# What does (should) effective professional development look like?

# Lesson Study: A Professional Development Practice

- •What do we mean by Teacher Professional Development?
- •Why do teachers need professional development?
- •What are the gaps in the professional development opportunities offered to Indian inservice teachers?
- •Lesson Study- a professional development practice undertaken collaboratively by teachers
- •Place of origin?
- •Focus- Research Lesson

### Characteristics of Effective Professional Development

- Practice-oriented/ Practice-based (Ball and Cohen, 1999)
- Focused on student thinking and learning (Carpenter et al 1998)
- Collaboration-based (Wilson and Berne, 1999)
- Research/ Inquiry perspective (Jaworski, 1998)
- Addresses issues and concerns of teachers (Clarke, 1994)
- Derives from the analysis of student learning of a specific content (Elmore, 2002)
- Sustained focus over time continuous professional development
- Ownership of teachers

Lesson Study

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授業研究

### Lesson Study in Japan

- Shift from teacher-directed instruction to child-centered instruction (Takahashi and Yoshida, 2004)
- Done in elementary and secondary schools nationwide
- Supported nationally and locally (part of the system)
- Part of pre-service training

#### Lesson Study Goal

- Driving questions:
  - What kind of students do we have?
  - What kind of students do we want to develop?
  - How do we get there?
- Lesson study goal: (Students)
  - Fostering student's problem-solving and responsibility for learning
  - Student engagement (Teachers)
  - Encourage recording and sharing student's mathematical thinking
  - Note-taking, Blackboard Organization, Student Presentation
  - Maximizing learning for every student
  - Establishing a culture of collaboration (collegial dialogue and planning)

#### Teaching Gap Stigler & Hiebert (1999)

Chapter 7 "Beyond Reform: Japan's Approach to the Improvement of Classroom Teaching"

Based on the TIMSS Video Study

"In Japan, teachers appear to take a less active role, allowing their students to invent their own procedures for solving problems. And these problems are quite demanding, both procedurally and conceptually. Teachers, however, carefully design and orchestrate lessons so that students are likely to use procedures that have been developed recently in class."

### Lesson Study Types in Japan

	Description	Main Purpose
School-Based Lesson Study	<ul> <li>Teachers from a school participate</li> <li>School lesson study goal</li> <li>Form several sub-groups</li> </ul>	<ul> <li>Systematic and consistent instructional and learning improvement</li> <li>Common vision of education at the school through teacher collaboration</li> </ul>
District-Wide Lesson Study	<ul> <li>Cross-school lesson study group</li> <li>Subject oriented groups (e.g., mathematics)</li> <li>Meet once or twice a month</li> </ul>	<ul> <li>Developing communication</li> <li>Exchanging ideas</li> <li>Improving instruction and learning in the district as a whole</li> </ul>
Cross-District Lesson Study	<ul> <li>Voluntarily organized group</li> <li>Improving teaching and learning or curriculum in a certain subject</li> <li>Meet once or twice after school</li> <li>on off-school days</li> </ul>	<ul> <li>Developing new ideas for (enthusiastic practitioners) Teaching</li> <li>Investigating curriculum sequences and contents</li> <li>Developing curriculum</li> </ul>

#### Lesson Study Cycle

- Defining the Problem Setting the Goal
- Planning the Lesson
- Teaching the Lesson
- Evaluating the Lesson and Reflecting on Its Effect
- Revising the Lesson
- Teaching the Revised Lesson
- Evaluating and Reflecting Again
- Sharing the Results

All the steps in the cycle need to be worked out collaboratively.

#### Working on a "Research Lesson"





Discussing & Recording

Implementing & Observing



#### Post-Lesson Discussion

- Post lesson discussion
  - Revise lesson plan and examine in one's own classroom
  - Re-examine lesson in own classroom using the lesson plan
  - Develop a lesson plan

- A focus on results (data collection and reflection)
  - New ideas for teaching

#### An example of a lesson study

- Case of a simple substraction problem
- Video
- Excerpt

• Points of consideration-

# Lesson Study and Professional Development

#### TRADITIONAL

- Begins with an answer
- Driven by an expert
- Communication- trainer to teachers
- Relationships hierarchical
- Gap between practice and research
- Teacher as a transaction vehicle
   (disempowered individuals)

#### LESSON STUDY

- Begins with a question
- Driven by participants
- Communication among teachers
- Relationship are reciprocal
- Practice is research
- Teachers in charge of their own professional development (reflective practioners)

#### Thank You