

## ABSTRAK

**AZLINA LUBIS.** Pengembangan Bahan Ajar Berbasis Pendekatan Matematika Realistik Untuk Meningkatkan Kemampuan Penalaran Matematis dan Kecerdasan Emosional Siswa MTs.S Muhammadiyah Sei Apung Jaya. Tesis. Medan: Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2018.

Penelitian ini bertujuan untuk mendeskripsikan: (1) validitas bahan ajar berbasis pendekatan matematika realistik yang dikembangkan; (2) kepraktisan bahan ajar berbasis pendekatan matematika realistik yang dikembangkan; (3) efektivitas bahan ajar berbasis pendekatan matematika realistik yang dikembangkan; (4) peningkatan kemampuan penalaran matematis siswa MTs.S Muhammadiyah Sei Apung Jaya menggunakan bahan ajar yang dikembangkan; (5) peningkatan kecerdasan emosional siswa MTs.S Muhammadiyah Sei Apung Jaya menggunakan bahan ajar yang dikembangkan. Penelitian ini merupakan penelitian pengembangan dengan model pengembangan 4-D, produk yang dihasilkan dalam penelitian ini adalah buku guru, buku siswa, lembar aktivitas siswa, dan instrumen-instrumen. Uji coba I dilakukan pada siswa kelas VII-4 dan uji coba II di kelas VII-3 MTs.S Muhammadiyah Sei Apung Jaya. Dari hasil penelitian ini diperoleh bahwa: (1) bahan ajar berbasis pendekatan matematika realistik yang dikembangkan valid (2) bahan ajar berbasis pendekatan matematika realistik yang dikembangkan praktis berdasarkan hasil revisi dari tim ahli dan keterlaksanaan bahan ajar; (3) bahan ajar berbasis pendekatan matematika realistik memenuhi keefektifan, efektif ditinjau dari: a) ketuntasan belajar siswa secara klasikal; b)waktu ideal; dan c) respon siswa; (4) Adanya peningkatan kemampuan penalaran matematis menggunakan bahan ajar yang dikembangkan; (5) Adanya peningkatan kecerdasan emosional siswa menggunakan bahan ajar yang dikembangkan. Selanjutnya, disarankan agar guru dapat menggunakan bahan ajar berbasis pendekatan matematika realistik sebagai alternatif pembelajaran, dengan bimbingan atau pertanyaan-pertanyaan yang diberikan dapat terjangkau oleh siswa, sehingga siswa lebih mudah memahami masalah-masalah yang berkaitan dengan kemampuan penalaran matematis dan kecerdasan emosional.

**Kata kunci:** Pengembangan bahan ajar, Pendekatan matematika realistik, Kemampuan penalaran matematis, kecerdasan emosional.

## ABSTRACT

**AZLINA LUBIS. The Development of Teaching Material Based Realistic Mathematics Approach To improve the ability of mathematical reasoning and students' emotional intelligence of MTs.S Muhammadiyah Sei Apung Jaya.** Thesis. Medan. Mathematics Education Graduate Program, State University of Medan. 2018.

This research aimed to describe: (1) the validity of teaching materials based on realistic mathematical approach developed; (2) practicality of teaching materials based on realistic mathematical approach developed; (3) the effectiveness of teaching materials based on realistic mathematical approach developed; (4) improving students' ability of mathematical reasoning of MTs.S Muhammadiyah Sei Apung Jaya using developed teaching materials; (5) improvement of and students' emotional intelligence of MTs.S Muhammadiyah Sei Apung Jaya using teaching materials developed. This research is a development research with Four-D model of development, the product that produced in this research is teacher book, student book, student activity sheet, and instruments. The research was done in class VII-4 and VII-3 MTs.S Muhammadiyah Sei Apung Jaya. From the results of this study obtained that: (1) teaching materials based on realistic mathematical approach developed valid; (2) teaching materials based on realistic mathematical approach developed practically based on the revision of the expert team and the implementation of teaching materials; (3) instructional materials based on realistic mathematical approach fulfill effectiveness, effectively viewed from: a) mastery learn classically; b) ideal time; and c) student responses; (4) There is an increase in ability of mathematical reasoning using instructional materials that are developed, (5) There is increasing of students' emotional intelligence using developed teaching materials. Furthermore, it is suggested that teachers can use teaching materials based on realistic mathematics approaches as an alternative to learning, with guidance or questions provided to be accessible to students, so that students more easily understand problems related to mathematical reasoning and emotional intelligence.

**Keywords:** Development of teaching materials, Realistic mathematical approach, The ability of mathematical reasoning, emotional intelligence.