

ABSTRAK

PENGEMBANGAN MEDIA PEMBELAJARAN INTERAKTIF BERBASIS KODULAR PADA MATERI SENAM IRAMA UNTUK SISWA SMK NEGERI DI PURWOKERTO

Alya Puspita ¹, Bayu Suko Wahono ², Septiana Dwi Rakhmawati ³

Latar Belakang: Pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan di SMK Negeri Purwokerto khususnya pada materi senam irama, masih mengalami beberapa kendala seperti kurangnya penjelasan teknik dasar, keterbatasan media pembelajaran, serta penerapan pembelajaran yang masih bersifat konvensional dan berpusat pada guru tanpa variasi metode pembelajaran. Selain itu, guru juga mengalami kesulitan dalam mengembangkan media pembelajaran yang inovatif. Oleh karena itu, penelitian ini bertujuan mengembangkan media pembelajaran interaktif berbasis Kodular yang efektif untuk mendukung proses pembelajaran.

Metodologi: Penelitian ini menggunakan metode *Research and Development* (R&D) dengan tahapan identifikasi masalah, pengumpulan informasi, desain produk, validasi ahli, uji coba, revisi, uji pemakaian, revisi akhir, uji efektivitas, dan diseminasi. Populasi penelitian berjumlah 1.713 siswa kelas X SMK Negeri 1, 2, dan 3 Purwokerto. Sampel terdiri atas 35 siswa (uji skala kecil), 71 siswa (uji skala besar), dan 35 siswa (uji efektivitas) yang dipilih melalui teknik *cluster random sampling*. Instrumen berupa angket validasi, angket respons, dan tes kognitif menggunakan soal yang telah valid. Analisis data meliputi uji validitas, reliabilitas, normalitas, *paired sample t-test*, dan *N-Gain*.

Hasil Penelitian: Media yang dikembangkan dinyatakan sangat layak dengan nilai validasi ahli materi 97%, ahli bahasa 94,29%, dan ahli media 82,5%. Media juga tergolong sangat praktis dengan hasil uji skala kecil 96,56%, skala besar 97,90%, serta penilaian guru 91%. Uji efektivitas menunjukkan perbedaan signifikan antara *pretest* dan *posttest* ($p < 0,001$), dengan nilai *N-Gain* 61,22% (kategori sedang) yang menunjukkan peningkatan hasil belajar siswa.

Kesimpulan: Media pembelajaran berbasis Kodular dinyatakan layak, praktis, dan efektif digunakan serta mampu meningkatkan hasil belajar siswa.

Kata Kunci: Kodular, media pembelajaran, senam irama, pendidikan jasmani, hasil belajar siswa.

ABSTRACT

DEVELOPMENT OF KODULAR-BASED INTERACTIVE LEARNING MEDIA FOR RHYTHMIC GYMNASTICS MATERIALS FOR STUDENTS AT STATE VOCATIONAL HIGH SCHOOL PURWOKERTO

Alya Puspita ¹, Bayu Suko Wahono ², Septiana Dwi Rakhmawati ³

Background: Physical education, sports, and health instruction at Purwokerto State Vocational High School, particularly in the area of rhythmic gymnastics, still faces several challenges, such as a lack of explanation of basic techniques, limited learning materials, and teaching methods that remain conventional and teacher-centered without variation. Additionally, teachers also face difficulties in developing innovative learning materials. Therefore, this study aims to develop effective modular-based interactive learning media to support the learning process.

Methodology: This study employed the Research and Development (R&D) method, comprising the following stages: problem identification, information gathering, product design, expert validation, piloting testing, revision, field testing, final revision, effectiveness testing, and dissemination. The study population consisted of 1,713 10th-grade students at State Vocational High Schools 1, 2, and 3 in Purwokerto. The sample comprised 35 students (small-scale test), 71 students (large-scale test), and 35 students (effectiveness test), selected using cluster random sampling. The instruments consisted of a validation questionnaire, a response questionnaire, and a cognitive test using validated items. Data analysis included validity, reliability, and normality tests, a paired sample t-test, and N-Gain.

Research Results: The developed instructional material was deemed highly suitable, with validation scores of 97% from subject matter experts, 94.29% from language experts, and 82.5% from media experts. The material was also classified as highly practical, with small-scale test results of 96.56%, large-scale test results of 97.90%, and teacher evaluations of 91%. Effectiveness tests showed a significant difference between the pretest and posttest ($p < 0.001$), with an N-Gain value of 61.22% (moderate category), indicating an improvement in student learning outcomes.

Conclusion: Kodular-based learning media is deemed feasible, practical, and effective for use and is capable of improving student learning outcomes.

Keywords: Kodular, learning media, rhythmic gymnastics, physical education, student learning outcomes.