

## ABSTRAK

### PENGEMBANGAN BUKU PANDUAN GURU DALAM PEMBELAJARAN MATEMATIKA MATERI GABUNGAN BANGUN RUANG KELAS VI SD BERBASIS ETNOMATEMATIKA MENGGUNAKAN GAMELAN JAWA

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2021

Penelitian ini dilatarbelakangi oleh kebutuhan guru terhadap referensi penerapan budaya ke dalam pembelajaran matematika di sekolah dasar dalam bentuk buku panduan guru. Penelitian ini bertujuan untuk 1) mengembangkan produk berupa buku panduan guru dalam pembelajaran matematika materi gabungan bangun ruang kelas VI SD berbasis etnomatematika menggunakan gamelan Jawa, 2) mengetahui kualitas produk berupa buku panduan guru dalam pembelajaran matematika materi gabungan bangun ruang kelas VI SD berbasis etnomatematika menggunakan gamelan Jawa.

Penelitian ini termasuk dalam jenis penelitian dan pengembangan (R&D). Subjek dalam penelitian ini adalah guru kelas VI SD Joannes Bosco Yogyakarta. Objek dalam penelitian ini adalah buku panduan guru berbasis etnomatematika pada pembelajaran matematika di sekolah dasar. Pengumpulan data dalam penelitian ini menggunakan teknik wawancara dan kuesioner.

Hasil penelitian menunjukkan bahwa: (1) buku panduan guru berbasis etnomatematika pada pembelajaran matematika di sekolah dasar dikembangkan menggunakan langkah-langkah model penelitian dan pengembangan tipe ADDIE, yaitu *analyze, design, develop, implement, and evaluate*. (2) kualitas buku panduan guru berbasis etnomatematika pada pembelajaran matematika di sekolah dasar yang dikembangkan adalah “Sangat Baik” berdasarkan hasil validasi oleh para ahli yang memperoleh rerata skor sebesar 3,54 dari skala 4 dan memenuhi 10 (sepuluh) indikator kriteria buku panduan pendidik yang baik, yaitu (1) judul buku merupakan gambaran dari isi buku dan ditulis menggunakan bahasa Indonesia yang baik dan benar, (2) judul buku tidak mengandung pelecehan terhadap masyarakat tertentu, (3) di dalam sampul buku terdapat nama penulis dan ilustrasi yang mengambarkan isi buku, (4) terdapat halaman prakata yang ditulis oleh penulis buku, (5) terdapat halaman daftar isi, (6) etnomatematika pada suatu objek yang sesuai dengan konsep matematika, (7) isi buku memberikan panduan tentang metode, media, dan penilaian pembelajaran yang berguna bagi peningkatan kualitas pendidik, (8) isi buku dapat dipertanggungjawabkan dengan mencantumkan sumber rujukan pada daftar referensi buku, (9) penulisan buku menggunakan bahasa dan gaya penyajian yang baik sehingga mudah dipahami oleh pembaca, dan (10) pada bagian akhir memuat informasi tentang penulis buku secara lebih mendetail.

**Kata kunci:** penelitian dan pengembangan, buku panduan guru, matematika, etnomatematika, budaya Jawa

## ABSTRACT

### **THE DEVELOPMENT OF TEACHER'S GUIDELINE'S BOOK OF COMBINE MATERIAL OF GEOMETRY IN MATHEMATICS LEARNING FOR GRADE VI ELEMENTARY SCHOOL BASED ON ETHNO-MATHEMATICS USING JAVANESE GAMELAN**

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2021

*This study is motivated by the teacher's need for references to the application of culture to mathematics learning in elementary schools in the form of teacher guidelines. The aim of this study is 1) to develop a product in the form of teacher's guideline's book of combined material of geometry in mathematics learning grade VI elementary school based on ethno-mathematics using Javanese gamelan, 2) to find out the quality of the product in the form of a teacher's guideline's book of combine material of geometry in mathematics learning for grade VI elementary school based on ethno-mathematics using Javanese gamelan.*

*This study is included in the type of research and development (R&D). The subject of this study is the teacher of grade VI of Joannes Bosco Elementary School, Yogyakarta. The object of this study is the teacher's guideline book in mathematics learning for elementary school based on ethno-mathematics. This study using the interview and questioner method to gets the data.*

*The result of this analysis shows that: (1) teacher's guideline's book in mathematics learning for elementary school based on ethno-mathematics is developed by using the ADDIE type research and development model steps, which are, analyze, design, develop, implement and evaluate. (2) the quality of teacher's guideline's book in mathematics learning for elementary school-based ethno-mathematics is "Very Good" based on the result of validation by experts who obtained an average score of 3,54 on a scale of 4, and fulfilled 10 (ten) indicators of criteria for the good guideline's book which are (1) the title of the book represent the contents of the book itself and written with the good and correct Indonesian, (2) the title of the book does not contain harassment against certain communities, (3) in the book cover there is the name of the writer and the illustration that describes the contents of the book, (4) there is a foreword page written by the author of the book, (5) there is a table of contents page, (6) ethno-mathematics on an object that is in accordance with mathematical concepts, (7) the contents of the book provide guidance on methods, media, and assessment learning that is useful for improving the quality of educators, (8) the contents of the book can be accounted for by including reference sources on the list of book references, (9) the writing of the book uses good language and presentation style so that it is easily understood by readers, and (10) at the end contains information about the author of the book in more detail.*

**Keywords:** research and development, teacher's guideline's book, mathematics, ethno-mathematics, Javanese culture