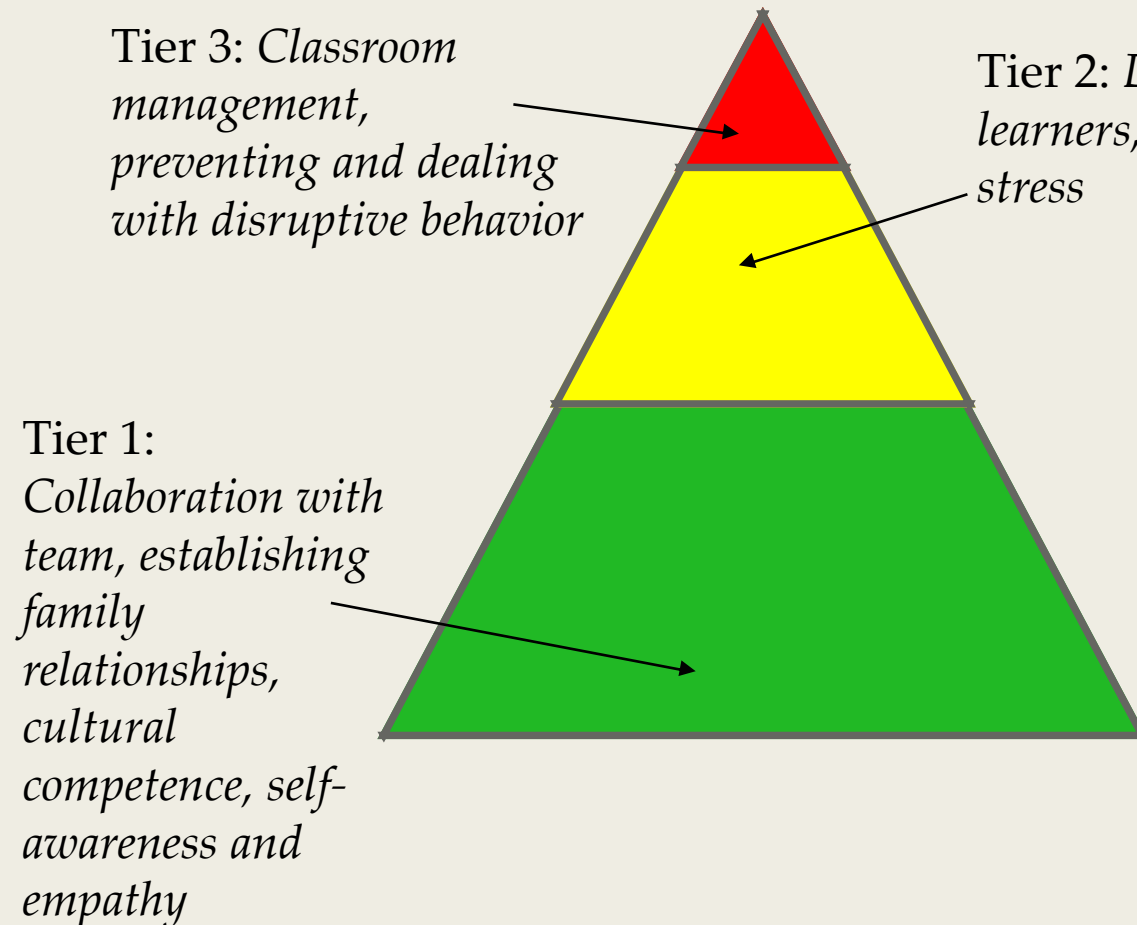
- Teacher preparation programs can consider:
  - *Technology Supports throughout program, including video analysis and video self-analysis*
  - *Fall vs. Spring semester student teaching placements*
  - *Support for cooperating teachers to support student teachers' classroom management practice*
  - *Alignment of classroom management performance feedback with edTPA rubrics*

# Potential Implications for Policy

- Importance of preparation in classroom management when addressing teacher shortage
  - *Emergency certification*
  - *No certification programs*
- Policy for teacher preparation programs
  - *Implications for alternative certification programs*
  - *Implications for general and special education certification programs (inclusive practice)*

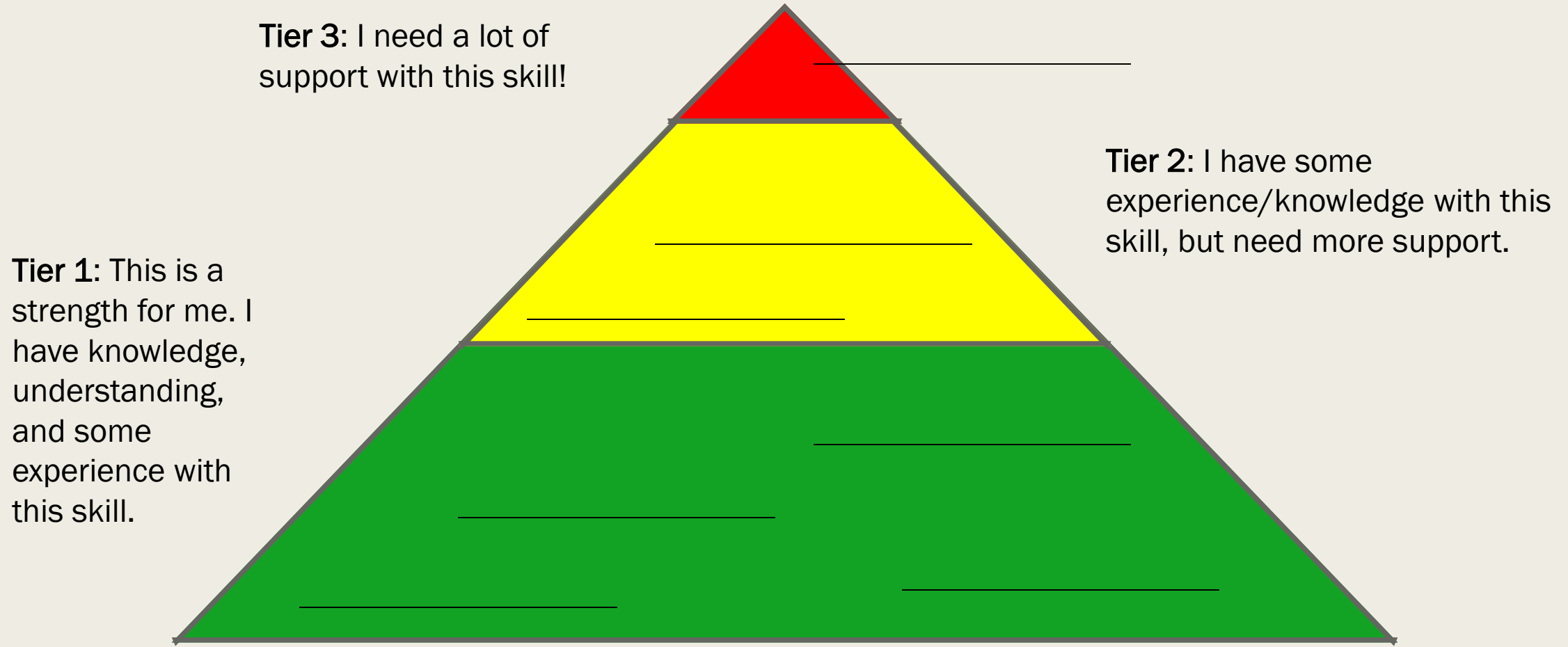
# Conceptual Model for Supporting Pre-Service Teacher Development

# Teaching Self-Management to Student Teachers



- With supervisor or faculty: identify strengths, areas in need of intensified support
- Develop goals, plan of action
- Monitor progress
- Scaffold support

# Self Management through MTSS



# Self Assessment: Self Management Plan



- Set Short Term Goal(s)
- Strategy/Plan for Skill Development
- How will I set up the environment so that I am successful?
- How will I increase knowledge/practice?
- How will I provide recognition and reinforcement for change?

