Science Learning Innovation Workshop Based on Nature of Science (NoS) in Online Learning Using Technology Embedded Scientific Inquiry for Junior High School Science Teachers to Optimize Pedagogic Competencies and Science Teachers Professional in the Revolutionary Era 4.0 in the 21st Century.

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ABSTRACT

This training activity aims to improve the pedagogical competence and professional competence of science teachers of SMP Muhammdiyah in Sleman Regency in compiling science learning innovations in the form of TESI-based learning planning products (Technology Embedded Scientific Inquiry) using the NoS (Nature of Science) component.

This activity was attended by 20 science teachers of SMP Muhammadiyah Sleman Regency. Education and training activities were carried out online on 13, 14 and 15 October 2020. The material presented on the first day included online learning, Technology Embedded Scientific Inquiry (TESI) and Nature of Science (NOS). Activities on the second day focused on designing TESI-based lesson plans. with a Nature of Science component. The third day of the workshop activity steps consisted of mentoring the preparation of an asincronus RPP. The training activity method consists of lectures, questions and answers and discussions. Activities carried out through the stages of preparation, implementation and evaluation. The preparation stage is carried out by coordinating with the IPA MGMP of SMP Muhammadiyah Sleman in determining the time and place of the training. The evaluation phase is carried out during the training process and an assessment of the learning planning product.

Based on the indicators of success, this regional development PPM activity can be carried out quite successfully. It can be seen from each science teacher in each group that they actively participate in compiling a TESI-based lesson plan with a Nature of Science (NOS) component. The science teacher responded very well to the activity and gave suggestions for further improvements to the training.

Kata Kunci: TESI, Nature of Science (NOS), Kompetensi pedagogik dan profesional.