

## **DEVELOPING HANDOUTS FOR MACHINE WORK CLASS THROUGH LATHE WORKS IN THE GRADE XI OF SMK PIRI SLEMAN YOGYAKARTA**

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**ABSTRACT**

This research aims at developing a new product in the form of handouts, and testing the feasibility and learning handout effectiveness for machine work class based on the School-based Curriculum (SBC) to improve students' learning achievement at the SMK PIRI (PIRI Vocational School), Sleman, Yogyakarta.

The research and development method was used in this research. The new product development in the form of handouts for machine work subject was performed through several stages, namely (1) preliminary study, (2) planning, (3) initial product development, (4) design revision, (5) pre-field trial, (6) revision I; (7) major field trial; (8) revision II; (9) operational field trial; (10) final product revision, and (11) product improvement. This research was conducted among the Grade XI students of Engineering Department at SMK PIRI Sleman, Yogyakarta. Data were collected by using questionnaires. Qualitative and quantitative analysis was used to identify the feasibility of handouts in machine work class.

This research produced instructional media in the form of handouts for machine work class. Based on the syllabus, competence standards and basic competence, the materials were developed to produce 3 (three) handouts. The main materials of each handout, namely: (1) handout 1 explained the meaning of lathes, and the types and parts of lathes, (2) handout 2 explained the meaning of cutting tools and lathe speeds, (3) handout 3 explained change gears and lathe works. The feasibility test on the handouts for the machine work class, according to the evaluations of material expert, media expert, and field test showed the percentages of 90.38%, 80.55%, and 79.9%, respectively. Based on these data it is concluded that the handouts developed have been considered as very good to support the machine work learning class.

**Keywords:** handouts, work machine class learning.