

Training on Utilization Virtual Laboratory Based on PhET Interactive Simulations as an Effort to Improve Science Teacher Ability in Conducting Lab Work Activity in Study from Home Program

by Allesius Maryanto, Widodo Setiyo Wibowo, Sabar Nurohman, Laifa Rahmawati

ABSTRACT

The PPM aims to: 1) enrich the knowledge of science teachers regarding PhET Interactive Simulations as a tool to conduct science lab work, 2) train the skills of science teacher in using PhET Interactive Simulations to conduct science lab work virtually. The subjects were the science teachers of MTs/ junior high school in Sleman Regency. This activity was held on 4, 11, 18 June 2021 virtually through Google Meet and was attended by 27 teachers. The stages of this activity include preparation, implementation and evaluation. At the preparation stage, coordination between members, division of tasks, determination of activities and materials sequence were carried out. In addition, coordination was also carried out with partner coordinators to determine the time and place of activities. At the implementation stage, knowledge enrichment, demonstration how to use PhET Interactive Simulations, workshop on developing learning materials to implement PhET in science learning, and finalization were carried out. Finally, the program was closed by evaluating both process and results as well. The results shows that the trainees: 1) get the knowledge enrichment regarding PhET Interactive Simulations as a tool to conduct science lab work, 2) are able to use PhET Interactive Simulations in conducting science lab work virtually. The results hopefully help science teacher in improving science learning quality in study from home program.

Kata Kunci: Training, Virtual lab, PhET Interactive Simulations, Science Learning