

Improving Ability to Develop Interactive Teaching Materials for Junior High School Mathematics Teachers Using Geogebra

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ABSTRACT

Interactive teaching materials are needed in learning mathematics, both for online and offline learning. Mathematical objects that are very rich with special symbols, tables, and images require special mathematical software support, one of which is Geogebra. Therefore, it is necessary to increase the mastery of Geogebra for teachers in secondary education, especially junior high schools (SMP) through training. Through collaboration with the Mathematics Education Subject Teacher Conference (MGMP) of Gunungkidul Regency Junior High School, the Community Service Team (PPM) Department of Mathematics Education, Faculty of Mathematics and Natural Sciences, Yogyakarta State University, carried out training on material development interactive teaching with Geogebra targeting junior high school mathematics teachers in Gunungkidul district. This training aims to increase the insight and ability of teachers in developing interactive teaching materials so that students are actively learning which in turn can improve mathematics learning outcomes

The training time was carried out for 2 days in the form of theoretical explanations and practicing making teaching materials with the help of Geogebra. The first day will be held on March 31, 2020 online, while the second day will be held on April 1, 2021, and will be conducted offline at the UNY Gunungkidul campus, Yogyakarta.

The evaluation results show that all participants can create interactive teaching materials with the help of Geogebra as exemplified in the form of proving the Pythagorean theorem, proving the area of flat shapes, and teaching materials involving drug and drop. From the results of the assessment by participants during the activity, it shows that the material presented by the Learning Team is very interesting and useful for learning mathematics in class. They look forward to similar training for professional development which is certainly very helpful in achieving the goals of improving student learning outcomes.

Kata Kunci: *training, interactive, Geogebra*