ABSTRAK

Buku ajar merupakan salah satu sumber belajar yang digunakan dalam pembelajaran di sekolah. Namun tidak banyak buku ajar yang mengajarkan proses matematisasi siswa dari konteks nyata menuju formal matematika. Sehubungan dengan hal tersebut, penelitian ini bertujuan untuk 1) mendeskripsikan proses pengembangan buku ajar dengan pendekatan PMRI melalui adaptasi buku *Models You Can Count On* pada jenjang SMP, serta 2) mengetahui kevalidan dan kepraktisan buku ajar dengan pendekatan PMRI melalui adaptasi buku *Models You Can Count On* pada jenjang SMP.

Penelitian ini merupakan penelitian pengembangan dengan model ADDIE dengan lima tahap, yaitu *analyze, design, develop, implement,* dan *evaluate*. Model ADDIE dipilih karena terdiri atas lima tahap yang sistematis sehingga sesuai dengan tujuan penelitian yang berfokus pada pengembangan, implementasi, dan evaluasi produk tanpa tahap penyebaran secara luas seperti pada model 4D. Subjek penelitian terdiri dari 22 peserta didik kelas VIII D SMP Joannes Bosco sebagai pengguna buku siswa. Pengumpulan data dilakukan melalui wawancara, angket, dan observasi.

Hasil penelitian menunjukkan kevalidan buku guru memperoleh skor rata-rata 83,2% dengan kategori “Valid” dan kevalidan buku Siswa memperoleh skor rata-rata 85,8% dengan kategori "Sangat Valid". Hasil kepraktisan buku guru memperoleh skor rata-rata 92,02% dengan kategori “Sangat Praktis”, dan kepraktisan buku siswa memperoleh skor rata-rata 82,89% dengan kategori "Praktis". Dengan demikian, buku ajar yang dikembangkan dinyatakan valid dan praktis untuk digunakan sebagai sumber belajar matematika pada materi pecahan di jenjang SMP.

Kata kunci: buku ajar, PMRI, adaptasi, ADDIE, pecahan, kevalidan, kepraktisan

ABSTRACT

Textbooks are one of the learning resources used in school instruction. However, few textbooks guide students through the process of mathematization—from real-world contexts to formal mathematics. In light of this, this study aims to 1) describe the process of developing a textbook using the PMRI approach through the adaptation of the book Models You Can Count On for junior high school students, and 2) determine the validity and practicality of the textbook using the PMRI approach through the adaptation of the book Models You Can Count On for junior high school students.

This study is a development research project using the ADDIE model, which consists of five stages: analyze, design, develop, implement, and evaluate. The ADDIE model was chosen because it comprises five systematic stages, making it suitable for the research objectives, which focus on the development, implementation, and evaluation of a product without a widespread dissemination stage, as found in the 4D model. The research subjects consisted of 22 eighth-grade students from Class VIII D at Joannes Bosco Junior High School, who served as users of the student workbook. Data collection was conducted through interviews, questionnaires, and observations.

The results showed that the validity of the teacher's guide achieved an average score of 83.2%, categorized as "Valid," while the validity of the student workbook achieved an average score of 85.8%, categorized as "Highly Valid." The practicality of the teacher's book received an average score of 92.02%, categorized as "Highly Practical," while the practicality of the student's book received an average score of 82.89%, categorized as "Practical." Thus, the developed textbooks are deemed valid and practical for use as mathematics learning resources on the topic of fractions at the junior high school level.

Keywords: *textbook, PMRI, adaptation, ADDIE, fractions, validity, practicality*