## ABSTRACT

Learning media has an important role in teaching and learning in the classroom, especially for elementary school students. Learning media can visualized abstract material subject. In research conducted at Gempol Sari Bandung Elementary School the media used in teaching and learning process is only a book. Therefore, learning media innovation needs to be done. Before teaching geometry material, Teacher must create 3D objects from cardboard or folding paper. So the Teacher needs more work before teaching the Geometry material . In addition, according to the guardian of V A SDN Gempol Sari class after teaching the material to build media space used carton and paper is only used for one teaching so that if will teach again the teacher must make the media many times.

This research is interesting because the results of this study are expected to be able to provide innovations in geometry learning media so that they can add or supplement other media used by the teacher in previous teaching.

The steps taken to complete this research that starts from the collection needs, users and developers identify all needs. Next, fast design, at this stage will be done in the form of mockup application design to provide an overview to the user of the application interface to be built. Next build the prototype, the implementation of the fast design stage that has been made. Then the customer evaluation of the prototype, tested the prototype that has been built to the customer. Further improvement of the prototype, will be done prototype improvement based on the evaluation of the user. Next stage of engineering products, ready-made programs and all user needs are met. Last done testing to users using black box testing, questioner, and test the material.

The output of this research is the application of android-based learning media in the form of augmented reality.

Keywords: learning media, augmented reality