

## ABSTRAK

Penelitian ini bertujuan untuk mendeskripsikan proses pengembangan buku guru dan buku siswa adaptasi *Mathematics in Context* (MiC) Unit *Ratios and Rates* serta menghasilkan produk yang valid dan praktis untuk mendukung pembelajaran kontekstual perbandingan senilai di SMP. Penelitian ini merupakan penelitian pengembangan dengan model 4-D yang dilaksanakan hingga tahap *Develop* (meliputi tahap *Define*, *Design*, dan *Develop*). Subjek penelitian terdiri dari 30 siswa kelas VII F SMP Negeri 1 Yogyakarta dan 1 guru matematika sebagai pengguna produk. Validasi dilakukan oleh dosen pendidikan matematika dan guru matematika.

Hasil analisis awal menunjukkan bahwa pembelajaran masih berfokus pada latihan soal rutin dan konteks asli MiC (satuan *miles*, *pounds*, denah AS) kurang familiar bagi siswa Indonesia. Pada tahap *Design*, konteks diadaptasi ke situasi Indonesia. Pada tahap *Develop*, produk divalidasi dan diujicobakan secara terbatas. Hasil validasi menunjukkan rata-rata total kevalidan sebesar 79,12% (Valid), dengan rincian buku siswa 78,24% dan buku guru 80,00%. Hasil uji coba menunjukkan kepraktisan buku guru 80% (Praktis) dan buku siswa 87,85% (Sangat Praktis). Hasil observasi keterlaksanaan pembelajaran mencapai 89,28% untuk buku guru dan 91,25% untuk buku siswa (keduanya Sangat Terlaksana).

Berdasarkan hasil tersebut, buku guru dan buku siswa adaptasi *Mathematics in Context* Unit *Ratios and Rates* memberikan indikasi awal bahwa produk layak dan praktis digunakan untuk mendukung pembelajaran kontekstual perbandingan senilai di SMP. Penelitian ini hanya menilai validitas dan kepraktisan, bukan efektivitas terhadap peningkatan hasil belajar siswa.

**Kata kunci:** adaptasi, *Mathematics in Context*, perbandingan senilai, pembelajaran kontekstual, model 4-D.

**ABSTRACT**

*This study aims to describe the development process of teacher's and student's books adapted from Mathematics in Context (MiC) Unit Ratios and Rates and to produce valid and practical products to support contextual learning of direct proportion in junior high school. This research is a development study using the 4-D model which was carried out up to the Develop stage (covering the Define, Design, and Develop stages). The research subjects consisted of 30 seventh-grade students from Class VII F of SMP Negeri 1 Yogyakarta and one mathematics teacher as the product user. Validation was conducted by a mathematics education lecturer and a mathematics teacher.*

*Initial analysis revealed that learning still focused on routine exercises, and the original MiC contexts (units such as miles, pounds, and maps of US cities) were unfamiliar to Indonesian students. At the Design stage, the contexts were adapted to Indonesian situations. At the Develop stage, the product was validated and tested on a limited basis. The validation results showed an average total validity percentage of 79.12% (categorized as Valid), with the student's book achieving 78.24% and the teacher's book 80.00%. The limited trial results indicated that the practicality of the teacher's book was 80% (categorized as Practical) and the student's book was 87.85% (categorized as Highly Practical). Observation results of learning implementation reached 89.28% for the teacher's book and 91.25% for the student's book (both categorized as Highly Implemented).*

*Based on these findings, the adapted teacher's and student's books of Mathematics in Context Unit Ratios and Rates provide initial indications that the product is feasible and practical to support contextual learning of direct proportion in junior high school. This study only assessed validity and practicality, not the effectiveness on improving student learning outcomes.*

**Keywords:** *adaptation, Mathematics in Context, direct proportion, contextual learning, 4-D model.*