

## ABSTRAK

Widiastuti, Lia (2025). *Pengembangan Media Pembelajaran Interaktif Sistem Gerak Manusia (SIGEMA) pada Mata Pelajaran IPAS Untuk Meningkatkan Pemahaman Konsep Siswa Kelas VI Sekolah Dasar*. Tesis, Program Studi Pendidikan Dasar, Program Pascasarjana, Universitas Pendidikan Ganesha.

Tesis berikut telah disetujui serta diuji oleh Pembimbing I Prof. Dr. I Gede Margunayasa, S.Pd., M.Pd. serta Pembimbing II Prof. Dr. Dewa Bagus Sanjaya, M.Si.

*Kata-kata kunci:* media pembelajaran interaktif, SIGEMA, pemahaman konsep, IPAS.

Penelitian berikut dilaksanakan guna meluaskan rancang bangun media pembelajaran interaktif SIGEMA serta menilai taraf validitas, kepraktisan, serta efektivitas pemakaiannya pada materi sistem gerak manusia guna mengoptimalkan pemahaman konsep murid kelas VI Sekolah Dasar. Pengembangan media dilaksanakan selaku upaya menyediakan sarana pengajaran digital yang interaktif maka bisa menunjang tahapan pengajaran IPAS agar lebih optimal serta selaras dengan karakteristik peserta didik di Sekolah Dasar.

Penelitian pengembangan dilaksanakan memakai model ADDIE, yang terdiri dari tahapan analisa, desain, pengembangan, implementasi, serta evaluasi. Hasil akhirnya ialah aplikasi pengajaran digital interaktif. Subjek penelitian mencakup pakar materi, pakar media, guru kelas enam, serta murid kelas enam. Guna mengukur efektivitas pemakaian media, data dikumpulkan memakai kuesioner validasi ahli, kuesioner kepraktisan yang diisi oleh guru serta siswa, serta ujian pra serta pasca pengajaran. Instrumen penelitian mencukupi standar validitas serta reliabilitas. Data dianalisa memakai pendekatan deskriptif kuantitatif serta uji statistik inferensial seperti uji  $t$  berpasangan.

Temuan penelitian memperlihatkan bahwasannya media SIGEMA memegang taraf validitas kategori amat tinggi, dengan persentase penilaian sejumlah 95,5% dari ahli materi serta 96,43% dari ahli media. Hasil uji kepraktisan yang dilaksanakan oleh tiga guru serta kelompok kecil murid mendapat skor masing-masing 98% serta 98,67% dengan kualifikasi amat baik. Pengujian efektivitas pada 30 murid memperlihatkan kenaikan rerata skor pemahaman konsep dari 67,47 sebelum pengajaran dijadikan 78,00 sesudah pengajaran. Hasil uji statistik memperlihatkan nilai  $t$ -hitung sejumlah 12,443 dengan taraf signifikansi  $p$ -value  $< 0,001$  yang mengindikasikan adanya perbedaan yang signifikan. Berlandaskan hasil tersebut, media pembelajaran interaktif SIGEMA dinyatakan valid, praktis, serta efektif guna mengoptimalkan pemahaman konsep murid kelas VI Sekolah Dasar pada materi sistem gerak manusia.

## ABSTRACT

Widiastuti, Lia (2025). *Development of an Interactive Learning Media on the Human Movement System (SIGEMA) in Science Education (IPAS) to Improve Conceptual Understanding of Sixth Grade Elementary Students*. Thesis, Primary Education Study Program, Postgraduate Program, Universitas Pendidikan Ganesha.

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Keywords: interactive learning media, SIGEMA, conceptual understanding, IPAS.

This study aimed to develop the design of SIGEMA interactive learning media and to examine its validity, practicality, and effectiveness in improving sixth-grade elementary students' conceptual understanding of the human movement system. The development of this media was intended to provide an interactive digital learning tool that supports science learning activities and accommodates the characteristics of elementary school learners, thereby enhancing the overall effectiveness of the learning process.

The research used the ADDIE methodology, which includes stages for analysis, design, development, implementation, and evaluation. The end result was a digital application developed as an interactive learning tool. The attendees comprised subject area specialists, media experts, sixth-grade teachers, and sixth-grade students. Data were gathered using expert validation surveys, practicality questionnaires completed by teachers and students, and pretest and posttest assessments to determine the media's effectiveness. The research instruments were validated and reliable. The acquired data were examined utilizing quantitative descriptive approaches and inferential statistical analysis via a paired sample *t*-test.

The findings revealed that the SIGEMA interactive learning media achieved a very high level of validity, with validation scores of 95.5% from subject matter experts and 96.43% from media experts. The practicality evaluation conducted by three teachers and a small group of students resulted in scores of 98% and 98.67%, respectively, both categorized as excellent. The effectiveness test involving 30 students indicated an improvement in the average conceptual understanding score, increasing from 67.47 in the pretest to 78.00 in the posttest. Furthermore, the paired sample *t*-test produced a *t*-value of 12.443 with a significance level of *p*-value < 0.001, indicating a statistically significant difference. Based on these results, the SIGEMA interactive learning media can be considered valid, practical, and effective in enhancing sixth-grade elementary students' conceptual understanding of the human movement system.