

**PENGEMBANGAN MEDIA PEMBELAJARAN FISIKA BERBASIS
COLLABORATIVE LEARNING BERBANTUAN GEOGEBRA UNTUK
MENINGKATKAN KEMAMPUAN BERPIKIR KREATIF SISWA KELAS
XI MIPA SMAN 1 BANJAR TAHUN AJARAN 2022/2023**

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ABSTRAK

Penelitian ini bertujuan untuk (1) Mendeskripsikan tanggapan ahli isi, ahli media, dan ahli desain terhadap produk pengembangan media pembelajaran berbasis *Collaborative Learning* berbantuan GeoGebra yang akan dikembangkan; (2) mendeskripsikan tanggapan siswa dalam uji coba perorangan dan uji coba kelompok kecil terhadap pengembangan media pembelajaran fisika berbasis *Collaborative Learning* berbantuan GeoGebra; (3) Mendeskripsikan tanggapan guru terhadap media pembelajaran fisika berbasis *Collaborative Learning* berbantuan GeoGebra yang akan dikembangkan; dan (4) Mendeskripsikan efektivitas media pembelajaran fisika berbasis *Collaborative Learning* berbantuan GeoGebra dalam uji lapangan. Model desain pengembangan yang digunakan dalam penelitian ini adalah model ADDIE dengan tahapan yakni tahap analisis, tahap perancangan, tahap pengembangan, tahap implementasi, dan tahap evaluasi. Desain uji lapangan menggunakan *one group pre-test post-test design* tanpa kelompok kontrol dengan melibatkan 30 peserta didik. Metode pengumpulan data yang digunakan adalah metode observasi, metode wawancara, metode angket, dan metode tes. Data dianalisis dengan analisis deskriptif dan uji-t sampel berpasangan. Hasil yang dicapai antara lain: (1) Media pembelajaran yang layak dan valid (2) Efektivitas produk ditunjukkan dengan hasil uji-t sampel berpasangan pada *pre-test* dan *post-test* saat uji coba lapangan mendapatkan nilai $t_{hitung} > t_{tabel}$ pada taraf signifikansi 0,05 dengan derajat kebebasan sebesar 29.

Kata kunci: *Collaborative Learning*, kemampuan berpikir kreatif, media pembelajaran, pengembangan

**DEVELOPMENT OF PHYSICS LEARNING MEDIA BASED ON
COLLABORATIVE LEARNING WITH GEOGEBRA TO IMPROVE THE
CREATIVE THINKING SKILL OF CLASS XI MIPA STUDENTS OF
SMAN 1 BANJAR ACADEMIC YEAR 2022/2023**

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ABSTRACT

This research aims to (1) Describe the responses of content experts, media experts and design experts to the Physics Learning Media Based On Collaborative Learning With GeoGebra development product that will be developed; (2) describe students' responses in individual trials and small group trials regarding the development of Physics Learning Media Based On Collaborative Learning With GeoGebra; (3) Describe the teacher's response to the Physics Learning Media Based On Collaborative Learning With GeoGebra that will be developed; and (4) Describe the effectiveness of Physics Learning Media Based On Collaborative Learning With GeoGebra in field tests. The development design model used in this research is the ADDIE model with phase, namely the analysis, design, development, implementation, and evaluation. The field test design uses a one group pre-test post-test design without a control group involving 30 students. The data collection methods used are the observation method, interview method, questionnaire method and test method. Data were analyzed using descriptive analysis and paired sample t-test. The results achieved include: (1) Appropriate and valid learning media (2) Product effectiveness is demonstrated by the results of the paired sample t-test in the pre-test and post-test during the field trial, getting a $t_{count} > t_{table}$ value at the level significance 0.05 with degrees of freedom of 29.

Key words: creative thinking skills, collaborative Learning, development, learning media