

The Feasibility of Android-Based Virtual Laboratory Media on Volcano Eruption Learning in Elementary Schools

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ABSTRACT

Indonesia is one of the countries that have the most active volcanoes in the world, some of which are the strongest volcanic eruptions ever in the world. This is one of the considerations of the need for disaster education volcanic eruption in the school curriculum. In its implementation, it certainly requires an effective and efficient medium to be used in learning the new normal era today. Therefore, the purpose of this study is to find out the feasibility of android-based virtual laboratory media on volcanic eruption material for elementary school students. Research method is development research using the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation). Development research procedures that will be carried out in the first year starting from the needs analysis stage, the design stage, to the media development stage. Development products are validated by material experts, media experts, and learning experts in elementary school using different instrument validation sheets on each expert. Before the product validation process, the instrument validation process is carried out first. The results showed android-based virtual laboratory media is worth using in volcano eruption learning in elementary school 4th graders. Validation results by media experts showed that the developed product achieved an average score of 4.86 so that it falls into the category of "very good", while the validation results by material experts obtained an average score of 4.43 so that it falls into the category of "very good", and the validation results of learning experts in elementary school obtained an average score of 4.65 included in the category of "very good". Teacher responses related to practicality of product use reached an average score of 4.88 with an "very good" category, while student responses related to practicality of product use reached an average score of 3.02 so that it falls into the category of "good". Thus android-based virtual laboratory media developed in the category are feasible and can be used in the learning of volcanic eruption materials for elementary school students.

Kata Kunci: Media Eligibility, Virtual Labs, Android-Based Media, Volcano Eruptions, Elementary Schools