

ABSTRAK

NOVITA INDAH WIJAYANTI. 2023. PENGEMBANGAN MEDIA PEMBELAJARAN MATEMATIKA BERBASIS *SCIENCE TECHNOLOGY ENGINEERING ARTS MATHEMATICS (STEAM)* DENGAN BANTUAN *SMART APPS CREATOR 3*. Jurusan Pendidikan Matematika. Fakultas Keguruan dan Ilmu Pendidikan. Universitas Siliwangi.

Penelitian ini bertujuan untuk mengembangkan produk media pembelajaran matematika berbasis *STEAM* dengan bantuan *software Smart Apps Creator 3* dan mengetahui kelayakan media pembelajarannya. Metode penelitian yang digunakan yaitu metode *Research & Development (R & D)* dengan model *ADDIE (Analysis, Design, Development, Implementation & Evaluation)*. Teknik pengumpulan data dilakukan melalui observasi dan kuesioner, Instrumen penelitian menggunakan lembar studi pendahuluan, angket penilaian kualitas media pembelajaran dengan lembar uji kelayakan media dan angket respon peserta didik. Data penelitian ini bersumber dari ahli media, ahli materi, dan peserta didik kelas VIII SMPN 5 Tasikmalaya. Teknik analisis data yang dilakukan dengan reduksi data, penyajian data dan penarikan kesimpulan. Hasil penelitian ini yaitu menghasilkan produk aplikasi pembelajaran yang bernama *MatSTEAM2D* dengan berbasis *STEAM* yang penggunaannya menggunakan android. Produk dinilai dari kelayakan penggunaan media yang diukur berdasarkan kualitas teknis, kualitas isi dan tujuan, dan kualitas respon peserta didik. Pada penilaian teknis, ahli media menyatakan media pembelajaran masuk pada kategori sangat layak, sedangkan pada penilaian kualitas isi dan tujuan ahli materi menyatakan media pembelajaran masuk pada kategori layak, dan berdasarkan angket penilaian kualitas instruksional pada uji coba kepada peserta didik, media pembelajaran yang masuk pada kategori sangat layak sehingga media pembelajaran dapat digunakan untuk membantu proses pembelajaran.

Kata kunci: Pengembangan media pembelajaran, media pembelajaran matematika berbasis *STEAM*, *software Smart Apps Creator 3*.

ABSTRACT

NOVITA INDAH WIJAYANTI. 2023. DEVELOPMENT OF MATHEMATICS LEARNING MEDIA BASED ON SCIENCE TECHNOLOGY ENGINEERING ARTS MATHEMATICS (STEAM) WITH THE HELP OF SMART APPS CREATOR 3. Mathematics Education Department. Faculty of Teacher Training and Education. Siliwangi University.

This study aims to develop STEAM-based mathematics learning media with help of the Smart Apps Creator 3 software and determine the feasibility of the learning media. The method used in developing this media is using the Research & Development (R & D) method with the ADDIE model (Analysis, Design, Development, Implementation & Evaluation). The data collection techniques use was observation and questionnaires. The research instrument used preliminary study sheets, questionnaires for assessing the quality of learning media with media adequacy test sheets and student response questionnaires. The data for this study came from media experts, material experts, and students class VII at Junior High School 5 Tasikmalaya. Data analysis techniques were carried out by data reduction, data presentation and drawing conclusions. The results of this study are to produce STEAM-based learning application products that use Android. Products are assessed from the feasibility of using media which is measured based on technical quality, quality of content and objectives, and quality of student responses. In the technical assessment, media experts stated that learning media was in the very feasible category, while in the assessment of the quality of content and objectives, material experts stated that learning media was in the feasible category, and based on the instructional quality assessment questionnaire in trials on students, learning media was declared included in the category is very feasible so that learning media can be used to assist the learning process.

Keywords: *Development of learning media, STEAM-based mathematics learning media, Smart Apps Creator 3 software.*