Supported Collaborative Teacher Inquiry Conference

Framing Remarks

Effective Teacher Professional Development: SCTI & Other Models

The Need for High Quality TPD

Never before in the history of education has greater importance been attached to the professional development of educators.

(Guskey, 2000)

If we want schools to offer more powerful learning opportunities for students, we must offer more powerful learning opportunities for teachers -- opportunities that are grounded in a conception of learning to teach as a life-long endeavor….

(Borko, Jacobs & Koellner, in press)

Student Reflection: Doctoral Seminar on TPF (Week 8)

Reading the literature this week on video has raised questions I didn't expect. First, is there some kind of a general arc of professional development we are seeing in which the identified problem follows these steps?

1. *Teachers are thinking within their content area in traditional teacher-centered ways.*
2. *The solution begins with teachers in groups investigating their own work.*
3. *The use of a reflective technique enables collaborative discussion.*
4. *Finally, success outcomes are measured in the ways their discussion demonstrates an alteration in the way their teaching challenges are framed.*

This might characterize, at least in a general way, the professional learning within video clubs, lesson study, student thinking as a basis for teacher learning, and professional learning communities. If I'm not making this general relationship up, then certain questions arise.

Supported Collaborative Teacher Inquiry: A working definition

- Teachers surface a focus around a meaningful dilemma, question, curiosity, or problem of practice
- Teacher interactions in pursuit of resolutions and answers to the focus
- Grounded in data that emanates from their professional practice
- Presence of a support structure for the collective work that is accessible and applicable

The Questions that Arose

- Do we have a new paradigm for professional learning and, if so, have researchers articulated it as such?
- Is this process sufficient to take teachers as far as they need to go to be effective with their students?
- Participants [in these PD programs] are in a significantly improved place, but are they done?
- What will our newly cracked-open teachers need next?

SCTI: Framing Remarks/Questions

1) What do we know about features of effective TPD?
2) Some (non-SCTI?) concrete examples
3) Where are we with respect to demonstrating the effectiveness of these practices?
4) As TPD providers and researchers, where should we go next?

Effective PD: Content Characteristics

- Situated in practice
  - Addresses problems of practice
  - Learning experiences grounded in teachers' own practice
  - Builds on teachers' CK & PCK
- Focused on students' learning
  - Connected to and derived from teachers' work with students
  - Focuses on supporting student learning
  - Understanding and building on student thinking

Effective PD: Process/Structure Characteristics

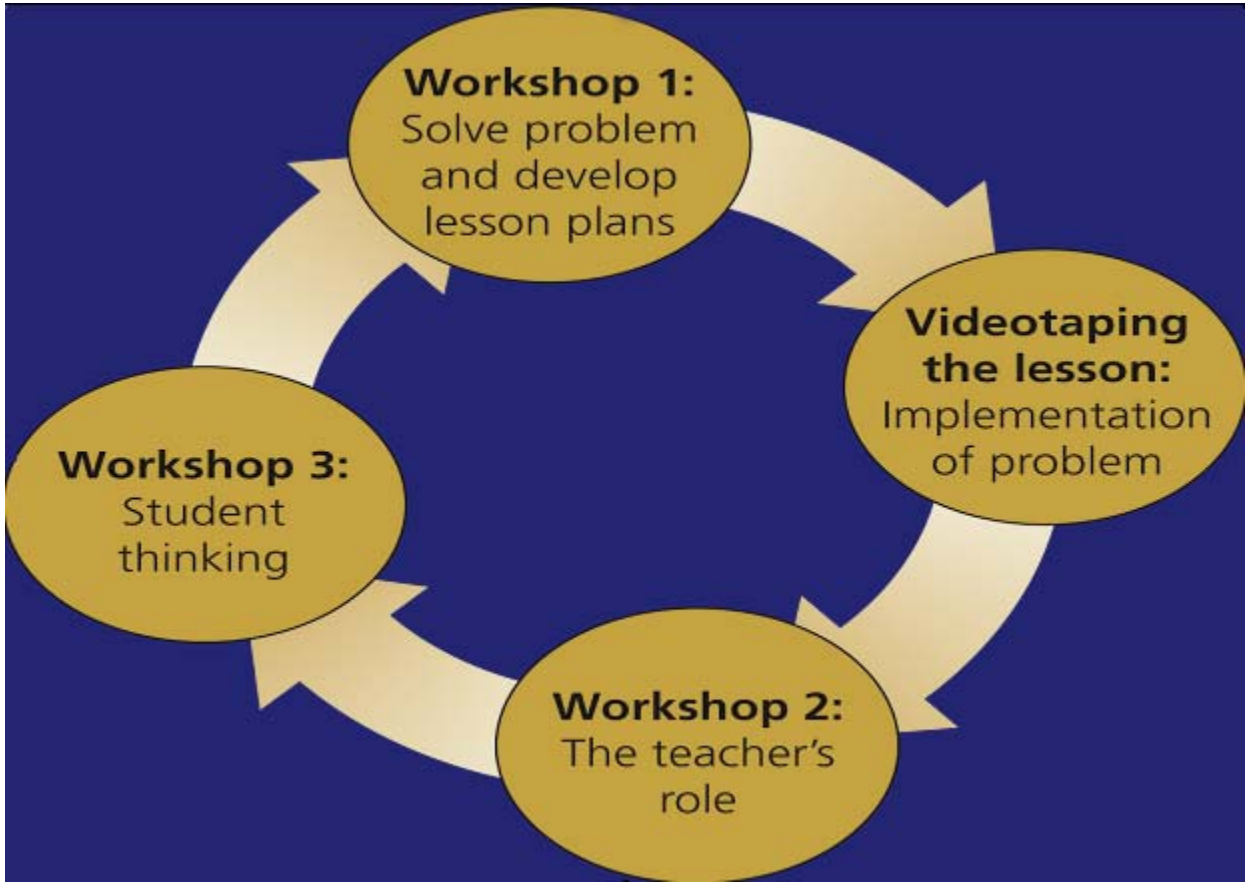
- Models preferred instructional practices
- Active teacher learning
  - Teacher inquiry
- Professional learning communities
  - Collaborative
- PD settings appropriate to PD goals
  - Often school-based
- Ongoing and sustainable over time

Professional Development and Research Team

- Hilda Borko
- Jennifer Jacobs
- Karen Koellner
- Ed Wiley

- Erin Baldinger
- Melissa Colsman
- Rachael Risley
- Sarah Roberts
- Adam Van Iwaarden

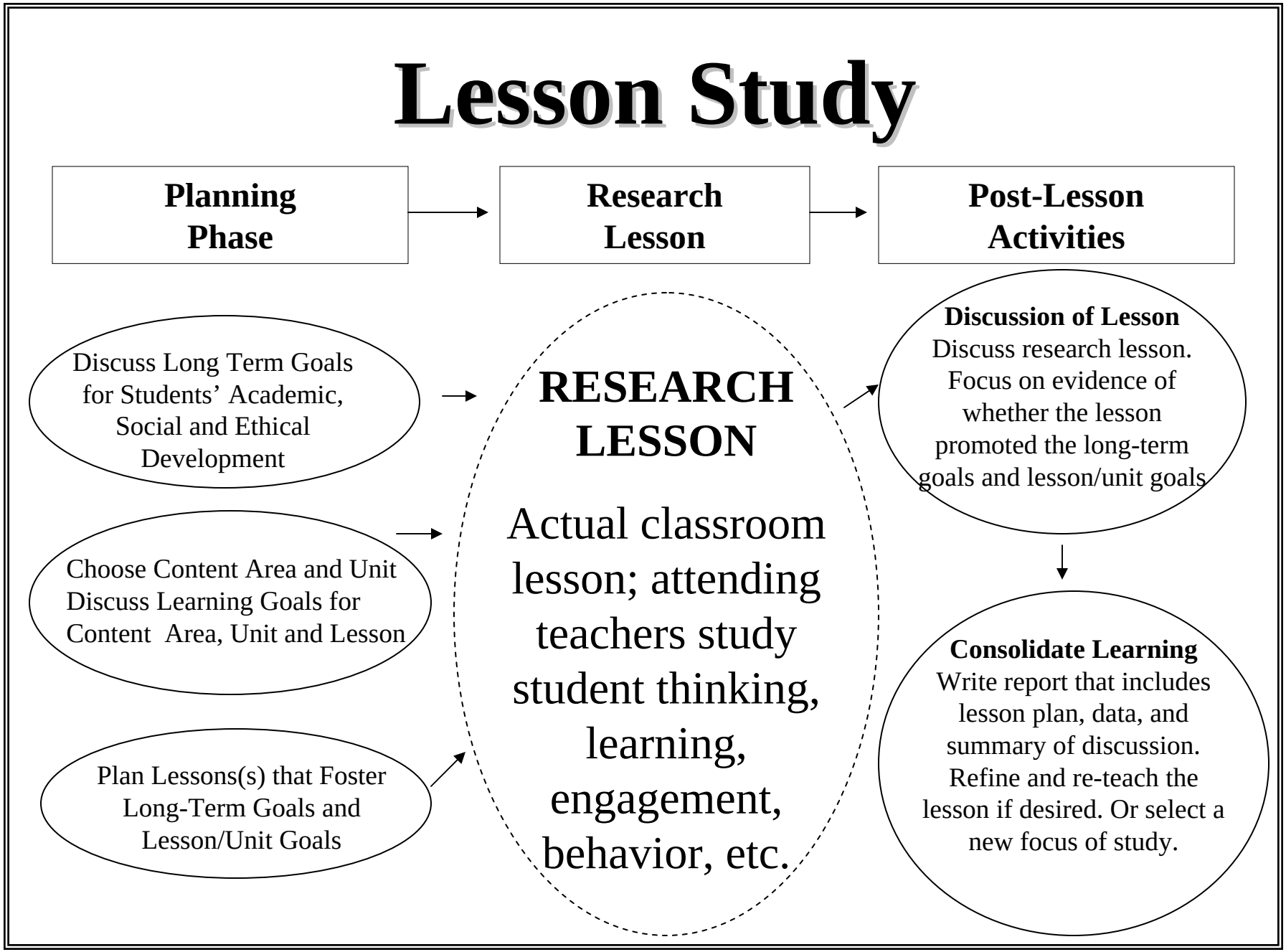
The Problem-Solving Cycle



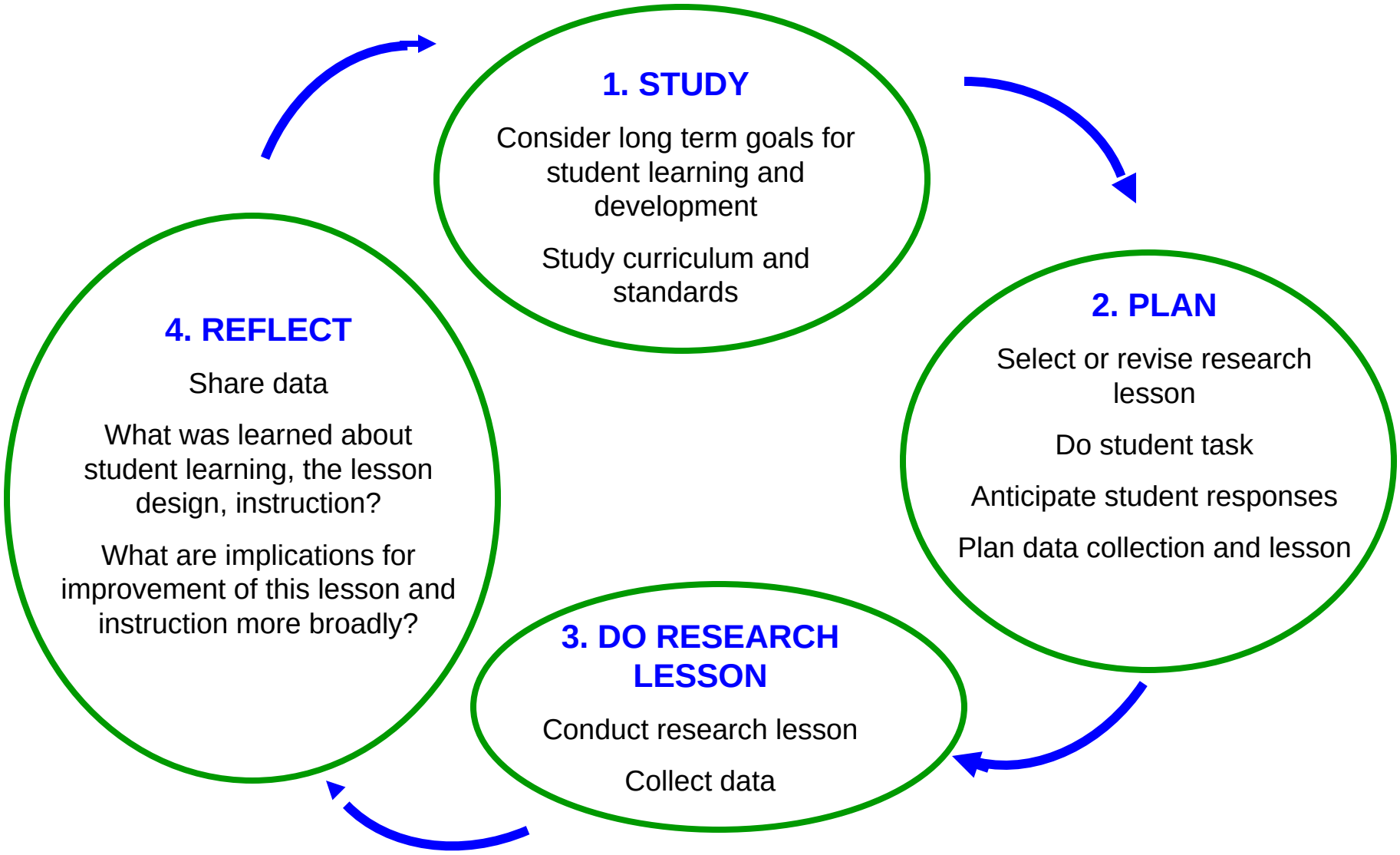
Goals, Activities, and Knowledge in PSC Workshops

Workshop	Goals	Knowledge	Activities
1	Develop content knowledge to teach the PSC problem	Specialized content Pedagogical content	Solve problem, debrief strategies Plan lesson
2	Inquiry about the teacher's role	PCK (content & teaching)	Analyze video, focusing on the teacher's role
3	Inquiry about student thinking	PCK (content & students)	Analyze video, focusing on student thinking

Figure 1


Lesson Study
Planning Phase
Research Lesson
Post-Lesson Activities
Discuss Long Term Goals for Students' Academic, Social and Ethical Development
Choose Content Area and Unit Discuss Learning Goals for Content Area, Unit and Lesson
Plan Lessons(s) that Foster Long-Term Goals and Lesson/Unit Goals
RESEARCH LESSON
Actual classroom lesson; attending teachers study student thinking, learning, engagement, behavior, etc.
Discussion of Lesson
Discuss research lesson. Focus on evidence of whether the lesson promoted the long-term goals and lesson/unit goals
Consolidate Learning
Write report that includes lesson plan, data, and summary of discussion. Refine and re-teach the lesson if desired. Or select a new focus of study.

Lesson Study



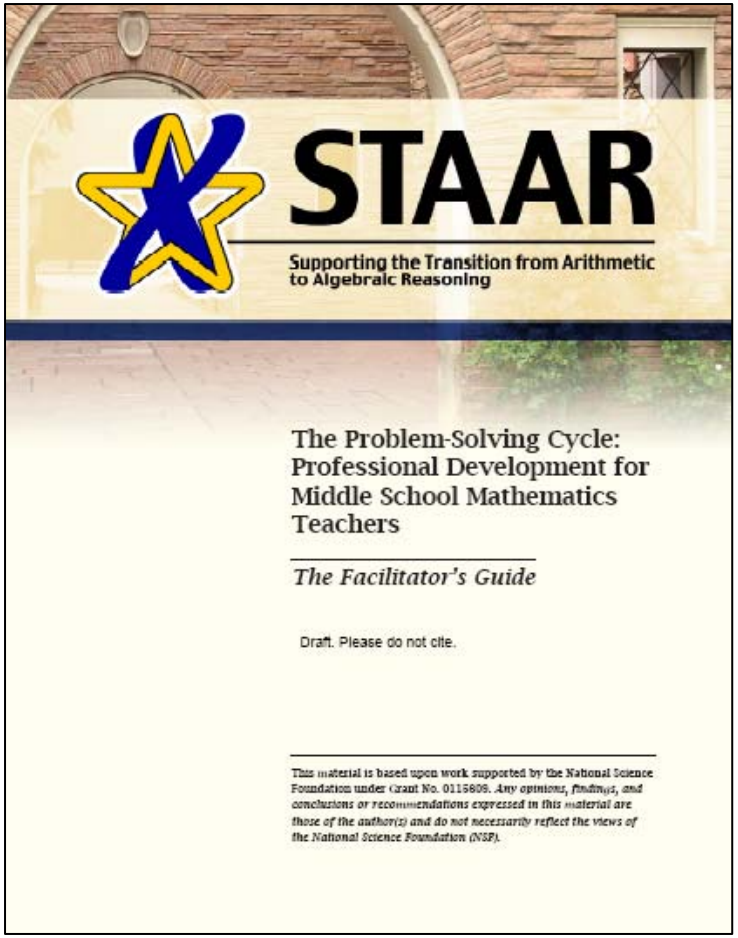
Where do we go from here?

- Building the Chain of Evidence
- Sustainability and Scalability
- Projects addressing these issues (an incomplete list; often project do both)
  - STRIDE
  - iPSC
  - Other conference attendees

Demonstrating Effectiveness: The Chain of Evidence

- Teacher Professional Development
- Teacher cognition
  - Knowledge
  - Beliefs
  - Attitudes
- Classroom practices
  - New strategies and skills
- Student learning
  - Learning
  - Performance (multiple measures)

iPSC: Scaling Up the PSC Model
Preparing PSC Facilitators



- Pilot Study
  - Piloted with Math Coaches
  - Refined materials & facilitator preparation
  - Documented the process
- Field Study
  - Support Instructional Leaders for 3 years
  - Document impact on ILs, teachers, students
  - Produce refined facilitation materials

Structure of Support for the ILs

- Instructional Support Meeting 1

Conduct PSC workshop 1

- Instructional Support Meeting 2

Conduct PSC workshop 2

- Instructional Support Meeting 3

Conduct PSC Workshop 3

Thoughts from Instructional Leaders

- Goals for PSC workshops

  I really think that this problem solving cycle is going to help teachers take a good look at themselves and a good look at student thinking, and it's going to help us better analyze student thinking … Once we can figure out how the students are thinking and we adapt our instruction to promote that thinking, then the sky's the limit for the learning …

- Facilitation strategies

  … making sure that each teacher gets a chance to say what they think they're seeing … because everybody's opinion counts when you're doing something like this. They may be able to see something from a different angle, from a different perspective … that they bring to the table that you may not have even considered.

Emerging Successes

- Instructional Leaders
  - Developing understanding of ratio (mathematical focus of iPSC) and knowledge of ratio needed for teaching
  - Transition to thinking of themselves as facilitators and leaders
  - Organized and launched PD programs in their schools
- Researchers
  - Developing understanding of knowledge of mathematics and pedagogy needed for PD
  - Insights about fidelity of implementation issues
  - Understanding of school contexts and their implications

Emerging Challenges

- Guiding ILs through pragmatic concerns
- Balancing researchers' need to collect systematic data with ILs' need to adapt the PD to the realities of their schools
- Creating shared understandings of:
  - Teaching mathematics through problems
  - Building on student thinking
  - Facilitating mathematics PD

Where Do We Go From Here?

- Develop & refine TPD programs
- Systematically build a chain of evidence
- Explore sustainability and scalability
- *What else?*
  - *Ideas explored (and to explore) at the conference*