

ABSTACT

Khalishah Qatrunnada, ID 4163312013 (2016). Development of Learning Media Assisted by GeoGebra to Improve Student's Spatial Ability on Two-dimensional Shaped Topic.

The purpose of this study is to describe a valid, practical, and effective GeoGebra-assisted learning media to improve students' spatial mathematical abilities on flat-shaped materials and describe the process of students' answers on spatial abilities. This type of research is research and development using the Hannafin and Peck model (analysis, design, development, and implementation stages). The research was conducted at one of the junior high schools in Labuhan Deli, namely SMP Negeri 1 Labuhan Deli which is located at Jalan Veteran Pasar IV Helvetia, Labuhan Deli, Deli Serdang in the odd semester of the 2021/2022 academic year. The sample of this research is the students of class VIII-1 SMP Negeri 1 Labuhan Deli, totaling 16 students. The sampling technique using purposive sampling. The result of this research is a valid, practical, and effective learning media assisted by GeoGebra software. The learning media was declared valid based on the assessment of three media and materials experts with a percentage of validity of 87.61% and 85.06%, respectively, in the very feasible category. The media is declared practical based on the student response questionnaire with a percentage of 89.45% which has a very practical category. The effectiveness of learning media is based on the n-gain value of 0.453 with the interpretation that there is an increase in the medium category. Based on these results, the developed media is feasible to use to improve students' mathematical spatial abilities. In this study, it was found that the answer process of students who received learning using media assisted by the GeoGebra software was better and received a positive response from students.

Key words: *Spatial Ability, Answer Process, GeoGebra Software*

