

Mathematics Teacher Educators' Understanding of Lesson Study in Malawi Teacher Education

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In this paper we discuss findings of a study that explored how mathematics teacher educators in Malawi understand and implement lesson study in their teacher colleges. The study is part of a wider on-going study and within a project that aims at improving quality and capacity of mathematics teacher education in Malawi. One component of the wider project is professional development of mathematics teacher educators. The professional development uses a lesson study model where mathematics teacher educators at each college do one lesson study cycle in mathematics. Each teacher college has seven to twelve mathematics teacher educators working together in their lesson study process. For this paper, data was collected from five teacher education colleges through lesson plans for their research lessons before and after revising the plans. In three of the five colleges, videos of planning research lessons, teaching research lessons and the teacher educators discussing the research lessons were available. Initial analysis and preliminary findings suggest that while there are some general understandings of lesson study that are common among the colleges, there are also some different understandings by the different teacher educators from different colleges. Furthermore, implementation of the lesson study process varies across the colleges, in general the teacher educators seem to struggle with some of the aspects of lesson study that are found in research on pre-service teachers and teachers worldwide. Although this might not be surprising, it raises questions of how best to implement lesson study that will be useful and beneficial in teacher education in Malawi. This research adds to the international research literature on research on lesson study in pre-service teacher education and on practicing teacher educators as there is not many studies on lesson study and teachers educators. Analysis of all the data is still in progress and complete findings will be presented at the conference. We will discuss implications of the findings including both positive and negative effects of the different understandings and implementations of lesson study to the desired goal of improving quality of mathematics teacher education in Malawi.

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Lesson Study Based Learning Practical Development for Prospective Teacher in Higher Education

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Improving the quality of education depends not only on the professionalism of the teachers but also on the sustainable teacher management system. A good management system can help identify weaknesses and find solutions. The system also includes a pre-service teacher guidance system devoted to coaching prospective teachers in order to initiate teachers' professional values early on. The development of LS is conducted in 4 cycles, each cycle discussing 1 topic. Each cycle consists of 4 stages including: 1) determination of goal setting, 2) planning, 3) implementation, and 4) evaluation. The development of LS in this activity is monitored and analyzed in every cycle. In cycle I and II, the percentage of LS implementation is 89.17%. While in cycle III and IV the percentage of LS implementation increased to 91.04%. In general, it indicates the improvement of quality or refinement of LS implementation conducted by expert team. The interaction is constructively and collaboratively to support the process of developing knowledge on the students as prospective teachers.

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Improving Students Participation Within the Learning Process through Lesson Study

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This research aims to improve students' participation within the learning process through by developing a group discussion model through a lesson study. This belongs to lesson study based classroom action research. The data come from the scores of observation forms relating to the students' participation within the learning process. The research was done in three cycles. The procedures come up by the sequence of planning the learning activities (plan), implementing the learning activities (do) and evaluating the lesson study (evaluation). The result shows: (1) There is the improvement of the students' participation within the learning process from 79,24 in the first cycle to be 82,41 in the second cycle, then 85,82 in the third cycle through the modification on lesson study based discussion model; (2) Two Stay Two Stray method results the highest score on students' participation; (3) The Learning Cell method is good to improve the group's responsibility in accomplishing the task.

Keywords: Lesson Study, The Learning Cell, Two Stay Two Stray.