

Optimization of Science Teacher Competencies in Inquiry Based Learning in the Online Learning Era through the Workshop on Preparation of Science e-Worksheets

by Purwanti Widhy Hastuti, Putri Anjarsari, Wita Setianingsih

ABSTRACT

The COVID-19 pandemic that has occurred has changed all the existing arrangements in the world, including the science learning process. To anticipate the spread of the virus, there are social distancing policies that have an impact on the online learning process or learning from home. Therefore, science teachers are required to package learning so that it is in accordance with the nature of science learning by not ruling out research activities. This PPM is the result of research by the service team on the application of research products to Inquiry-Based Learning by applying e_worksheet to science learning. This training activity aims to improve the quality of student assessment so that they can apply the PISA model of science assessment to measure scientific literacy skills. The activities that will be carried out are to disseminate research results from the service team on the development of tools, especially the electronic version of the Inquiry-based worksheet, improve teacher skills in developing e-worksheets, especially those that integrate inquiry into learning, improve teacher skills in creating student center learning by activating students, improve teacher creativity in designing e-Worksheets that integrate Inquiry-Based Learning. PPM activities are carried out by means of tutorials (face to face virtual), workshops, structured assignments, and consultations with the following details. Tutorials and workshops, namely the delivery of Inquiry-Based Learning materials and their implementation in learning, (b) development of Inquiry-based e-Worksheet teaching materials, (c) Utilization of Virtual Laboratory in learning. Structured Tasks, namely the preparation of e-Worksheets that integrate Inquiry-Based Learning for science subjects based on the 2013 curriculum. Task consultation, namely consultations carried out via email/WA/HP, especially for trainees who have difficulty completing structured assignments. The results of this activity indicate that the science teachers of SMP in Bantul Regency have the competence in conducting Inquiry learning with the prepared E-Worksheet media. The teacher has been able to design an inquiry-based learning e-worksheet in science learning for material with appropriate characteristics.

Kata Kunci: Inquiry-Based Learning, E-Worksheets, Science Teacher Competencies