

ABSTRACT

Learning media takes role as an auxiliary tool in learning process. Learning materials can be packed more engaging and interactive, so it more attracts students' attention and can motivate students to learn. This application is intended to be able to facilitate and help the streamlined of learning process where learning activities using learning media can be done independently or guided by a teacher. Students can also do more learning activities (such as observing and demonstrating) not only listen to the description of the teacher. This application is capable in displaying cube and cuboid objects in 3D and 2D animation. The functionality of the application is that it can rotate on 3D cube and cuboid objects, practice counting cube unit, practice drawing the cube, display nets cube animation and cube nets forming the cuboids, and water volume animation. This application is made by using ADDIE method. Tools used in making this application are using Blender to create 3D objects, Unity as tools to build applications and manufacturing of 2D animation. Final of this project is to build and design an Application of Mathematics Learning Media Cubes and Cuboids Volume in Elementary School Class 5 using platform desktop based. Application test is conducted by using functionality test and user satisfaction test. Testing results of 21 correspondents of students at Ar-Rafi Elementary School, 85% stated that the application can enhance the spirit of learning, and 90% can understand the lessons of cube and cuboid volume. Application is able to explain the material and provides exercises that can help students in understanding the learning material.

Keywords: Learning Media, Unity, 3D, Animation, 2D, Math.