

DEVELOPMENT OF A PROJECT LEARNING MODEL TO GROW THE TECHNOPRENEUR SOUL OF MECHANICAL ENGINEERING VOCATIONAL EDUCATION STUDENTS

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ABSTRACT

This research aims to: (1) produce a Project Learning Model to foster the technopreneur spirit of students in Vocational Education; (2) testing the feasibility of the Project Learning Model to foster the technopreneur spirit of students in Vocational Education; (3) testing the effectiveness of the Project Learning Model to foster the technopreneur spirit of students in Vocational Education.

This research is a type of research and development. Research locations in the Department of Mechanical Engineering Education, FT UNY, industry in Yogyakarta, and several other universities. The research time is from June-September 2023. Data collection techniques use observation sheets, interviews and documentation. Content validation analysis was carried out using expert judgment. The effectiveness test was carried out using an equivalent time series design. The data that has been obtained is analyzed descriptively qualitative-quantitative.

The results obtained: (1) the stages of the learning process in the Project Learning Model that have been developed consist of forming a work team, determining the project (job sheet), scheduling and design, presentation, project work process, Quality Control (QC), cost calculation and determination price, reflection; (2) the feasibility of the Project Learning model that has been developed is in the Very Feasible category for implementation. This is based on the results of expert validation which obtained a score of 3.81; the educator's response obtained a score of 3.82; and student responses obtained a score of 3.87; (3) The Project Learning model that has been developed has proven to be effective in increasing the practical competency of machining and employability skills related to the student's technopreneur spirit. This is based on data on an increase in employability skills of 23.57% and an increase in machining practice competency of 17%. This is also confirmed by the results of the hypothesis test, namely f count of 64.18 where $F(0.05, 2, 18)$ table = 3.555, which means f count > F table.

Kata Kunci: Project Learning Model, Technopreneur, vocational education