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DPED Trainee Teachers' Views and Practice on Mathematics Lesson Study in Bangladesh

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Abstract: The main aim and objective of the eighteen-month long Diploma in Primary Education (DPED) teacher education training course for in-service primary teachers in Bangladesh is to acquire professional knowledge as well as make them proficient in professional practice. The training, therefore, introduces a variety of theoretical and practical approaches as well as some professional development activities—lesson study being one of them. But, in the field of mathematics teaching, even after implementing the lesson study method, the desired practical teaching skills of the teachers have not been developed. In addition, elementary students also remain quite raw in mathematics. Although there have been various studies to solve the problem, the need for the teachers' views on mathematical ideas has not been taken into consideration. The researcher conducted the research to find out the cause of the discussed problem. In this case, two teams of nine DPED trainee teachers and two instructors conducted two lesson studies in two schools located in the city and town of Khulna Province, Bangladesh. The researcher observed group lesson planning by trainee teachers, followed by a trainee teacher teaching the planned lesson plan to an actual mathematics classroom, and finally, post-teaching reflective discussion in each lesson study. Two DPED instructors acted as mentors in the lesson study. DPED trainee teachers and instructors were asked about mathematical concepts and classroom practices through questionnaires as well as videotaped mathematics classroom teaching. For this study, the DPED mathematics course, curriculum, and assessment activities were analyzed. In addition, the mathematics lesson plans prepared by the trainee teachers for the lesson study and their pre-teaching and post-teaching reflective discussions were analyzed by some analysis categories and rubrics. As a result, it was found that the trainee teachers' views of mathematics are not mature, and therefore, their mathematics teaching practice is not appropriate. Therefore, in order to improve teachers' mathematics teaching, the researcher recommended including some action-oriented aspects in each phase of mathematics lesson study in DPED-for example, emphasizing mathematics concepts of the trainee teachers, preparing appropriate teaching materials, presenting lessons using the problem-solving method, using revised rubrics for assessing mathematics lesson study, etc.

Keywords: mathematics lesson study, knowledge of mathematics, knowledge of teaching mathematics, teachers' views

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