

# **PENGEMBANGAN KURIKULUM PENDIDIKAN DAN PELATIHAN VOKASI BIDANG MESIN BERBASIS INDUSTRI**

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## **ABSTRACT**

This research aims to develop an industry-based vocational education and training curriculum to obtain a vocational education and training curriculum model that, by industrial developments, especially in the mechanical sector, increases the competence of vocational teachers as the front guard in education. The broader hope is to play an active role in helping to resolve all problems that occur in every implementation of education and training, such as the education system is still conventional and not by the industrial cycle, the material is too theoretical and essential, the technological transformation has not been maximized, the acculturation of educational and industrial culture has not been optimal, not yet maximum integration of education with industry, mastery of complex skills is still lagging behind industry, soft skills have not been maximized according to industry habits and needs, assistance from educational and training institutions has not been maximized, education and training have not answered the needs of participants, and Instructors and technicians are not yet fully standardized in industry competency as a form of human resource quality development. This research is appropriate and related to the scope of UNY's research strategic plan, namely the Development of Professionalism of Educators and Education Personnel, by producing a formulation and model for the preparation and professional development of educators (teachers) and education personnel as a national reference. This research uses Research and Development (RnD) type research with the reason that using RnD is considered appropriate for developing a product, one of which is an industry-based vocational education and training curriculum model. The RnD model chosen is the research and development model from Borg and Gall with the steps carried out including 1) Research and information collecting, 2) Planning, 3) Developing a preliminary form of product, 4) Preliminary field testing, 5) Main product revision, 6) Main field testing, 7) Operational product revision, 8) Operational field testing, 9) Final product revision, 10) Dissemination and implementation. The mandatory output of this research is publication in a Scopus-indexed international journal, and the additional production is an Industry-based Vocational Education and Training Curriculum Model. The TKT of this research is 3, namely, producing a model or prototype of a system/subsystem in a relevant environment.

*Kata Kunci: Model, Curriculum, Education and Training, Vocational, Industry*