

## ABSTRAK

**Sitanggang, Arta Oktaviyanti, NIM 4203321023 (2020). Pengembangan Media Pembelajaran Berbasis Kontekstual Pada Materi Alat-Alat Optik di SMA**

Penelitian Pengembangan ini bertujuan untuk menghasilkan media pembelajaran berbasis kontekstual pada materi alat-alat optik yang layak, praktis, dan efektif digunakan dalam pembelajaran fisika. Jenis penelitian ini merupakan Research and Development (R&D) menggunakan model penelitian ADDIE. Subjek penelitian ini adalah ahli materi, ahli media, guru fisika dan peserta didik di kelas XII berjumlah 25 siswa SMA Eria Medan. Instrumen yang digunakan dalam penelitian ini terdiri dari angket kelayakan (ahli materi, ahli media, dan guru fisika), instrumen soal pretest dan posttest serta angket respon guru dan peserta didik terhadap media pembelajaran berbasis kontekstual pada materi alat alat optik. Hasil penelitian menunjukkan bahwa media pembelajaran berbasis kontekstual pada materi alat alat optik yang dikembangkan masuk dalam kategori sangat layak digunakan dalam proses pembelajaran fisika berdasarkan hasil uji validasi ahli 1 (83,2%), validasi ahli 2 (89%), dan guru fisika (90,4%). media pembelajaran berbasis kontekstual pada materi alat alat optik masuk dalam kategori sangat praktis berdasarkan hasil respon siswa kelompok kecil (88,1%) dan respon siswa kelompok besar (90,4%). Media pembelajaran masuk dalam kategori efektif melalui peningkatan yang terjadi pada n-gain sebesar 0,67 pada kategori sedang serta dengan rata-rata nilai pada possttest mencapai KKM sebesar 82. Dengan demikian dapat disimpulkan bahwa media pembelajaran berbasis kontekstual pada materi alat alat optik layak, praktis dan efektif digunakan dalam pembelajaran.

**Keywords:** Research and Development, Media Pembelajaran, Kontekstual, Alat Alat Optik

## ABSTRACT

**Sitanggang, Arta Oktaviyanti, NIM 4203321023 (2020). *The Development of Learning Media Based on Contextual for The Topic of Optical Instruments in Senior High School***

This developmental research aimed to produce contextual-based learning media for the topic of optical instruments that are suitable, practical, and effective for use in physics education. The study employs a Research and Development (R&D) approach, utilizing the ADDIE research model. The research subjects include content Specialists, media specialists, physics teachers, and 25 twelfth-grade students from school SMA Eria Medan. The instruments used in this study comprise suitability questionnaires (for content experts, media specialists, and physics teachers), pre-test and post-test question instruments, as well as response questionnaires for teachers and students regarding the contextual-based learning media on optical instruments. The results indicate that the developed contextual-based learning media for optical instruments is categorized as highly suitable for use in physics learning processes, based on validation test results from expert 1 (83.2%), expert 2 (89%), and physics teachers (90.4%). The contextual-based learning media for optical instruments is classified as highly practical, according to responses from small group students (88.1%) and large group students (90.4%). The learning media is deemed effective, as evidenced by an increase in n-gain of 0.67, categorized as moderate, with an average post-test score reaching the Minimum Competency Criteria of 82. Thus, it can be concluded that the contextual-based learning media for optical instruments is suitable, practical, and effective for use in education.

**Keywords:** Research and Development, learning Media, Contextual, Optical Instruments