

Eliciting Mathematical Thinking of Students through Realistic Mathematics Education

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Abstract

This paper focuses on an implementation a sequence of instructional activities about addition of fractions that has been developed and implemented in grade four of primary school in Surabaya, Indonesia. The theory of Realistic Mathematics Education (RME) has been applied in the sequence, which aims to assist low attaining learners in supporting students' thinking in the addition of fractions. Based on the premise that eliciting and addressing learners' alternative conceptions in mathematics is beneficial in assisting them to improve their understanding, the paper seeks to explore the role that RME plays pertaining to this particular supposition. The paper presents and discusses examples of learners' responses to contextual problems given to them during the course of the instructional activities.

Keywords: Realistic Mathematics Education, mathematical thinking, a sequence of instructional activities

Abstrak

Makalah ini membahas tentang implementasi urutan kegiatan instruksional tentang penambahan fraksi yang telah dikembangkan dan diimplementasikan dalam empat kelas sekolah dasar di Surabaya, Indonesia. Teori Pendidikan Matematika Realistik (RME) telah diterapkan dalam urutan, yang bertujuan untuk membantu peserta didik mencapai rendah dalam mendukung pemikiran siswa pada penambahan fraksi. Berdasarkan pada premis bahwa eliciting dan mengatasi konsepsi alternatif peserta didik dalam matematika bermanfaat dalam membantu mereka untuk meningkatkan pemahaman mereka, makalah ini berusaha untuk mengeksplorasi peran bahwa RME memainkan berkaitan dengan ini anggapan tertentu. Makalah ini menyajikan dan membahas contoh tanggapan peserta didik untuk masalah kontekstual yang diberikan kepada mereka selama kegiatan instruksional.

Keywords: Pendidikan Matematika Realistik, berpikir matematika, urutan kegiatan pembelajaran

In Indonesia, one of the major goals of organizing school mathematics teaching activities is to help the learners to acquire basic mathematical knowledge as well as being good at mathematical thinking. However, the current practice of mathematics teaching activities in Indonesia does not seem to suffice to help develop the students' mathematical thinking. This is due to the fact that in the traditional classroom culture