

ABSTRACT

Three-dimensional space learning activities in SDN Panancangan 2 are carried out by the teacher explaining the material in front of the class assisted by props, using used cardboard media. The use of learning media that is less attractive causes a lack of interest in learning, so that students find it difficult to digest and understand the material presented, especially difficulties in learning how to count three-dimensional space volume. Learning media is needed to help students to digest and understand three-dimensional space, namely an Android-based three-dimensional space learning application with user interface design. The method used in designing the user interface is User Centered Design which focuses on the needs of the user. The application that has been built is carried out usability testing using the Quality in Use Integrated Measurement method. The first test got an average percentage of 90%, but the factors that are still low can be improved. The second test got an average percentage of 91%. The achievement of learning outcomes for each student gets an increase after using the application, which is completed above the Minimum Completeness Criteria to 26.6% from 30 students, which previously was only 6.6%.

Keywords: three-dimensional space, user centered design, user interface, quality in use integrated measurement, mathematics