

## ABSTRACT

This study aims to produce teaching materials for e-modules to build cube and cuboids using the PMRI approach with a valid, practical Malay Islamic context and knowing the potential effects on solving students' mathematical problems. This is known as development research with a formative research model (Tessmer). The research procedure used consists of the preliminary stage (preparation and design) and the formative evaluation flow (self-evaluation, one-to-one, small group, and field test stages). The content of the material is prepared based on the PMRI approach combined with the Malay Islamic context and pays attention to the mathematical problem-solving skills of students. The data collection techniques used are questionnaires, interviews, documentation, and tests. Validity data is obtained based on the results of the validity questionnaire, which are analyzed descriptively and qualitatively through comments and suggestions from validators. Practicality data were obtained based on the results of the practicality questionnaire, which were analyzed descriptively and qualitatively based on student comments and suggestions. The potential effect is obtained from the results of the analysis of the students' answers on the evaluation test in the e-module. The results of this study showed that the e-module developed was declared valid based on validators' comments and suggestions and was declared practical based on the questionnaire of the practicality of student responses, and the e-modules developed had a potential effect on solving students' mathematical problems with a percentage of completeness of 81.8%, a very high category of 27.3%, a high category of 54.5%, and a medium category of 18.2%.

**Key words :** E-module, Cube and Cuboids, PMRI, Malay Islamic

## ABSTRAK

Penelitian ini bertujuan untuk menghasilkan bahan ajar *e-modul* bangun ruang kubus dan balok menggunakan pendekatan PMRI dengan konteks Islam Melayu yang valid, praktis, dan mengetahui efek potensial terhadap pemecahan masalah matematis siswa. Jenis penelitian ini merupakan penelitian *Development Research* dengan tipe *formative research* model Tessmer. Prosedur penelitian yang digunakan terdiri dari tahap *preliminary* (persiapan dan pendesainan) dan alur *formative evaluation* (tahap *self evaluation*, *one-to-one*, *small group*, dan *field test*). Konten materi yang disusun berdasarkan pendekatan PMRI yang dipadukan dengan konteks Islam Melayu serta memperhatikan kemampuan pemecahan masalah matematis siswa. Teknik pengumpulan data yang digunakan yaitu angket, wawancara, dokumentasi dan tes. Data kevalidan diperoleh berdasarkan hasil angket kevalidan yang dianalisis secara deskriptif kualitatif melalui komentar dan saran dari validator. Data kepraktisan didapatkan berdasarkan hasil angket kepraktisan yang dianalisis secara deskriptif kualitatif berdasarkan komentar dan saran siswa. Efek potensial didapatkan dari hasil analisis jawaban siswa pada tes evaluasi yang ada pada *e-modul*. Subjek penelitian ini adalah siswa kelas IX MTs Fajar Siddiq Palembang. Hasil penelitian ini menunjukkan bahwa *e-modul* yang dikembangkan dinyatakan valid berdasarkan komentar dan saran validator dan dinyatakan praktis berdasarkan angket kepraktisan respon siswa serta *e-modul* yang dikembangkan memiliki efek potensial terhadap pemecahan masalah matematis siswa dengan persentase ketuntasan sebesar 81,8%, kategori sangat tinggi sebesar 27,3%, kategori tinggi sebesar 54,5%, dan kategori sedang sebesar 18,2%.

**Kata Kunci :** *E-modul*, Bangun Ruang Kubus dan Balok, Pendekatan PMRI, Islam Melayu