The Implementation of Social Responsibility with the Approach of Indonesian Realistic Mathematics Education in Teaching and Learning Mathematics on Students' Engagement and Learning

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Abstract : The major objective of this study was to implement and evaluate the use of the implementation of social responsibility with the approach of Indonesian Realistic Mathematics Education (PMRI) in teaching and learning mathematics on students' engagement and learning. The research problems investigated in this research: 1) What were the effects of the implementation of social responsibility with PMRI approach to learning mathematics? 2) What were the effects of the approach to students' engagement? An action research and grounded theory methodology were adopted for the study. This study used mixed methods to collect, describe, and interpret the data. The data were collected through focus group discussion, classroom observations, questionnaire, interview, and students' work. The participants in this study consisted of 45 students. The study revealed that the approach has given students the opportunity to develop their understanding of concepts and procedures, problem-solving ability, and communication ability. Also, students' involvement in the approach improved their engagement in learning mathematics in the three domains of cognitive engagement, effective engagement, and behavioral engagement. In particular, the data collection from the focus group, classroom observations, and interviews suggest that, during this study, the students became more active participants in the mathematics lessons.
Keywords : Indonesian Realistic Mathematics Education, PMRI, learning mathematics, social responsibility, students' engagement