Professional learning and school improvement: The role of teachers’ thinking and belief system in Lesson Study practice in Indonesia

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Indonesia and Lesson Study core cities in this presentation:

- Jakarta, the capital
- Bandung, UPI & GagasCeria (LSMGMP, LSBS)
- Banjarbaru (LSc)
- Minahasa (LSc)
Lesson Study in 3 Districts of Java: JICA’s main project sites

Lesson Study was introduced to three Indonesian leading Teacher Education Institutions in Java Island (UPI: Bandung, UNY: Yogyakarta, UM: Malang) in partnership with junior high school teachers and district office of education.
Historical Development (Suratno, 2012a)

Japan International Cooperation Agency (JICA Project)
Located in Bandung (1,2) and Sumedang (3,4); Banjarbaru, Minahasa & GagasCeria (GC) (4)

1. IMSTEP
2. Follow up IMSTEP
3. SISTTEMS
4. PELITA

Piloting Activities (PA)
Uni-School Partnership, In-campus Development; Action Research;

Piloting of LS

Districts scale LS implementation Subject Group LS; Whole School LS.
Learning Community; Mutual Learning; Exchange of Experiences;

Student learning
Teacher learning
Learning community

Key Challenge: Practice of instructional core (teacher-content-student) improvement at scale.
Underlying Principles (Suratno & Cock, 2009): University-School Partnership
Indonesia’s Lesson Study
(Suratno & Cock, 2009; Suratno, 2012a)

FOMASE UPI’s Lesson Study (2005-12)
–Lesson Study Cycle and Establishing Learning Community

A model of professional development for educators by studying teaching and learning activities collaboratively and continually, based on the principles of collegiality and mutual learning to develop a Learning Community among educators.
Key Challenges

Supervision: Evaluation & ‘Judgement’

School Culture: Seniority, Textbook, Competition, Punished by rewards

Professional Development: one size fits all, TC-based.

Teacher Performance Assessment: Evaluation; Incentives

Teacher Working Groups Activity: Reporting; Admin; Formality

‘Truth-Games’

Models of Teaching: Active, Joyful, Contextual, Cooperative, Testing

Classroom Action Research: ‘Scientific’ Method & result

Teacher Performance Assessment: Evaluation; Incentives

Suratno, 2012b; 2012c

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LS: Learning and Learner; collaborative learning

Placing the constitution of Lesson Study:

‘Outward Accountability’

CRITICISING TEACHING AND TEACHERS
(Best models of teaching/teacher’s proof, ‘teaching show’)

ACCOMPILISHING OFFICIAL DIRECTION PROCEDURES
(Administrative formats, standards)

PERFORMATIVITY
(Policy and practice by numbers; exam results, teacher performance assessment)

SCHOOL CULTURE AND PEDAGOGIES
(contrieved collegiality, competition, textbook & transmissive, punished by reward)

GOVERN LSMGMP & LSBS PRACTITIONERS

Suratno, 2012b; 2012c
Interregnum: Towards Educating for Innovation

• Identified tensions between: formal vs. informal teacher learning, top-down vs. bottom-up approach, inconsistencies between teachers’ knowledge and belief system, and teachers’ vs. students’ expectation.

• New approach, pilot stage of informal network of teacher group and school-based lesson study:
  – Promoting teacher thinking and dealing with teacher belief system.
  – Inquiry-based professional learning (practitioner-inquirer/teacher as researcher).
  – What’s math/science, its teaching and learning? etc. through experiential and inferential mode of activity.

• Goal: Capitalising teachers’ thinking and belief system to make powerful pedagogical decision making and enactment.
Identified teachers’ pedagogical beliefs

• Teaching is explaining all technical terms of concepts; teaching for ‘future scientist’ (inability to choose ‘big ideas’).

• Collaborative learning is group work competition and group presentation.

• Assessment is individual/group reward and punishment (by number, point or other signs); punished by rewards).

• Learning is influenced by individual/group background: family, socioeconomic, location, ability, trait, behaviour;
  – Stereotyping: slow learners and naughty kids cannot learn or do not want to learn;
  – Low/high student input determine the quality of instruction and schooling.
Teacher Thinking Framework for Indonesian Lesson Study (Suratno & Iskandar, 2010)

<table>
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<tr>
<th>Prospective Analysis Lesson Planning (PLAN)</th>
<th>Situational Analysis Classroom Observation (DO)</th>
<th>Retrospective Analysis Post-Class Discussion (SEE)</th>
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<tr>
<td><strong>Analyzing HLT (Hypothetical Learning Trajectory (process))</strong></td>
<td><strong>Analyzing ALT (Actual Learning Trajectory (process))</strong></td>
<td><strong>Analyzing HLT vs. ALT</strong></td>
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| • Analyze possible learning demands and obstacles.  
• Identify possible student responses (Prediction) and teacher intervention (Anticipation).  
• Develop Hypothetical Learning Trajectory (HLT). | • Does prediction and anticipation appear? How is the process?  
• Is there any new response beyond the prediction and how does teacher interfere? Does it work?  
• Do students experience learning obstacles and breakthrough? How to help them? | • Analyze student responses (student learning) and how teacher intervenes.  
• Analyze Learning obstacles and breakthrough.  
• Frame and reframe the analyzed problem for alternative HLT. |
The Cases of LSC teachers (Banjarbaru & Minahasa) and GagasCeria primary school (Bandung)
Questioning, experiencing, interpreting and inferring thinking process and creativity in teaching and learning

Acting like student

Thinking as if they were student

GagasCeria primary teachers
Engaging task, Collaborative learning
Promoting new assessment method (Assessment for and as learning): *Learning is editing your life*

Teacher provided feedback

Student reorganised his work

Engaging Banjarbaru junior high students assessing their learning
Artifact of Students’ Learning

Student’s work (Banjarbaru)  Student’s work (Minahasa)

Digging into students’ thinking and understanding:
Beautiful mind of students from remote areas.
Promoting ‘thinking class, learning school’: Creative Display

Even teachers were proud of their students’ works.

And students were satisfied experiencing an engaging learning.

Aligning teachers’ and students’ expectation: Learning satisfaction.
The story of Fion: Mr. Adhit’s reflection
(November 21, 2012)

• I noticed significant progress on individual student. For example, Fion, a girl from Group 2 in 8A. She has caught my attention since the very first day of the lesson because of her ice-cold look. She hardly showed any emotion on her face, only sadness in her eyes. She seemed lonely, not confident, and like she didn’t belong in her class. I was really worried about her and have been keeping close eyes on her ever since.

• In the first few days, I saw that she seemed to be very dependent on one of her group members’, Ando. He was probably the fastest learner in that group. She always checked on Ando’s work and ran practically everything by him. She didn’t look confident at all about her ability. I think that this might be the source of her lack of self-confident, which in turn made her to behave and acted the way she did in the classroom.

• However, in the following days, I observed some significant progress occurred. She started to communicate with other students in her group. She looked more and more confident. She even supported her friends when they asked for her help. She looked more and more confident with herself and her ability. She could draw the graph confidently, by herself, and finished even faster than Ando!

• Then, on the last days of learning with Ryo, I saw a tremendous change on her face. She smiled more often than she did in the past week. I even saw laughter broke every now and then. She looked comfortable and, probably for the first time in her school days, felt she did belong there, with her friends. I was overjoyed to see her and felt that all of Ryo’s hard work for the past week had been paid in full.
The story of Alan: Mr. Adhit’s reflection  
(November 21, 2012)

• Meet Alan, the naughtiest student in the school. Mrs. Agnes, one of the school teachers and a member of LSc, shed some lights about Alan’s notorious reputation in the past. She said that Alan was not only the naughtiest, but threatened to be expelled several times for his misdemeanor conduct. He never showed any interest to his lessons and had tested his teachers’ patience more often than he could afford. When I first saw him, I could also see directly that he was far from our image of a role-model student. He had his ear pierced and I saw him proudly wore an earring once, when he was outside of the classroom.

• However, Mrs. Agnes was amazed when she saw Alan’s performance in Ryo’s classes. He never made any trouble. He always concentrated in the lessons, showed enormous interest in them, contributed to his group, and could work well with others. She was really happy to see how much Alan has progressed.
Mr. Adhit’s reflection
(November 21, 2012)

• But only after we finished putting them [students’ works and display] that I understood why it was important. Maybe it was only my imagination, but I sensed that the classroom’s atmosphere has suddenly changed. It was their wall of pride, a memento of their hard work, an echo of their learning. More importantly, now the classroom has a personal touch. I think it can help students like Fion and Alan, when they see their work on the wall, to feel that they belong in there, that they are part of it, that this is their classroom, part of their identity, their home. It’s something that I never felt when I was a student and, suddenly, I envied them.
Mr. Adhit’s reflection
(November 21, 2012)

• These facts reminded me about a conversation that Sato-san once had with a widyaiswara in 2009, during a TOT. The trainer asked Sato-san, “How could we teach a student who doesn’t even want to learn?” Strangely (for me at that time), Sato-san replied, “Impossible. It is impossible that a student does not want to learn. The fact that he is coming to school every single day is a proof that he does want to learn”. Now, after learning from Alan, it all looked crystal clear for me. Even him, the naughtiest student, did want to and could learn. The only real question remaining is whether we, as teachers, can provide him that opportunity. If learning (understanding) is a luxury he could not obtain from his teachers in the classroom, acting-out was probably his way to compensate for his unfulfilled rights and desire.
Mr. Jovan’s reflection

- Teachers who join the activity every day cannot see the huge impact on the students because they see changes bit by bit. But for Mrs. Tri, she was really surprised because the students that she observed on Day 3 are so different to students on Day 6. It is a rough valid proof that the “bit by bit” can be huge at some point.
Lessons learned: Experiencing ‘innovation’

• Experiencing ‘innovation’ is perceiving small but important one with huge impact.

• Fellow teachers can not articulate because they are experiencing new things; AHA experience, ‘just great’.

• Incremental improvement means subtle evidence, microgenetic development.

• To some extent, the evidence of innovation is hard to be communicated and should be measured carefully.

• It is important for program designer to make sense of small points of development to substantiate the core of educational practices.
Lessons learned: Change approaches

- Lesson Study was adapted through strategic partnership that focused on studying students’ learning (IMSTEP).
- Empowering professional learning community by modelling powerful teaching and reflective practice (SISTTEMS).
- Deepening understanding and belief of teaching and learning through both modelling and cascading an engaging pedagogies and assessment (as if they were student(s)) (PELITA).
- Improving school by engaging teachers to think and reflect deeply on their practice and routine at school (facilitating experiential and inferential teacher learning to enhance teachers’ knowledge and belief).
Cited works

• Suratno, T., and Cock, K. (2009). A School-University Partnership in Indonesia: Lesson Learnt from Lesson Study (pp. 69-90). In Cher Ping Lim et al. (Eds). Innovative practices in pre-service teacher education: An Asia Pacific perspectives. Sense Publisher. Rotterdam.


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