

STEM-BASED LEARNING DEVELOPMENT TRAINING (SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS) FOR SCIENCE TEACHERS AND VOCATIONAL CHEMISTRY TEACHERS IN DIY

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ABSTRACT

This Community Service activity aims to: (1) equip science and chemistry teachers in vocational high schools about the concept of STEM-based learning, STEM-based learning design, and the concept of measuring analytical thinking skills of vocational school students; (2) equip the science and chemistry teachers of SMK in developing STEM-based learning designs and instruments to measure the analytical thinking skills of SMK students; and to (3) motivate SMK science and chemistry teachers to develop STEM-based learning and analytical thinking skills instruments for SMK students. This PPM activity is training in nature and is carried out using lectures, discussions, exercises, mentoring, assignments, tests, and questionnaires. Through these activities, participants received material about the basic concepts of STEM, STEM-based learning design, evaluation of STEM-based learning, making STEM-based students' analytical thinking instruments, and examples of STEM applications to improve students' analytical thinking skills. The target audience for this activity is 35 teachers of chemistry, science and applied vocational schools from public and private schools. Evaluation of PPM activities is carried out in 2 stages, namely process evaluation through observations during PPM activities and evaluation of results through test results and product assessment assignments to design STEM-based learning.

Kata Kunci: *training, STEM, vocational school, chemistry*