

## ABSTRAK

**Albertus Febza Kusuma. 2023. Pengembangan Media Pembelajaran Matematika Berbasis Musik untuk Mengembangkan Minat dan Hasil Belajar Siswa pada Materi Bangun Ruang Sisi Datar Kelas 8 SMP Stella Duce 2 Yogyakarta Tahun Ajaran 2022/2023. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma, Yogyakarta.**

Penelitian ini bertujuan untuk: (1) mengembangkan media pembelajaran matematika berbasis musik yang berkaitan dengan materi Bangun Ruang Sisi Datar; (2) mengetahui minat belajar siswa dan; (3) mengetahui hasil belajar siswa pada materi Bangun Ruang Sisi Datar kelas 8 *Celebration* SMP Stella Duce 2 Yogyakarta setelah mengikuti pembelajaran matematika berbasis musik (lagu).

Subjek dalam penelitian ini adalah siswa kelas 8 *Celebration* di SMP Stella Duce 2 Yogyakarta yang berjumlah 23 siswa. Jenis penelitian ini adalah penelitian pengembangan atau *Research and Development (R&D)* serta model ADDIE. Teknik Pengumpulan data yang digunakan adalah observasi dan wawancara untuk analisis kebutuhan, angket minat belajar dan angket evaluasi produk serta tes untuk hasil belajar. Teknik analisis data yang digunakan adalah analisis data angket minat belajar, angket evaluasi produk, dan tes hasil belajar.

Berdasarkan hasil analisis data dan pembahasan pada penelitian ini telah menghasilkan: (1) Pengembangan media pembelajaran matematika berbasis musik pada materi Bangun Ruang Sisi Datar dilaksanakan menggunakan tahap ADDIE. Pada tahap *Analyze* terdapat masalah yaitu minat belajar siswa dan hasil belajar rendah. Akan tetapi karena siswa memiliki kelebihan yaitu gemar dengan musik sehingga peneliti tertarik untuk mengembangkan lagu sebagai media pembelajaran. Pada tahap *Design*, dirancang 4 lagu pembelajaran yang berisi tentang kubus, balok, prisma, dan limas. Rancangan tersebut meliputi lirik lagu, nada lagu, aransemen lagu, dan alat instrumen yang digunakan. Pada tahap *Development*, mengembangkan 4 lagu yang telah di *recording*, publikasi di Youtube dan validasi oleh guru. Hasil dari validasi memperoleh nilai rata-rata 3,67 dari 4,00 dan produk tersebut siap digunakan tanpa revisi. Selain itu dibuat angket minat belajar, angket evaluasi produk, dan tes hasil belajar. Pada tahap *Implement*, uji coba produk dilakukan sebanyak 2 pertemuan (5 JP), tes hasil belajar dilakukan selama 2 JP dan pengisian angket minat belajar siswa dilakukan setelah tes hasil belajar. Pada tahap *Evaluate*, angket minat siswa, angket evaluasi produk, dan tes hasil belajar siswa dianalisis. Angket evaluasi produk diisi oleh guru dan memperoleh nilai 84% dan layak sekali untuk digunakan; (2) Minat belajar siswa kelas 8 *Celebration* setelah mengikuti pembelajaran matematika berbasis musik (lagu) memiliki kategori berminat. Hal ini ditunjukkan dengan modus minat belajar siswa memiliki tingkat kategori berminat sebanyak 15 siswa berminat; (3) Media pembelajaran lagu belum mampu mendukung hasil belajar siswa. Hal ini ditunjukkan pada tes ulangan harian yang diikuti oleh 23 siswa dan memperoleh nilai rata – rata sebesar 34,5. Selain itu hanya ada 2 siswa yang lulus berdasarkan KKM (75).

**Kata kunci:** minat belajar siswa, hasil belajar siswa, media pembelajaran musik (lagu), materi bangun ruang sisi datar.

## ABSTRACT

**Albertus Febza Kusuma. 2023. Development of Music-Based Mathematical Learning Media to Develop Student Interests and Learning Outcomes in Building Materials for Class 8, SMP Stella Duce 2 Yogyakarta Academic Year 2022/2023. Thesis. Mathematics Education Study Program, Department of Mathematics Education and Natural Sciences, Faculty of Teacher Training and Education, Sanata Dharma University, Yogyakarta.**

This study aims to: (1) develop a music-based mathematics learning media related to the Flat Sided Space Construct material; (2) knowing students' interest in learning and; (3) find out the results of student learning on class 8 Flat Sided Building material *Celebration* SMP Stella Duce 2 Yogyakarta after participating in music-based mathematics learning (song).

The subjects in this study were grade 8 students *Celebration* at SMP Stella Duce 2 Yogyakarta with a total of 23 students. This type of research is development research or *Research and Development (R&D)* as well as the ADDIE model. Data collection techniques used were observation and interviews for needs analysis, interest in learning questionnaires and product evaluation questionnaires as well as tests for learning outcomes. The data analysis technique used is data analysis of interest in learning questionnaires, product evaluation questionnaires, and learning achievement tests.

Based on the results of data analysis and discussion in this study, it has resulted in: (1) The development of music-based mathematics learning media on the material Flat Sided Space is carried out using the ADDIE stage. At the level of *Analyze* there is a problem, namely student interest in learning and low learning outcomes. However, because students have the advantage of being fond of music, researchers are interested in developing songs as learning media. At stage *Design*, designed 4 learning songs which contain cubes, blocks, prisms, and pyramids. The design includes song lyrics, song tone, song arrangement, and the instruments used. At stage *Development*, developing 4 songs that have been in *recording*, publication on Youtube and validation by the teacher. The results of the validation obtained an average value of 3.67 out of 4.00 and the product is ready for use without revision. In addition, questionnaires of interest in learning, product evaluation questionnaires, and learning achievement tests were made. At stage *Implement*, product trials were carried out in 2 meetings (5 JP), learning achievement tests were carried out for 2 JP and filling out student interest questionnaires was carried out after the learning outcomes test. At the Evaluate stage, student interest questionnaires, product evaluation questionnaires, and student learning achievement tests were analyzed. The product evaluation questionnaire was filled in by the teacher and obtained a score of 84% and was very suitable for use; (2) 8th grade students' interest in learning *Celebration* after participating in music-based mathematics learning (songs) has an interest category. This is indicated by the mode of student interest having an interest category level of 15 students who are interested; (3) Song learning media have not been able to support student learning outcomes. This is shown in the daily test which was attended by 23 students and obtained an average score of 34.5. In addition there were only 2 students who passed based on KKM (75).

**Keywords:** student learning interest, student learning outcomes, music learning media (songs), material for flat sided spaces.