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Exploring the Landscape of Deep Learning Pedagogies. The Role of Networked Professional Learning Communities in Indonesian Primary Schools

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Transforming teaching towards new pedagogies requires implementation framework that depicts deep learning in practice. This paper aims at exploring the landscape of such new pedagogies by reverberating the attempt made by primary school teachers in realizing networked professional learning. By explicating narratively the experience of Lesson Study practitioner networks from Malang and Bandung, I make a case by unfolding teachers' and students' stories to live by as they were experiencing an engaging learning about division of fraction. In doing so, I especially address the pivotal processes in networked professional learning which consist of 1) explicating powerful students' learning; 2) nurturing collegiality among teachers in designing and reflecting upon students' collaborative learning; and 3) engaging teachers' repersonalisation in digging into students' thinking and feeling. I would argue that deep learning pedagogies will only flourish in learning communities in which close relationship is continually composing teachers' and students' learning. By attending to the interwoven lives of teachers and children, we will come to understand that it is a fusion with children that fosters teachers' sense making toward students' learning.

Keywords: new pedagogies, deep learning, lesson study, collegiality, professional learning community

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Implementation of Mentoring through Lesson Study as a Tool for Professional Development of Unexperienced Teachers

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Today scientific research is an important part in school practice; therefore teachers try to find different research methods to improve their teaching process.

The practical part of organizing Lesson study to mentor inexperienced teachers in frames of Lesson Study research according to Transcript, Seating Map, Time Sequential Method, Case study method at the Nazarbayev Intellectual School of the International Baccalaureate is presented in this article.

The objectives of the study were:

- to organize the observation process, attracting inexperienced teachers and teachers, striving to improve their teaching practice.
- To find out common problems to solve by lesson Study observation process
- To increase students' learning skills and motivation to improve group dynamic on the lessons

The research question was: What are the effective teaching strategies for mentoring to increase the confidence of inexperienced teachers and students' motivation in the process of Lesson Study?

The Case Study method was chosen as appropriate for a year research, because it provides opportunity to observe teaching and learning process in problematic groups of students and teachers.

Methods of Lesson Study research help supervisors to introduce a new type of assessing professionalism by organizing observation process of mentored teachers. The regular observation of lessons by experienced teachers (mentors), their recommendations and comments are very helpful for inexperienced teachers, aiming the improvement of methods and quality of teaching practices.

The article reflects the findings and conclusions of implementing mentoring through Lesson study as well implications.

Supervisors expected the following results before Lesson Study process:

- a collaborative environment for improving the quality of planning and teaching will be created;
- an understanding of methods of observation and research principles of Lesson Study will be gained;
- a necessity to watch and improve group dynamic will be brought up among teachers.

At the end of the year the Supervisors of School Lesson Study team organized a discussion of the process of Lesson Study observation and came to a conclusion that the process succeeded, because teachers-participants were able to create their own culture of lessons by the implementing recommendations of mentors in their everyday practice and it helped them motivate students to study school subjects at a higher level. At the same time inexperienced teachers realized the necessity of further development of their observation and research skills.

The School Study team defined such findings as:

- The well planned and organized process of observation by Lesson Study let teachers to identify own strong and weak sides of teaching in a short time;
- Lesson Study observation process gives an opportunity to gain watching and research skills at working place;
- Lesson Study observation is friendly for students and teachers and let teachers create more collaborative communication among students;
- Regular process of sharing observation experience let select the most appropriate teaching strategies aimed to solve problems in the context of students' behavior and focus on the teaching.
- Specially developed forms of protocols, called 'observation Forms #1, 2, 3' help both observers and teachers reflect on seats of students, their communication and teachers' activity during a lesson.

Implications of the research were the following:

- Working time-table of different teachers was not suitable to organize large scaled observation;
- Overloading by teaching and working routine limited the time of meeting, discussions and sharing experiences;
- Low motivation of some inexperienced teachers to develop their professional skills.

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Mathematic Problem Solving Ability Development of Grade 4 Students through 5 Steps Learning and Peer Coaching with LSPLC in Thailand

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Background and Problems:

As a novice Mathematic teacher, supporting grade 4 students to develop mathematic problem solving ability was a big problem. As our Satitpattana School, a large private school in Bangkok, implementing ‘Lesson Study and Professional Learning Community (LSPLC)’, we were supported to solve our problem collaboratively by redesigning our grade 4 mathematic lessons through 5 Step Learning Process and peer coaching.

The study objectives were to analyze:

- (1) Important aspects of the redesign of the mathematic lesson plans for problem solving ability development.
- (2) the changes of the ability of students and classroom atmosphere
- (3) the changes teachers’ learning collaboratively through LSPLC

Target Group:

43, grade 4 students from 2 classes (23 students and 20 students)

Study Instruments:

A Grade 4 mathematic problem solving ability test, peer coaching skills evaluation form, six lesson plans, teachers’ learning log, LSPLC learning log and video records were used in the study.

The Findings were as follows:

- (1) Redesigning the structure of learning process from 3 step learning process (introduction, teaching the concepts and conclusion) to 5 steps learning process (questioning, searching information, constructing knowledge, communicating and community servicing) through collaborative learning in a small group of four students with peer coaching relationship were important aspects of the 6 lesson plans which were supported through LSPLC. The lesson study procedure in our school consisted of 5 collaborative learning steps among teachers and PLC members. They are (1) analyzing learning indicators, (2) planning a lesson, (3) doing and observing students learning behaviors, (4) reflecting the outcomes of the observed class, and (5) redesigning the observed lesson.
- (2) After two weeks of learning through the 6 redesigned lessons, 41 students had improvements in their ability scores, and peer coaching skills scores. 29 and 7 students’ post. Best scores were at high and at moderate levels respectively.
- (3) Coaching and mentoring activities from LSPLC created collaborative learning opportunities for

teacher to better understand our students potentials and needs. They also provided us with a collaboratively focus on how to support our individual students to learn effectively.