

# The Connection Between Teacher Self-Efficacy and Reflective Practice

By Tim Sibbald

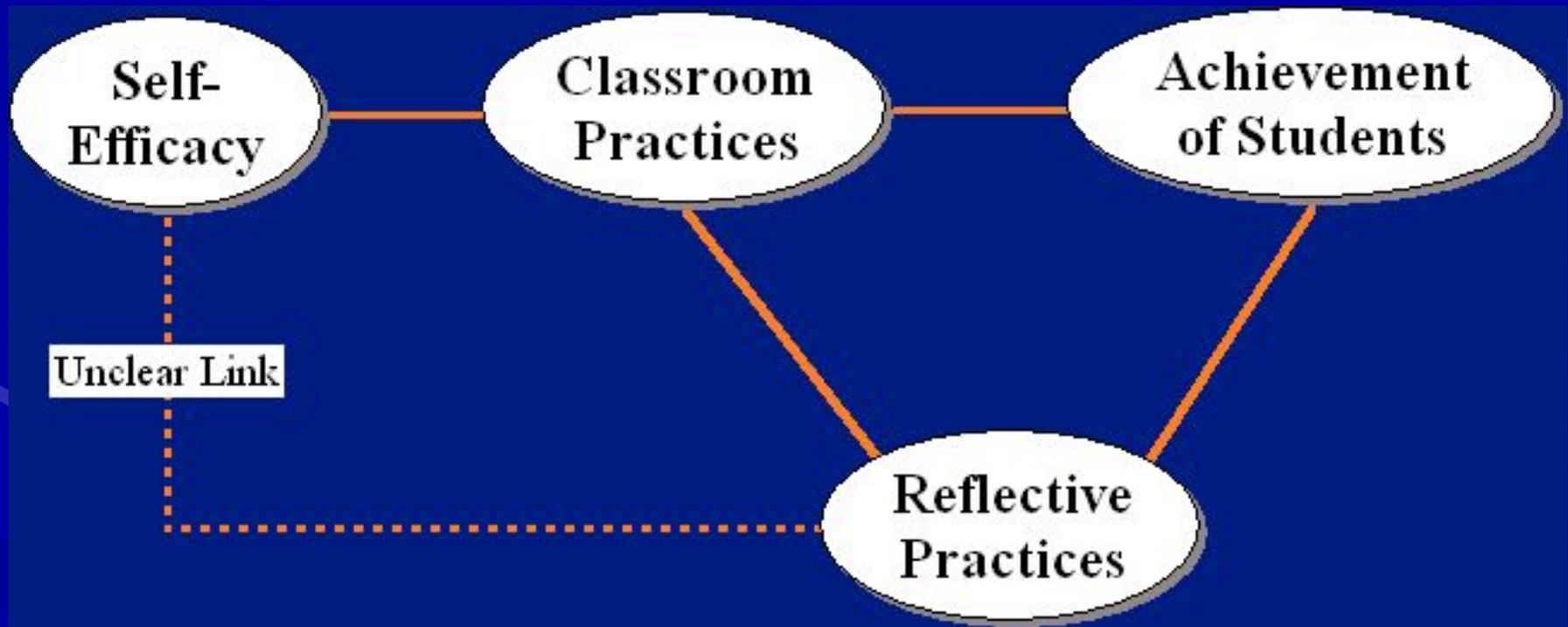
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Based upon research documented in:

Sibbald, T.M. (2008). The connection between teacher self-efficacy and reflective practice. Unpublished doctoral dissertation, Ontario Institute for Studies in Education, University of Toronto.

Academic publishing of papers based on this work is underway.

# Existing Theoretical Framework



# Research Questions (abbreviated)

- What changes arise from reflective practice and how does implementation affect teacher self-efficacy?
- How does a teacher's curriculum orientation affect technique adoption?
- What is the role of leadership?

# Participants

- Lesson Study – Intermediate division
  - Equation solving, vertical alignment
- Peer Coaching – Primary division
  - Step counting, using PRIME resource
- Mentoring – Senior division
  - Permutations and combinations, pre-service training
- Self-Study – Junior division
  - Implementation of curriculum reforms

# Methodology

- Followed natural progression of reflective practice.
- Observation constrained by circumstances of reflective practice (such as duration).
- Data included recordings of meetings before and after classroom observation, interviews, artifacts and field notes.

# Lesson Study

Curriculum achievement chart framework

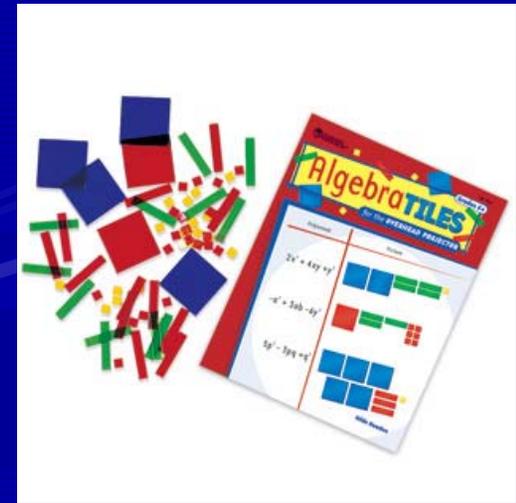
Algebra tiles

Ordering fractions

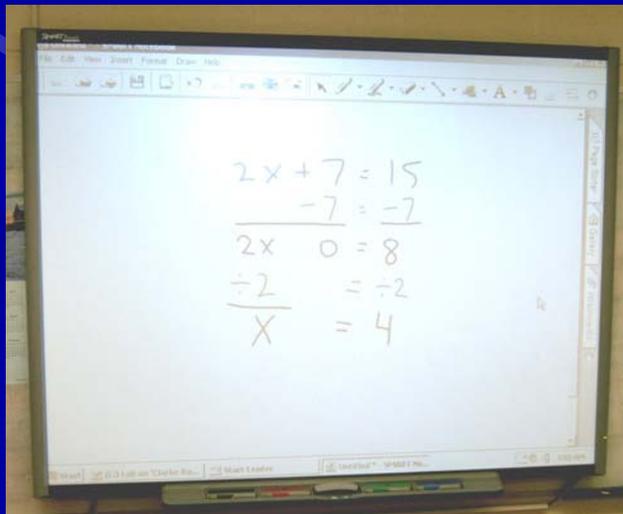
Curriculum flow

Other's mark

SMART Board



[www.learningresources.com](http://www.learningresources.com)



# Peer Coaching

Pedagogical content knowledge

Use of PRIME

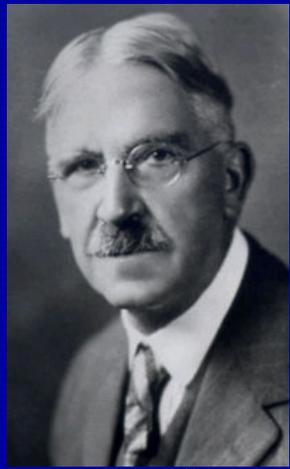
Pedagogy

# Mentoring

Scavenger hunt  
Fourth dimension  
Homework policy  
Language teaching

Towers of Hanoi  
Permutations by mapping  
Whiteboard markers  
Few changes by mentor

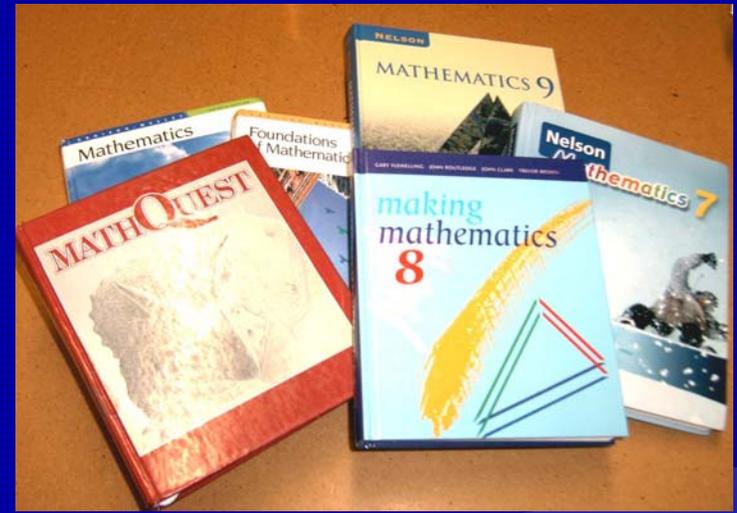




[www.wikipedia.com](http://www.wikipedia.com)

# Self-Study

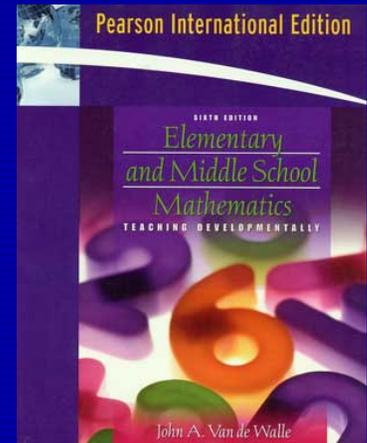
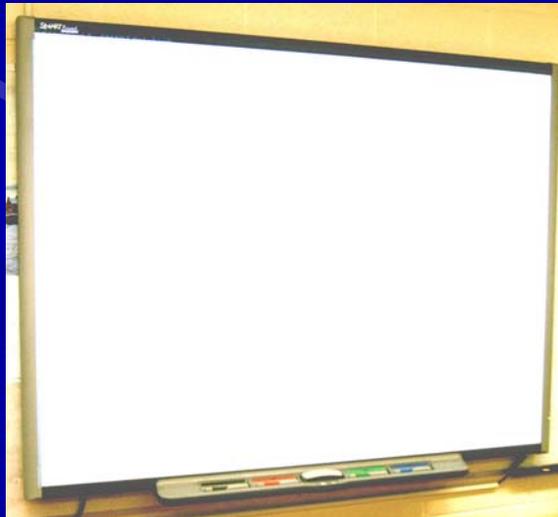
Philosophical change



Change of math textbooks

Accessing the math community

SMART Board



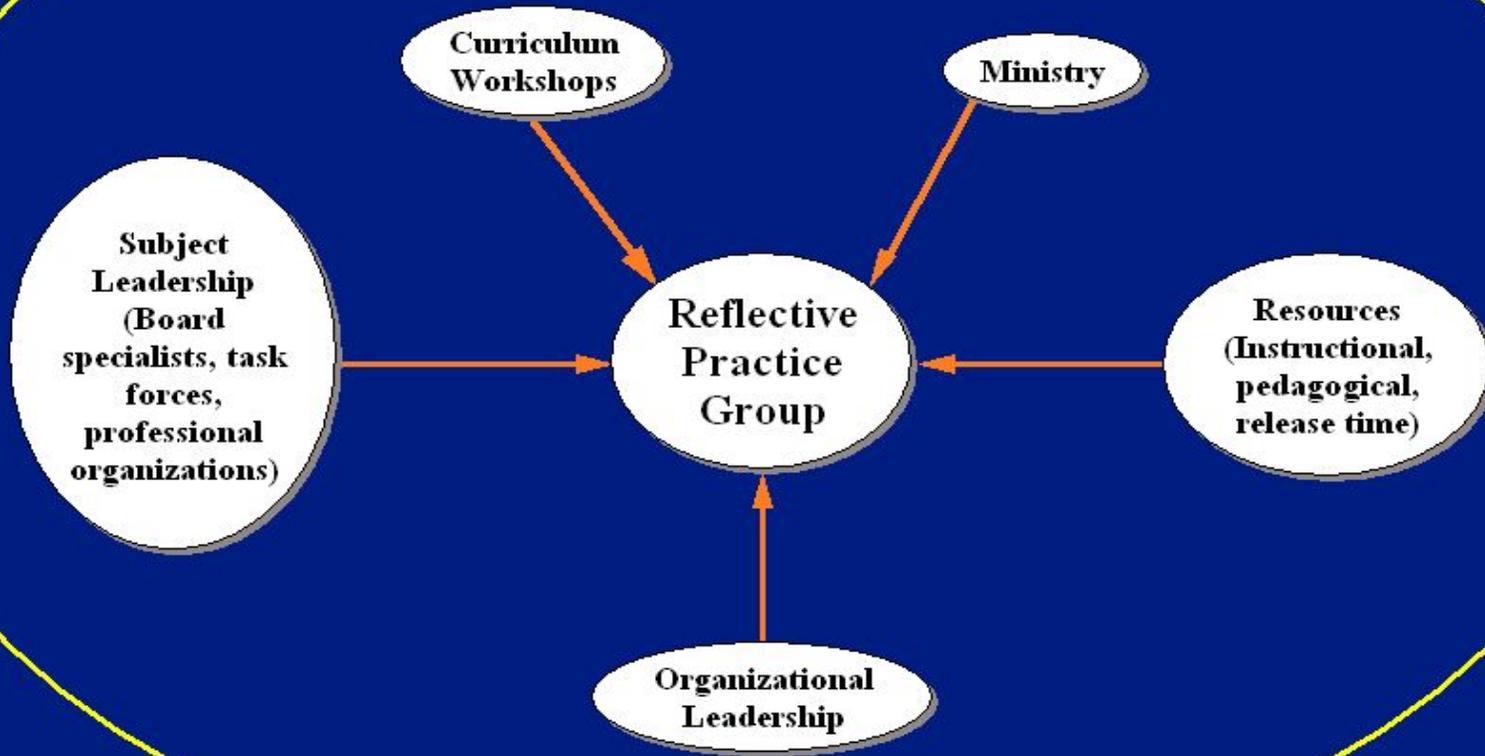
[www.maliks.com](http://www.maliks.com)

# Data Analysis

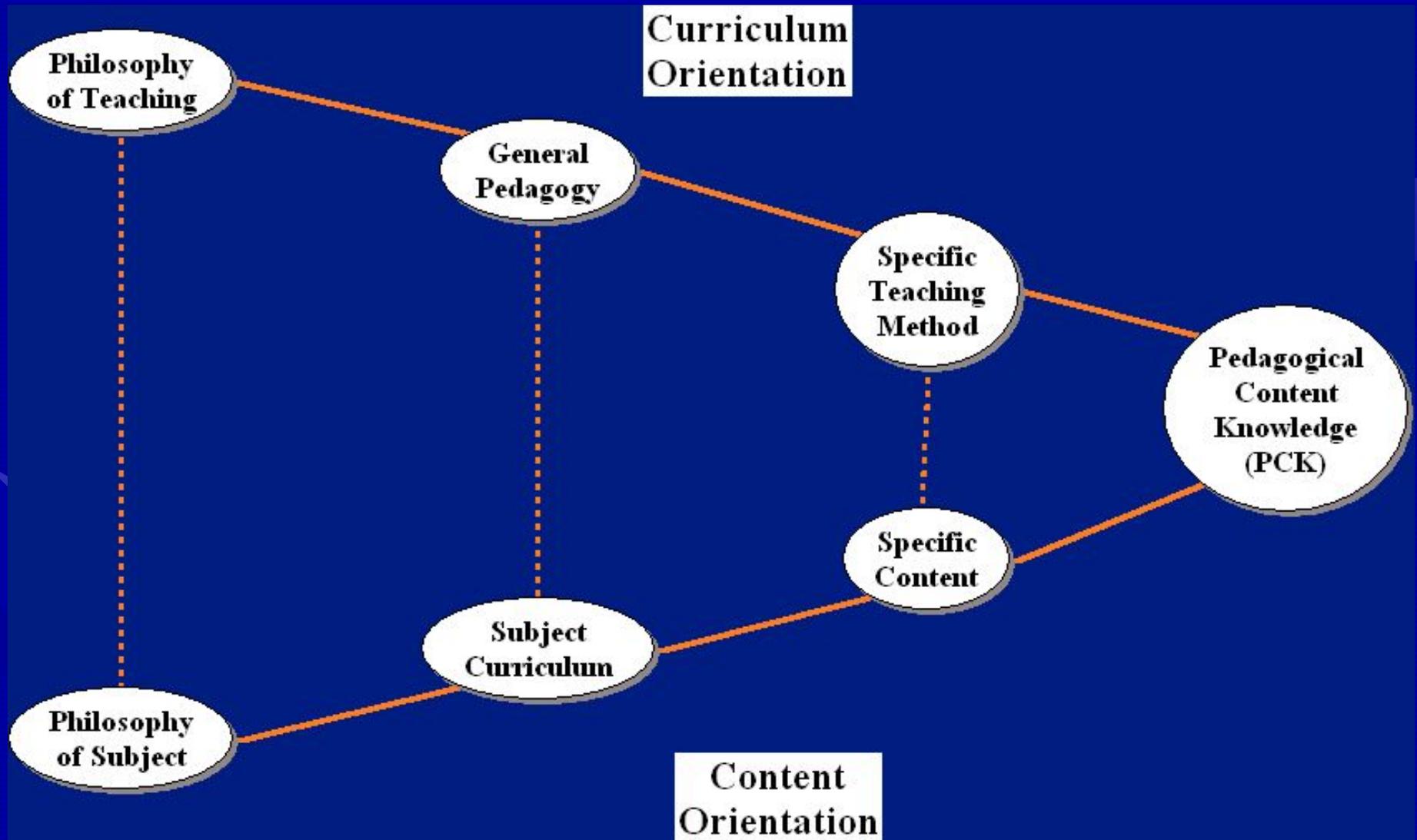
- Lesson study used as initial case and augmented with other cases.
- Grounded theory to establish emergent concepts.
- Vignettes based on coded text highlighted processes linking code book concepts.
- Substantive theory developed using lesson study; subsequent cases used to contrast or support the tentative theory

# Community of Practice

## Community of Practice

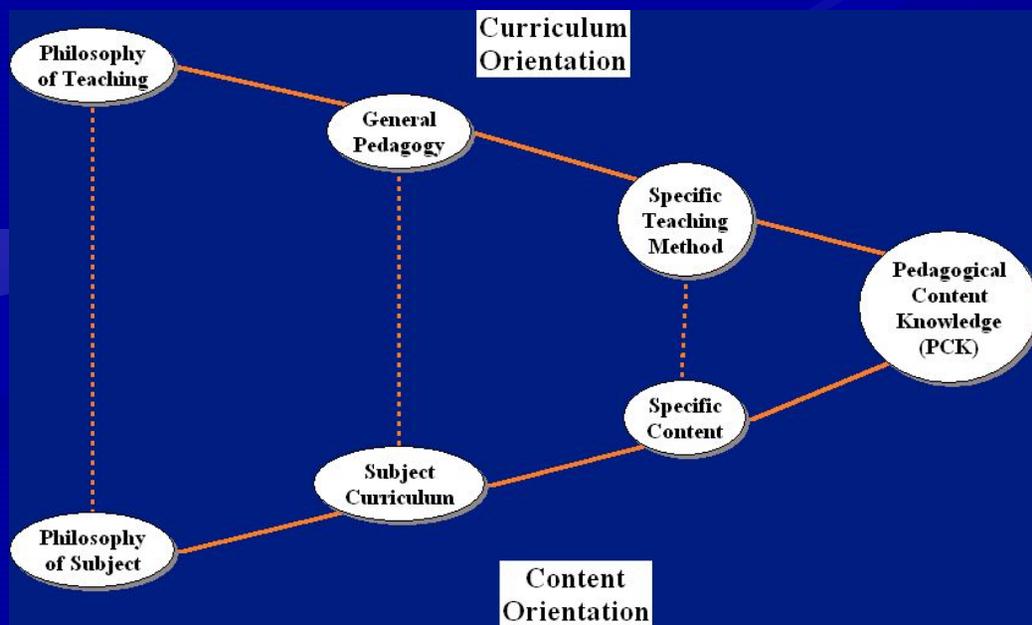
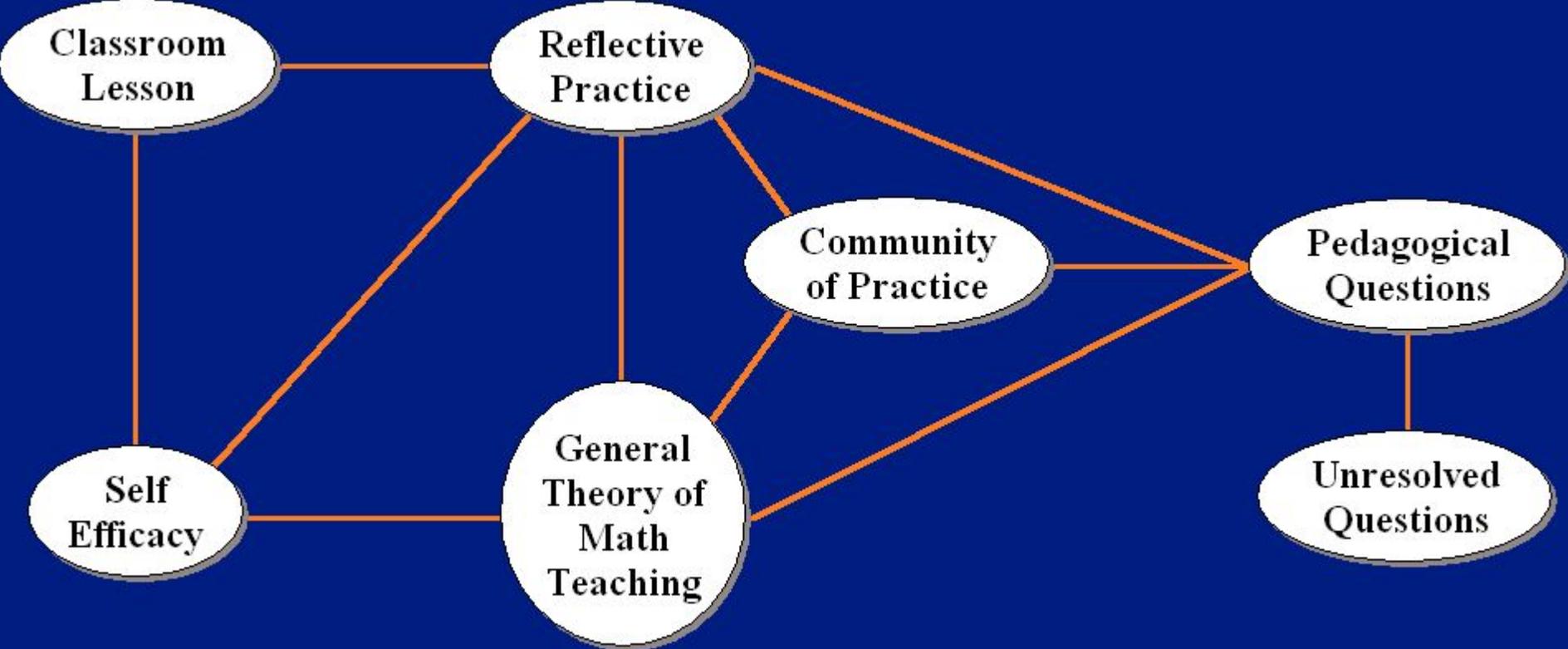


# General Theory of Math Teaching



# Substantive Theory





# Theoretical Implications

- Mechanism linking reflective practice and self-efficacy (which contributes to student achievement).
- Implications for scope and limitations of reflective practice.
- Central importance of the content and pedagogy with a support role for the community of practice.

# Practical Implications

- Group must be able to broaden content/pedagogical knowledge.
- Leadership has support role.
- Implications for interactions between reflective group and community of practice.
- Demonstrates that reflective practice is a viable means of improving student achievement.

# Future Research

- Establish causality and extent of impact on student achievement.
- Generalize beyond micro-system.
- Extend to other subject areas.
- Need for quantification of varieties of reflective practice.
- Investigate implications for teacher self-regulation.