

Abstract Number: 20355

Development of Teachers' Formative Assessment by Using Lesson Study and Open Approach

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This study is a sub-research project within the research project of Centre of Excellence in Mathematics (CEM) and the project of 'U.S.-Thailand Research Network to Advance the Teaching and Learning of Algebraic Reasoning' which collaborative launching by Center for Research in Mathematics Education (CRME), Khon Kaen University, Thailand and University of North Texas, USA. (Eddy & Inprasitha, 2012). It aimed to examine the teachers' ability of formative assessment by using lesson study (LS) and open approach (OA) in the mathematics classroom. LS and OS (Inprasitha, 2011) and AssessToday (Eddy and Harrell, 2013) were adapted in this study. Especially, AssessToday was modified to fit in the context of Thai mathematics classroom using LS and OA (Thinwiangthong et al, 2017). Target group were 2 secondary teachers at a school in Chaiyaphum Province. The data were collected by video recording and descriptive writing in the AssessToday fieldnote during the second semester of 2016 academic year. The data were analyzed by video analysis compose with content analysis. The analysis results were express by analytic description and the level of AssessToday: Novice, Apprentice, Practitioner, or Master (Eddy and Harrell, 2013).

Research results shown that the teachers' ability of formative assessment was developed by LS and OA. The results details shown as follows; (1) in the beginning of the semester, the teachers' ability of formative assessment drawn in the apprectice level. They wrote the learning taget in the lesson plan and compared the learning target with the students' idea. They rarely used the questions to examine the students' understanding and encourage the students' problem solving. They rarely used wait time. They pushed the students to monitor their thinking but no relate to improve the students' learning. They rarely recognized the students' affect. They rarely adjusted their teaching. And they selected only the students' ideas according to learning target for presentation and discussion. (2) In the end of the semester, the teachers' ability of formative assessment drawn in the practitioner level. They wrote the learning taget in the lesson plan, compared the learning target with the students' idea, and discussed to connect the ideas to accomplish the learning target. They generally used the questions to examine the students' understanding and encourage the students' problem solving. They generally used wait time. They pushed the students to monitor their thinking ans use to improve the students' learning. They generally recognized the students' affect. They generally adjusted their teaching. And they brough all of the students' ideas for presentation and discussion to accomplish the learning target.

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Learning How to Draw a Proper Conclusion in Composition Writing for Primary School Students using Design Thinking & Drama-in-Education

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There are many fairy tales around, and most of these stories concluded with And they lived happily ever after giving a clear explanation as to what happened to the characters which leaves the readers feeling satisfied with no regrets.

However, when it comes to composition writing, which include story writing, many students in primary schools face the problem of not knowing how to end a story or how to provide it with a suitable conclusion. Wouldn't it be ideal if there was an effective way for students to conclude a story? With this problem statement in mind, our team applied Design Thinking in search of a 'solution' for the teaching of story endings. Design Thinking allowed us to adopt a student-centric approach in solving the learning problem faced by students.

The study was carried out in 2015. The team targeted Primary 4 students who were of middle progressing ability as the research group. Through this study, we aim to improve the quality of students' composition endings as we observed that students lacked the knowledge and skills to end their compositions.

Students answered a questionnaire pertaining to reading and composition writing. The objectives were:

- i) To gather students' perception on reading and its association to composition writing and;
- ii) To gather students' perception of the difficulties faced in composition writing.

The questionnaire was administered during the Empathy stage of Design Thinking, before the team came up with the P4 Composition Package during the Ideate stage. Based on the data gathered, the team decided to focus on two types of composition endings 'ending with an Affirmation' and 'ending with a Lesson Learnt' The team had observed that most of the compositions which primary school students wrote had concluded with these two endings. The solution was also derived from the advice and guidance from our Knowledgeable Other (KO), Ms Lim Seok Lai.

The school maximised Drama-in-Education, the core pedagogy in the teaching of Chinese Language to enhance students' engagement and the joy in learning. Students acted out the composition endings they

had in mind in the Prototype stage. The flow of the composition was clearer as students could visualise what would happen next in their writing and refine accordingly. To help the students further, adequate scaffolding like appropriate phrases and relevant proverbs were provided.

Ms Zhang Fujun, the research teacher, mentioned that students were able to apply what they had learnt in subsequent composition writing exercises. In general, 12 out of the 20 targeted students were able to use the descriptive phrases appropriately in similar compositions.

The designed lesson was focused and targeted, and hence learning was manageable for the students. The KOs thought that the lesson plan could be used as exemplar for NIE trainees in their teaching of composition writing.

After three years of research, including mass lectures, writing exercises and learning activities, students are able to end their compositions adequately, relevantly and meaningfully. The team tracked and studied the targeted students' composition endings in their written examinations. 36% of the students had utilised the main descriptive phrases in 2015 and this increased to 41.4% in 2017. The team ascertained that students had difficulty in word recognition and this hindered their understanding during the research lesson. The team, with the guidance of the KOs, took the following necessary actions for improvement:

- x Provided more scaffolding for group work, for greater ownership of learning by the students.
- x Allocated more time for group discussion and presentation.
- x Included Chinese phonetics (Hanyu Pinyin) to aid students' identification and understanding of the difficult characters.
- x Provided a series of writing lessons focusing on endings using proverbs.

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Teacher Perspectives About Lesson Study Programme in BPI Junior High School

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Abstract

Lesson Study is a Japanese model of teaching that in this activity teachers collaborate to research, plan, teach and observe series of lessons using discussion, reflection and there is expert, a lecturer comes to help and refine their lesson design. Teachers in BPI Junior High School has been practicing Lesson Study since 2016 when BPI Foundation and UPI cooperate to run this programme. During the programme, BPI teachers cooperated with lecturer from UPI. Through the process, teachers identify challenge and obstacle they found in their class. Teachers practicing Lesson Study made a positive impact on their teaching practices and as a result students' learning from participation in the Lesson Study process. This paper examines the ways in which BPI Junior High School teachers perceive that practicing Lesson Study has impacted their teaching. The motivation of the teachers themselves influence the significance progress of this programme. The paper is conducted to investigate teacher's perspective to Lesson Study Programme in BPI Junior High School. The paper uses questionnaire and interview about the teachers experience during the lesson study programme and how it was implemented in their class. While, the questionnaire spread to the teachers who have practiced Lesson Study and held public lesson. The interview is conducted to reveal the teacher's perspective in this programme. There are some important result reported in this paper about teachers perspective after applying lesson study and collaborating with team in planning the materials; teachers reported to have a better collaboration with other teachers; they made lesson designs together. Working collaboratively shows that one need others opinion and input to their teaching, so collaboration in Lesson Study made a positive impact since the teachers have a greater chance to their professional development, it is not to judge the way the teachers teach but to see how it works on the students and see how they learned, it also creates a better participation for the students since the teaching activity becomes more interactive. Hopefully, the teachers doing this programme continually and consistently in order to have a better teaching and learning activity. The paper is expected to contribute for teachers and researchers practicing Lesson Study.

Keywords: Lesson Study, secondary school, teacher, collaboration, BPI Junior High School, perspective, research.