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## Vocational Middle-school Internship with Industry During the Covid-19 Pandemic

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### ABSTRACT

*The Covid -19 pandemic has influenced all levels of education, even at the vocational level, especially in the industrial world internship program. Industry parties still need to be ready to accept participant apprenticeships with base guard happening the spread of the covid virus. This paper aims to give solutions in the implementation apprenticeship industry at vocational schools during the Covid-19 pandemic. Apprenticeships aim to fulfill demands of competence in the curriculum implementation in the world of work and experience work. The research adopted a qualitative approach with literature study and descriptive analysis method. The study results revealed that internship-based Project Based Learning is one of the solutions for implementing internships during the Covid-19 pandemic. The internship-based also optimizes the concept of a teaching factory at the vocational school level that leverages the participatory education practices involving vocational schools with the industries.*

**Keywords:** *Industry internship, Project Based Learning, Teaching Factory.*

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### INTRODUCTION

The presence of the Covid virus in 2019 has changed many arrangements in the life-world community. World education is not an escape from due to the Covid-19 virus. Where are the rights of education of hundreds of millions of students worldwide and in Indonesia threatened even almost 10 million children risky break school (Rajab, 2020)? In Indonesia, more than 147 thousand schools and madrasas postponed the learning process due to the Covid-19 virus health protocol. Consequently, closing schools

and madrasas impacted the original learning model, face-to-face learning model, to distance learning/online model. The Covid-19 pandemic required unprecedented changes in the educational landscape to advance the teaching-learning process and fulfil the aim of education. Such abrupt transformation was not smoothly adopted, especially for technical and vocational schools that emphasize more practical material. It is mandatory that, students are required to conduct internship in industries to familiarize them with working environment. Industrial internship in Curriculum 2013 also known as Praktek Kerja Industri - PRAKERIN (Industrial Internship) or Pendidikan Sistem Ganda - PSG

(dual educational system) in the 2006 Curriculum (SMK, 2007). It is a learning program implemented by a particular that takes time allocation specific and involves another party outside the school system. The internship could takes place at the industries in the form of private company or government agency. Practice work field according to or *on-the-job training* is a training model that aims to give necessary skills in a profession particular following demands ability for workers.

Several industries that accepted interns before the pandemic were no longer accepting students for internships at their offices. The decrease of jobs received by the companies caused interns' lack of activities. Another reason was mitigating the impact of Covid-19 pandemic that maybe caused by close contact among strangers at the office. In the middle pandemic was a challenge for schools to equip students before deploying them for industrial internship. The issue with learning activities that most of the courses conducted online which contradicted the requirement for practical skill.

Many believe that industrial internship was particularly successful during the pandemic in term of encouraging vocational students to practice so they could reveal insight into their knowledge and limited practical experience. Since during the pandemic most of the courses were learnt online, the knowledge and experience obtained during the practical activities at during the internship could be a lot better. Despite the limitation in social distancing, students were allowed to join industrial internship at their local community. Although in its implementation, it must be carried out with

strict procedures and always under the supervision of the school and related industries.

## RESEARCH METHODS

This study adopted a qualitative research approach within three stages. The first stage was research preparation, including a) Formulating problem, which is the research problem formulation b) Study literature, at the stage this conducted understanding literature. Required data could be generated through review libraries, books, and journals, as well as searching for data via the internet and various sources as ingredient references and base related theory with the issues discussed in writing. c) Make a design study based on results from studies and literature.

The second stage was the data collection process. While the third stage was solution research, including a) Process s processing data. b) Interesting conclusion from results processing and analysis of research data.

## RESULTS AND DISCUSSION

The covid-19 pandemic has been in progress so a long in Indonesia and so changed various aspects of life, including education. Re-learning is an option while face-to-face, but during the pandemic, the only option was for the government to provide online learning suited to each person's level of competence. With this online learning, objective learning could be permanently satisfied. Vocational education as education for the world of work and industry finally is formation competence. Abilities participants educate and trained to perform with skills, attitudes, and knowledge suitable work \_ with the demands and needs of the world of work

(Sudira, 2017). The official Letter of Director General Vocational of the Education, Cultural and Technology, Number 01 issued in 2020 (Vokasi, 2020) explicated that the school internship could be substituted with *Project-based Learning* (PjBL) design, and collaborative entrepreneurship with industry and the world of work. Therefore, vocational schools catering for school internship programs supposed to be prepared for the new policy.

The PjBL model is a learning model that uses problems as a first step in collecting and managing new knowledge based on experience in authentic activities and provides opportunities for students to manage learning in the classroom by involving project work (Wena, 2014; Listiani, 2017).

The PjBL model places a strong emphasis on problem-solving as a collaborative activity (Kesanti & Budiyanto, 2020). The PjBL model provides opportunities for students to explore the material using various ways according to students creativity so that it is meaningful and carried out collaboratively. PjBL is very suitable to be applied in vocational schools, considering that this institution functions to prepare graduates to be either working in the industry, continuing study at the college or venturing into their own business. Therefore, the vocational schools must equip students with the essential competencies needed in the world of work and in the industry (Mariyaningsih & Hidayati, 2018). The PjBL learning model focuses on either the outcome and, more importantly, on the emphasizes how student to be able to conduct problem solving and create products (Williams,

2017) that can monitor progress and accurately evaluate professional students.

### **The Pros and Cons of *Project-Based Learning* (PjBL)**

#### **a. Advantages of Project-Based Learning**

PjBL learning has several advantages compared to other learning models (Fivi et al., 2017) states. That the advantages of PjBL include the following:

- 1) PjBL is a pretty good technique for understanding the lesson better,
- 2) PjBL can challenge students' abilities and provide satisfaction in finding new knowledge for students,
- 3) PjBL is considered more fun and liked by students,
- 4) PjBL can develop students' ability to think critically,
- 5) PjBL can provide opportunities for students to apply their knowledge in the real world,
- 6) PjBL can develop students' interest in learning continuously even though studying in formal education has ended.

#### **b. Disadvantages of Project-Based Learning (PjBL)**

Similar to other teaching models, the PjBL learning model also has several weaknesses in its application (Susilowati, 2017), including:

- 1) When students are not interested or confident that the problem being studied is challenging to solve, they will feel reluctant to try.
- 2) The success of the learning model through PjBL requires preparation

- 3) They will only learn what they want to learn with an understanding of why they are trying to solve the problem under studied.

PjBL is suitable for implementing practical work in industry in the future, especially during the Covid-19 pandemic activities in unit education of the vocational schools (Prahutri, 2021). Teaching factory (TEFA) concept adopter organizations, for example, would benefit from the implementation of PjBL.

The TEFA is distinguished into four models and can be used as tool mapping of vocational schools implementing TEFA. The model is as follows: 1). *Dual System Model* in form practice work field is pattern learning on-site vocational known work as *experience-based training* or *enterprise-based training*. 2) *Competency Based Training (CBT)* Model or training-based competence is an approach to learning that emphasizes the development and improvement of skills and knowledge participants educated following the job needs. 3) The *Production Based Education and Training (PBET)* model is an approach to learning-based production. Competencies owned by participants need to be strengthened and confirmed skills with giving knowledge making a product needed by the world of work ( industry and society ). 4) *Teaching Factory* is a draft learning-based industry (products and services ) through synergy school and industry to produce competent graduates in compliance with job market's needs.

With the use of the PjBL method, every student develops a scheme to do sessions interactive individually, providing approach

creativity. As an alternative solution for industry internship implementation during the Covid-19 Pandemic or beyond for vocational school students with industries' assistance. This project-based industry internship program is a breakthrough for increasing the quality of high school graduates. Implementing this project-based industry internship will benefit the world of education, specifically the vocational education and the industrial world to get the skills needed in the job market during the pandemic.

## CONCLUSION

Apprenticeships aim to fulfil the competing demands in the curriculum implementation in work and experience work. Apprenticeship based Project Based Learning to be one of the solutions in the implementation of Internships during the Covid-19 pandemic and maximizing the teaching factory in intermediate vocational schools as the place to practice participant education with cooperation between intermediate vocational schools with the world of industry and the world of work.

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