

School-Based Lesson Study in Singapore

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Outline of Presentation

- **Extent** of School-based Lesson Study in Singapore schools.
- **Practice** of Lesson Study.
- **Issues** arising from practice of Lesson Study in Singapore schools.



Context of Educational System

- About 364 primary, secondary and post-secondary schools
- About 31,000 teachers with 79% graduate teachers; 1847 Allied Educators
- English is the medium of instruction
- Centralised Curriculum (80%) from MOE and 20% (school-based curriculum)



Reform Initiative: Teach Less, Learn More

A call from PM Lee Hsien Loong during his inaugural National Day Rally in 2004 for schools and teachers to:

- teach less
- improve the quality of interaction between teachers and students
- equip students with the knowledge and skills and values to prepare them for life



HIGH INVESTMENT IN TEACHER EDUCATION

- Three attributing factors prevalent in top performing education systems (McKinsey, 2007)
 - getting the right people to become teachers
 - developing them into effective teachers;
 - ensuring that the system is able to deliver the best possible instruction for every child.
- Teacher quality made the largest difference in student achievement and the most effective school systems invested in their teachers (McKinsey, 2007).
- High investment in education in Singapore: Much of the investment goes to the development of teachers.



Support from MOE

Provision of Top Down Support for Bottom-up Initiatives

- Give teachers more time and space.
 - *Reduce curriculum content*
 - *Creation of white space*
- Provide additional resources to schools ready to prototype their ideas for TLLM and bring in new school practices.



Support from MOE

- **Enhance professional development and mentorship of teachers:**
 - *Strengthen focus on professional development in curriculum customisation, pedagogy and assessment;*
 - *Offload experienced teachers, such as Senior Teachers or Heads of Department, to mentor beginning teachers;*
 - *A new position of school staff developer in schools created.*



Extent of LS in Singapore

Exploratory Stage: Just do it

- Lesson Study started in Singapore schools in 2004 supported by the faculty from the National Institute of Education.
- It has now grown by leaps and bounds.





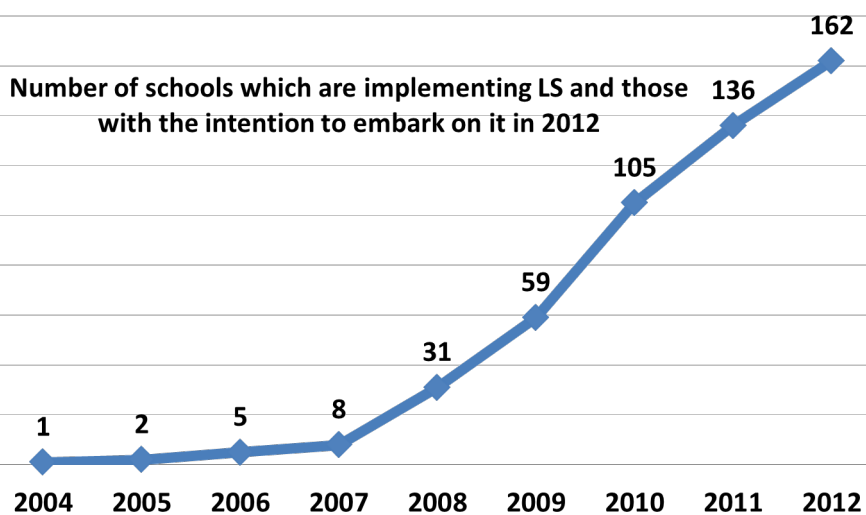
Results from Dipstick Survey 2011

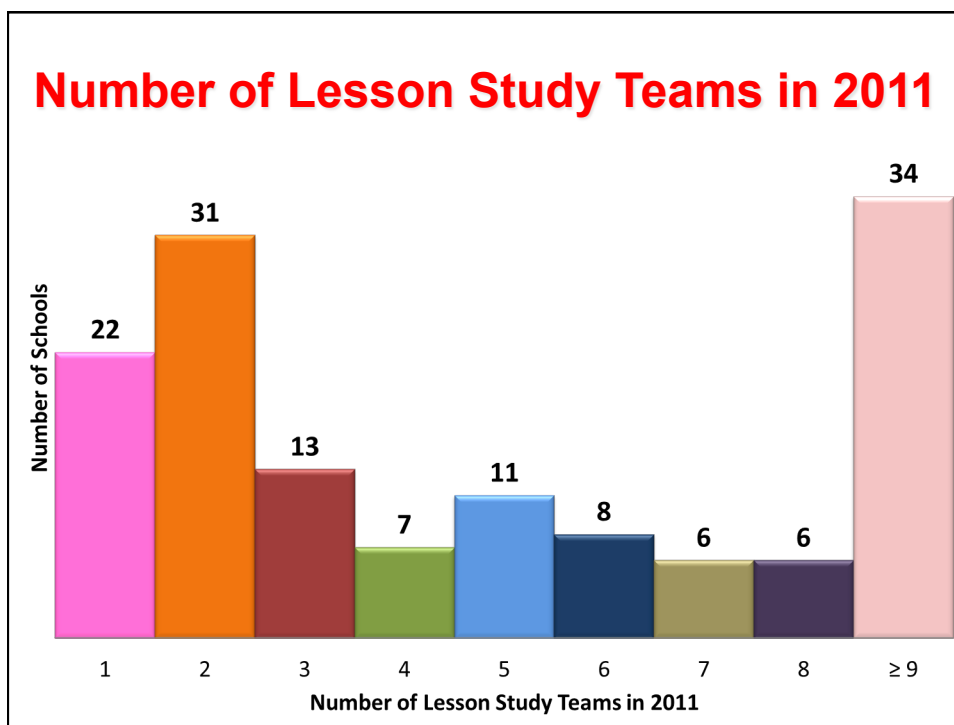
Overall Response Rate to Online Survey: 60%

	Primary	Secondary	Jr College	Total
Responded	94	104	4	202
Doing LS	64 (68%)	70 (67%)	2 (50%)	136 (67%)
Beyond 2012	78 (83%)	81 (78%)	3 (75%)	162 (80%)





The Growing Interest in Lesson Study in Singapore





Impetus for Growth of Lesson Study in Singapore schools

- PLC Initiative from STB, MOE in 2009. Lesson Study is one of 3 platforms for developing PLCs
- In Sep 2009, at the annual MOE Work Plan Seminar, the Minister cited Lesson Study as an avenue for building schools into Professional Learning Communities, thus escalating demand for lesson study training. 
- The launch of Academy of Singapore Teachers in 2010.
- Marshall Cavendish Institute also offers Lesson Study training and support to schools. 



MOE Support of Lesson Study

- **26 Aug 2009:** Address by the Director-General (Education) at the Teachers' Mass Lecture
 - “teachers taking ownership in designing learning for students”
 - “Professional Learning Communities are powerful platforms for teachers to learn from one another, and for teachers to be leading teachers. There are 51 Professional Learning Communities (PLCs) today. We will in fact increase the number of these PLCs as we go forward. PLCs are a way of learning that can help level up teacher professionalism in a quick and effective way.”



MOE Support of Lesson Study

- **17 Sep 2009:** Speech by Minister of Education (Dr Ng Eng Hen) at MOE Workplan Seminar
 - Teacher-driven culture of professional excellence: “enabling teachers to develop themselves”
 - Professional Learning Communities — Teachers driving professionalism: “an example is Tampines Primary, where teachers conduct peer lesson observations, with a post-lesson observation conference to provide feedback and exchange best practices with one another”
 - Video clip of teacher who attended WALs Conference 2008.



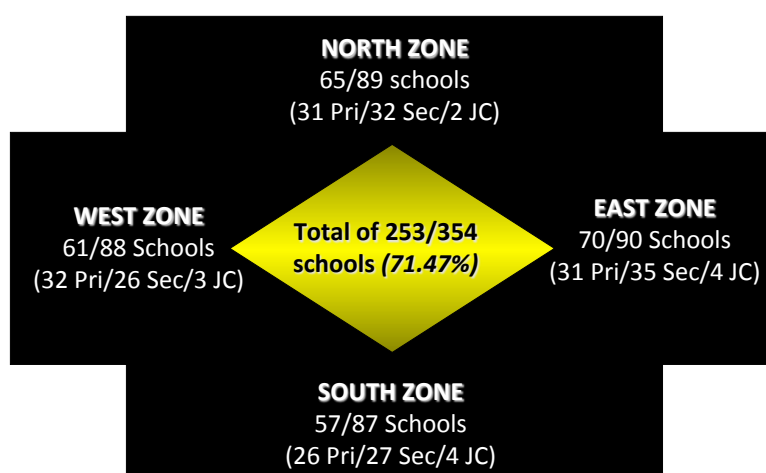


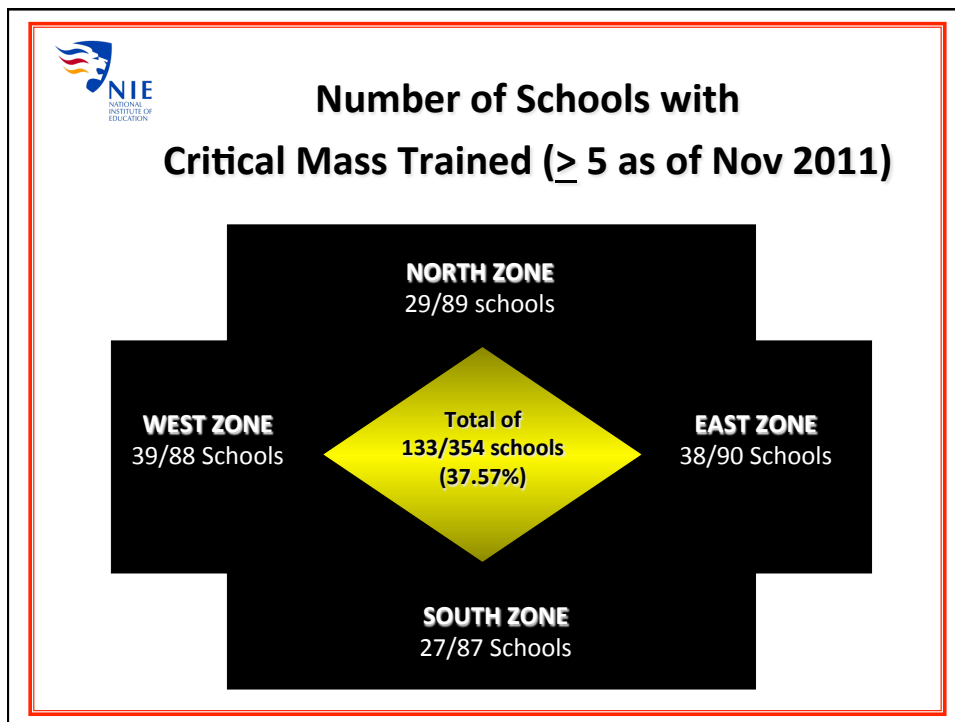
NIE's Provision of Training to Schools

Course Title	Duration	Participants
INTRODUCTION TO LESSON STUDY	7 hrs	Teams composed of key personnel (P, VPs, HODs) and teachers from all levels
CRAFTING A RESEARCH LESSON	10 hrs	Members of lesson study team
EXPERIENCING LESSON STUDY	7 hrs	Teams composed of key personnel (P, VPs, HODs) and teachers from all levels
LESSON STUDY AS A TOOL FOR TEACHER LEADERS	14 hrs	Teams composed of key personnel (P, VPs, HODs) and teachers from all levels



Number of schools trained in introductory workshops (as of Nov 2011)



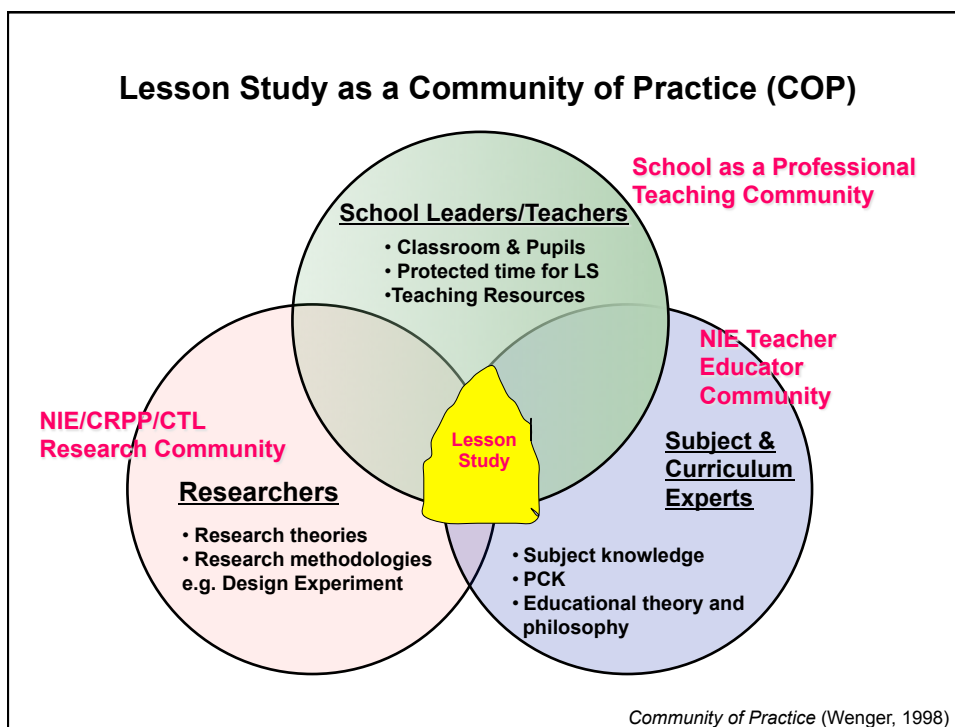


NIE
NATIONAL INSTITUTE OF EDUCATION

Major Findings from a CRPP Funded Lesson Study Pilot Project in a Primary School (2006 – 2007)

I AWARD
INNOVATION SINGAPORE
Innovation of the year 2007

An Institute of **Nanyang** Technological University



Implementing LS in a Primary School

2006
Cycle 1 (Jan-Apr)
 Learning by doing

Cycle 2 (July-Sept)
 Improving & adapting to local context

↓

2007
Cycle 3 (Jan-April)
 Experimenting with whole school approach - teacher leaders as facilitators

Cycle 4 (July-Sept)
 Deepening teachers curriculum and subject matter knowledge

20 Studies of Lessons Across Grades & Subjects

6 in Mathematics, 5 in English, 2 in Social Studies
 2 in Malay Language, 2 in Tamil Language, 1 in Science,
 1 in Chinese Language & 1 in Physical Education



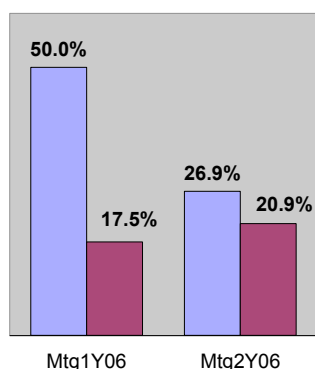
Major Findings: Teachers' Participation

- Majority of teachers:
 - were satisfied with Lesson Study as a process for improving teaching and learning in the subject areas but found it difficult to cope with the competing demands in the school.
 - felt more confident to have colleagues observe their lessons.
 - gained confidence in teaching the topics (of research lessons) selected by their teams.
- Lesson study teams became sites for mentoring beginning teachers

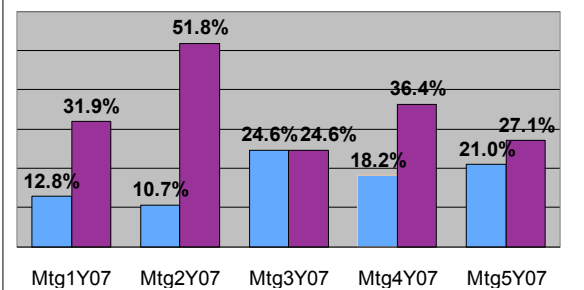


Shift in Teachers' Planning Orientation from Focusing on Instructional Strategies to Meaningful Learning Opportunities for Students

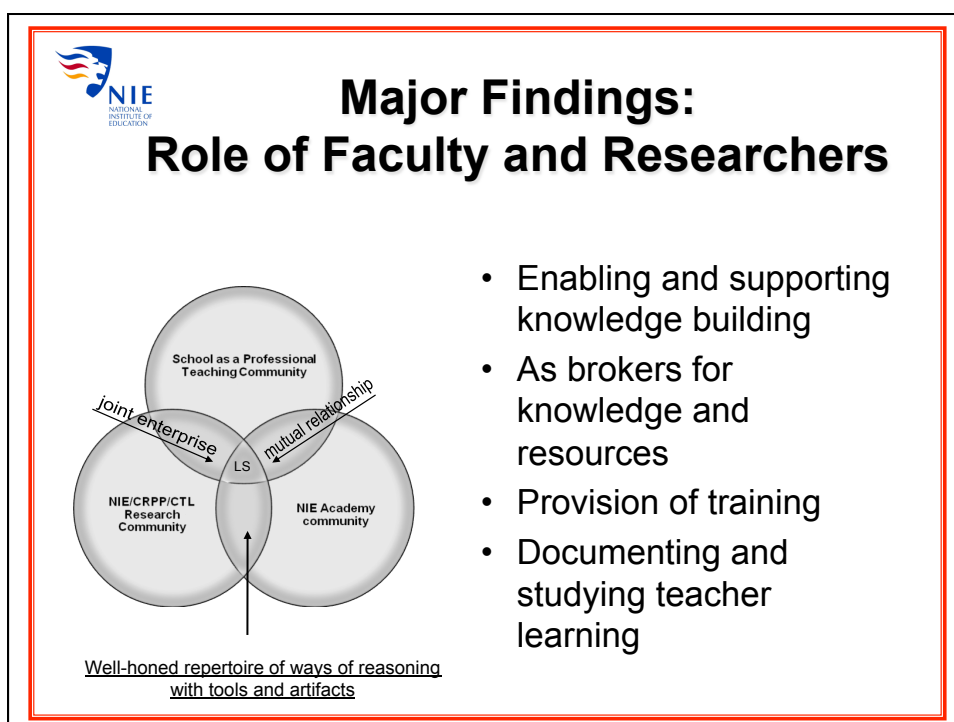
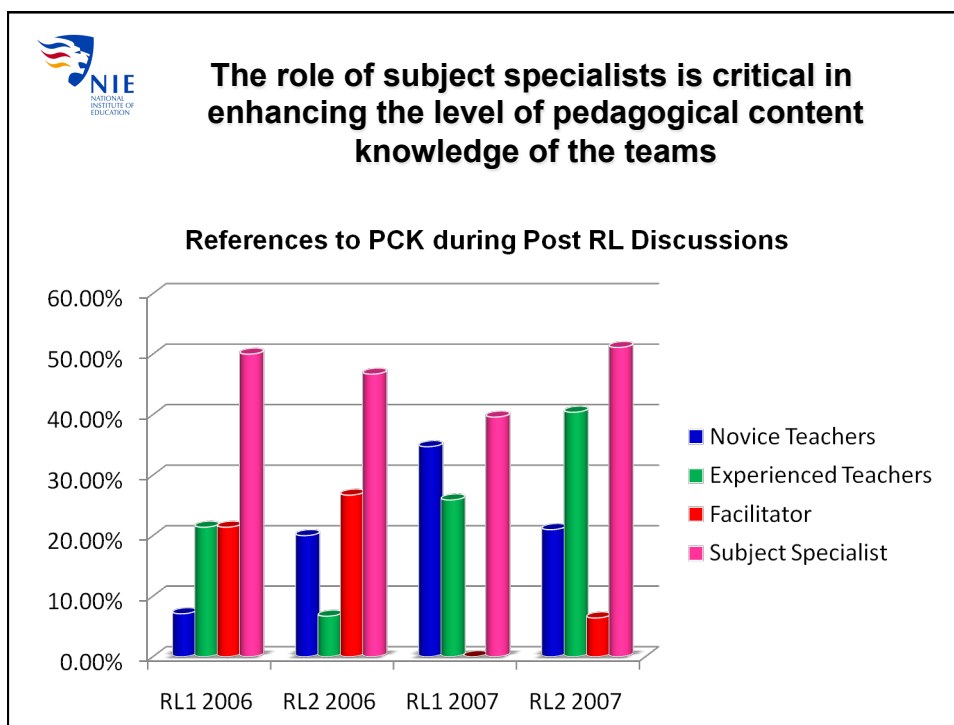
Planning Sessions in 2006



Planning Sessions in 2007



■ Teaching ■ Teaching & Students Learning





Power Factors into the Egalitarian Interaction in Lesson Study

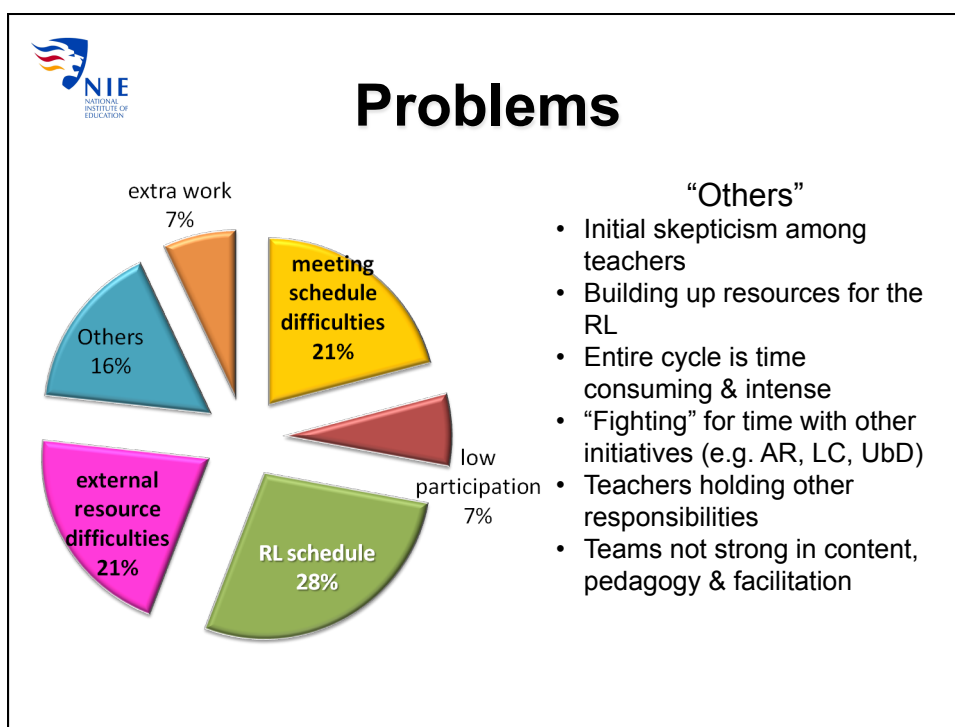
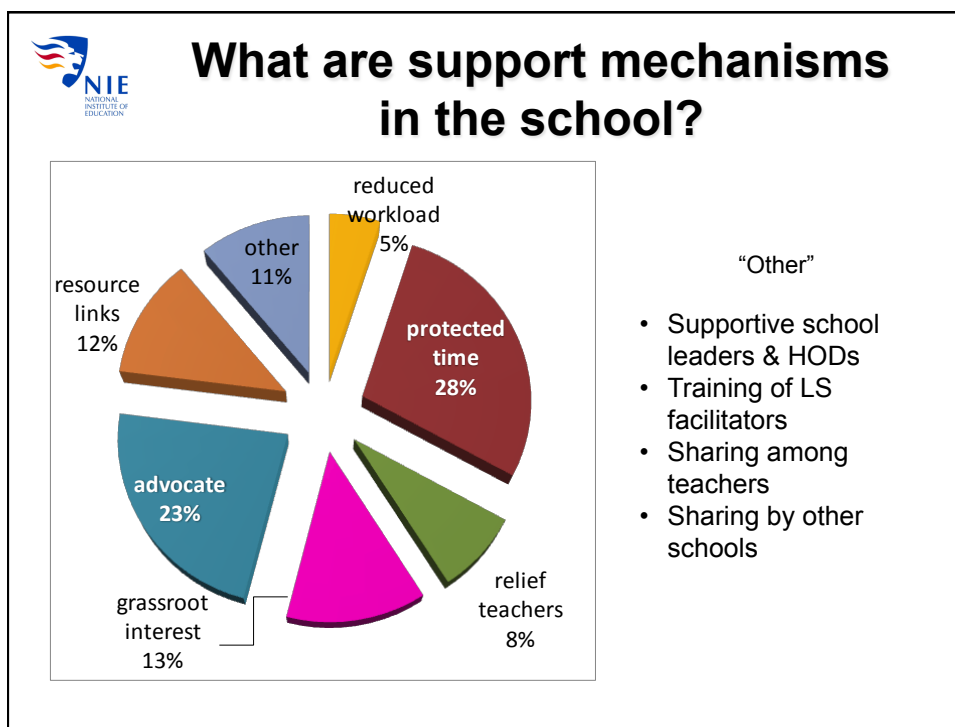
- Lesson Study is an egalitarian platform where participants, regardless of years of experiences, are able to contribute thoughts and suggestions freely
- Nevertheless power factors into the interactions. Ideas offered by those perceived to possess more knowledge were accepted more readily in the lesson design.

The issue is how do we build norms and protocols to support sharing and community building in the early stage of lesson study?



2009 LESSON STUDY SURVEY FINDINGS







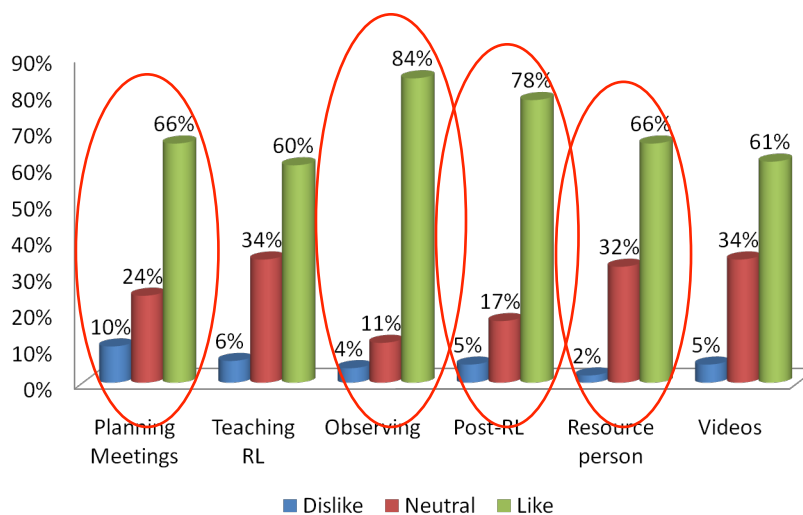
Summary of Findings: Teachers' Voices

What did teachers like or dislike Lesson Study?

- The teachers liked
 - post-RL discussions (84%)
 - observing the RLs (78%)
- Top of the list of dislikes is planning meetings (10%)
- The RL teachers seemed to benefit more from LS than those who did not teach the RLs.



What Teachers Like/Dislike about LS



Positive Outcomes of Lesson Study

- Bring about greater collegiality among teachers
- A site for the mentoring of beginning teachers
- Sharing of lesson study experiences within schools, across schools and at national and international platforms
- Deepening of subject matter knowledge and PCK
- Develop teacher capacity for curriculum redesign

Need for more research to collect evidences of teacher learning and student learning



Common Practices & Concerns

In planning, teacher teams

- decide on the topic of the research lesson **without giving adequate attention to a discussion of a research problem** which LS is attempting to address.
- over-plan** by including too many activities in a lesson.
- spend a lot of time in developing the lesson plan with inadequate attention to how they are going to observe the lesson
- include a group-work component for the sake of observers of their research lesson
- do not situate** their single research lesson in a unit of work and that a single lesson is sufficient to improve learning
- are concerned about the collection of **quantitative data as evidence** that students have learnt.



Common Practices & Concerns

In observing research lessons, teachers

- are not sure **what to observe** and how to take notes
- tend to **observe the teacher** rather than the student (s) (ingrained practice)
- do not use a camera or video camera as additional tools of observations
- sometimes **interfere** with the group process



Common Practices and Concerns

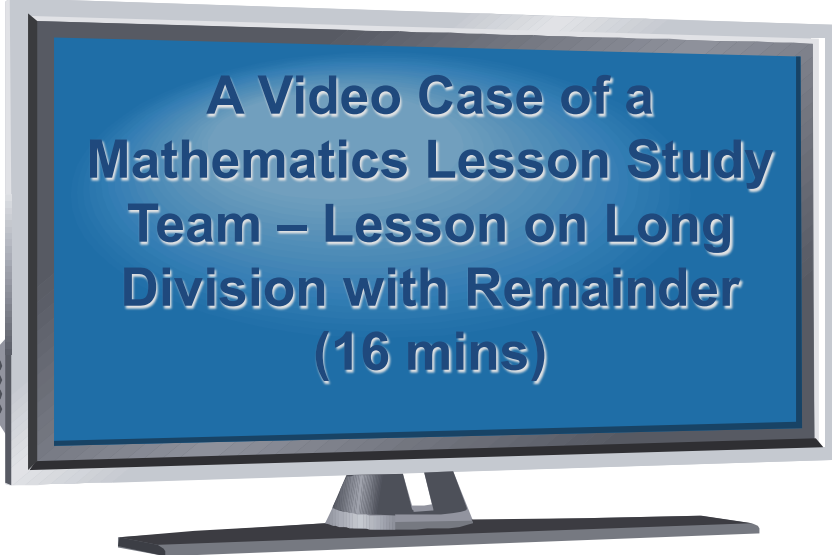
In post-lesson discussions, teachers

- who participated in the planning process are not able to attend post-lesson discussion because of conflicting schedules
- share their reflections largely based on recall or opinions **without reference to data** such as observation notes or concrete examples
- do not use students' work for discussion
- comment on teacher's delivery**/teaching (He/she should have....)
- do not use the video as a source of evidence
- do not after the cycle document carefully the materials, tools, and artifacts produced during the process.



Early Adopters of Lesson Study

Lesson Study in Singapore is still in its early stages of development. We started only in 2004. It would take time to bring about **changes in school culture and mindsets of teachers**. Much more work has to be done to develop the quality of Lesson Study.

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A Video Case of a
Mathematics Lesson Study
Team – Lesson on Long
Division with Remainder
(16 mins)

