

ABSTRAK

PENGEMBANGAN ALAT PERAGA KINCIR AIR TEMA 2 SUBTEMA 3 MATERI PERUBAHAN ENERGI PADA SISWA KELAS IV SD KANISIUS KENTENG

Amalia Titisari

Universitas Sanata Dharma

2022

Penelitian ini dilatarbelakangi oleh adanya kebutuhan alat peraga yang digunakan dalam kegiatan pembelajaran IPA di sekolah dasar. Tujuan penelitian ini mengembangkan alat peraga kincir air tema 2 subtema 3 materi perubahan energi pada siswa kelas IV SD Kanisius Kenteng dan mengetahui kualitas alat peraga kincir air tema 2 subtema 3 materi perubahan energi pada siswa kelas IV SD Kanisius Kenteng.

Jenis penelitian ini adalah penelitian dan pengembangan (R&D) menggunakan tipe ADDIE. Subjek penelitian ini adalah sembilan siswa kelas IV SD Kanisius Kenteng tahun ajaran 2021/2022. Objek dalam penelitian ini adalah alat peraga kincir. Teknik pengumpulan data dalam penelitian ini yaitu, wawancara, kuesioner, observasi, dan tes.

Hasil dari penelitian ini menunjukkan bahwa: (1) prosedur pengembangan alat peraga kincir air menggunakan langkah ADDIE yaitu, *Analyze, Design, Develop, Implement, dan Evaluate*; (2) kualitas alat peraga kincir air memperoleh skor rerata 3,79 masuk dalam kategori “Sangat baik”. Alat peraga kincir air memenuhi delapan karakteristik alat peraga (Carol Nancarrow, 2008) yaitu *Growth-Oriented, Transferable, Time-Efficient, Results-Oriented, Essential, Feasible, Engaging, dan Functional*. Dengan demikian, disimpulkan bahwa alat peraga kincir air memiliki kualitas sangat baik, layak digunakan untuk siswa kelas IV di SD Kanisius Kenteng.

Kata Kunci : Alat peraga kincir air, materi perubahan energi, penelitian dan pengembangan, model ADDIE

ABSTRACT

THE DEVELOPMENT OF THE WATERWHEEL PROPERTIES THEME 2 SUB-THEME 3 ENERGY CHANGE MATERIALS IN CLASS IV STUDENTS OF SD KANISIUS KENTENG

Amalia Titisari

University of Sanata Dharma

2022

This research is motivated by the need for teaching aids used in science learning activities in elementary schools. This study aimed to develop a waterwheel prop with theme 2 sub-theme 3 energy change material for fourth-grade students at SD Kanisius Kenteng and to determine the quality of waterwheel props in theme 2 sub-theme 3 material energy change in fourth-grade students at SD Kanisius Kenteng.

This type of research is research and development (R&D) using the ADDIE method. The subjects of this study were nine fourth-grade students of SD Kanisius Kenteng for the academic year 2021/2022. The object of this research is a waterwheel prop that uses science process skills. The data collection techniques in this study were interviews, questionnaires, observations, and tests.

The results of this study indicate that: (1) the procedure for developing the waterwheel props uses the ADDIE steps, namely, Analyze, Design, Develop, Implement, and Evaluate; (2) the quality of the waterwheel props obtained an average score of 3.79 which was included in the "Very good". The waterwheel props fulfill eight characteristics of teaching aids (Carol Nancarrow, 2008) namely Growth-Oriented, Transferable, Time-Efficient, Results-Oriented, Essential, Feasible, Engaging, and Functional. Thus, it is concluded that the waterwheel props have very good quality, suitable for use for fourth grade students at Kanisius Kenteng Elementary School.

Keywords: Waterwheel props, energy changes, research and development, ADDIE model