

Exploration of Learning Models and Vocational Teachers Perspectives of Mechanical Engineering in the Covid-19 Era

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ABSTRACT

The New Normal era was marked by various activities carried out via the internet. The effort of the Minister of Education and Culture to anticipate this is to issue Circular Number 36962/MPK.A/HK/2020. One of the points in the letter is that students can study at home, via video conferencing, digital documents, and other online means. This study aims to (1) know the mechanical engineering learning models that have been applied in the Covid-19 era, (2) knowing teachers' perceptions regarding inhibiting factors and positive impacts towards the new normal era of mechanical engineering vocational education learning, and (3) knowing effective learning models in vocational education, especially the mechanical engineering skills program facing the new normal era.

This study uses a systematic review approach with the PSALSAR framework (Protocol, Search, Appraisal, Synthesis, Analysis framework, and Report) which is modified from SLR (Systematic Literature Review) and SALSA (Search, Appraisal, Synthesis, and Analysis). The results expected from this study are: (1) the machine technique learning model used by vocational school teachers to consider four conditions, namely (a) the implementation of learning is limited to online theory using cooperative learning and problem-based learning models; (b) learning is carried out using online theory and practice using a project-based learning model; (c) learning with online theory and offline practice using a project-based learning model; and (d) offline practical learning recommends inquiry learning and project-based learning models, (2) constraints of limited internet access and network affordability. (3) Online or offline learning in the Covid-19 pandemic is currently still an emergency in nature, as an effort to maximize the learning process when the face-to-face mode is not yet possible, even so, the implementation of this online or offline mode opens the understanding that the learning process returns to the idealism of learning to take the opportunity to study anywhere, anytime, with any media.

Kata Kunci: Learning Model, Vocational, Mechanical Engineering, New Normal Era