

TEACHING FACTORY MANAGEMENT IN IMPROVING THE COMPETENCY OF VOCATIONAL SECONDARY SCHOOL GRADUATES

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ABSTRACT

Teaching Factory is a learning concept that integrates theory with direct practice in the industrial world, providing real experience to students to prepare them to enter the world of work, but in its implementation in vocational schools, there are several challenges and problems, with an in-depth analysis of these problems, it is hoped that can provide a comprehensive understanding of the importance of effective management in the context of a teaching factory. Through careful planning, structured organization, integrated implementation, and continuous evaluation, Teaching Factory can significantly increase the competency of vocational school graduates, and be responsive to industry changes, and it can be ensured that vocational school graduates have bright career prospects in the future.

Keywords: Management, Teaching Factory, and Graduate Competencies

INTRODUCTION

Teaching Factory is a learning concept that integrates theory with direct practice in the industrial world, providing real experience to students to prepare them to enter the world of work. However, in its implementation in vocational schools, there are several challenges and problems that need to be considered.

The steps for implementing a teaching factory include: (1) Planning, where planning begins with identifying the goals and objectives of the Teaching Factory program and planning a curriculum that combines theory with industrial practice and determining the resources needed, including facilities and equipment. (2) Organizing, Form a teaching team that is competent in their field, set a clear organizational structure for the Teaching Factory and coordinate with industry for active involvement. (3) Implementation, Apply the curriculum that has been designed by integrating theory and practice, ensure teaching is carried out by experienced instructors, involve students ensure teaching is carried out by experienced instructors, involve students in direct experience in the industrial world. (4) Evaluation, Regularly monitor and evaluate student progress, support students in identifying and overcoming challenges in the field, provide constructive feedback for continuous improvement, carry out regular performance evaluations of the Teaching Factory program, revise the curriculum based on feedback

from industry and student achievement, adjust resources and strategies according to evolving needs.

There is a significant gap between the curriculum taught in educational institutions and industry requirements. This gap can hinder graduates from facing the challenges of an increasingly complex world of work. This research aims to explore how teaching factory management can help reduce this gap.

In some cases, there are obstacles in the involvement of industry and other stakeholders in the process of developing and implementing teaching factories. This may influence the program's relevance to industry needs. This research will explore strategies that can increase active stakeholder involvement in teaching factory management.

According to PP no. 41/2015 concerning Industrial Resource Development: A factory in a school (teaching factory) is a production facility that is operated based on actual work procedures and standards to produce products in accordance with real conditions in the Business/Industrial World (DUDI) and is not oriented towards making a profit." Meanwhile, the definition of a teaching factory according to Minister of Education and Culture Regulation No. 34/2018 concerning SMK/MAK SNPs are as follows: Industrial Learning (teaching factory) is a learning model with an industrial nuance through synergy between SMK/MAK and the business/industry world to produce competent graduates in accordance with market needs.

Through in-depth analysis of these problems, it is hoped that we can provide a comprehensive understanding of the importance of effective management in the context of a teaching factory to improve graduate competency and meet the demands of an ever-growing industry.

B. RESEARCH METHODS

The method used in this research is analytical descriptive with a naturalistic qualitative approach. According to Sugiyono (2018) qualitative research methods are research methods used to research the conditions of natural objects, where the researcher is the key instrument, data collection techniques are carried out by triangulation (combination), data analysis is inductive, and qualitative research results emphasize the meaning of on generalization. Through this research, the author attempts to describe and analyze Teaching Factory Management in improving the Competency of Vocational School Graduates. According to (G.R.Terry, 2010), management functions include how to plan, organize, implement and evaluate Teaching Factory learning.

C. RESULTS AND DISCUSSION

Teaching Factory can increase the competency of vocational school graduates significantly, and be responsive to industry changes, and it can be ensured that vocational school graduates have bright career prospects in the future.

1) Planning

Curriculum Planning is designed by combining the theory taught in class with relevant industry practices. This can be achieved by integrating real case studies and industry-based

projects into the curriculum, providing practical training through industrial work environment simulations and involving industry practitioners as guest lecturers or mentors. To support the Teaching Factory program, the following resources need to be considered such as Classroom facilities are equipped with the latest equipment and technology in accordance with industry standards, equipment used in related industries, which allows students to practice relevant skills. Instructors who have industrial experience and good teaching skills, materials used in industrial production processes, for student practice and Industrial Collaboration or partnerships with companies to provide industrial insight and internship opportunities.

With careful planning, the Teaching Factory program can be an effective bridge between educational theory and industry practice, and assist students in their transition to the world of work.

2) Organizing,

Organizing involves forming a competent teaching team with several steps that can be taken such as recruiting instructors who have relevant industry expertise and experience, ensuring they have the ability to integrate theory with real work practice, as well as providing training to teachers on effective teaching methodologies for vocational education .

A clear organizational structure with defined roles and responsibilities for each team member, assign a program coordinator who will be responsible for running the program and be a liaison between the school and industry and form an advisory committee consisting of industry professionals to provide strategic input.

Build collaborative relationships with relevant companies to obtain support in the form of resources, mentorship and internship opportunities for students, organize regular meetings with industry representatives to ensure the program is always relevant to the needs of the job market and develop an internship program that allows students to gain experience direct work in related industries.

With good organization, the Teaching Factory program will be able to run efficiently and achieve the stated goals, namely creating graduates who are ready to work and competent in their fields.

3) Implementation

Implementing the curriculum that has been designed is an important step. This involves integrating theory and practice in teaching, as well as engaging students in hands-on industry experience. Experienced instructors play an important role in delivering material in a way that students can understand and provide regular evaluation or feedback to the instructor to improve the quality of teaching.

Involve students in projects that provide hands-on industry experience, such as internships or practical work. Facilitate industry visits and Q&A sessions with professionals to provide further insight into the world of work. And use up-to-date technology and equipment to provide practical experience that is relevant to current industry needs.

This is proven by the fact that vocational school graduates who have a Teaching Factory can produce graduates who have competencies in line with the needs of the industrial world.

By implementing these steps, students will gain valuable and relevant experience that will help them in their transition to the workforce after graduating from the Teaching Factory program.

4) Evaluation and Monitoring Student Progress

Evaluation in the context of the Teaching Factory is a very important process and must be carried out regularly. This process involves several simple steps such as:

Monitoring Student Progress

Conduct regular assessments of student performance, both in theoretical and practical aspects. Use a portfolio or journal to document student work and their progress.

Curriculum Assessment

Review the curriculum regularly to ensure that the material taught is still relevant to industry needs. Hold discussions with teachers and students to get input about which parts of the curriculum are most beneficial or require changes.

Teaching Methods
Observe and evaluate the teaching methods used to determine whether they are effective in conveying the material. Look for innovative ways to teach that can increase students' understanding and their engagement in learning.

Adapt to Change

Pay attention to the latest trends in industry and technology, and ensure that educational programs adapt to those changes. Hold training for teachers to keep them up-to-date with the latest developments.

By carrying out comprehensive and ongoing evaluations, Teaching Factory can continue to improve and provide high-quality education, and ensure that its graduates have the competencies required by the industry .

D. CONCLUSION

Creating vocational school graduates who are competent and ready to work is becoming increasingly complex. The Teaching Factory program, which is designed to bridge the world of education and industry needs, has great potential in increasing graduate competency. However, there are several root problems that need to be addressed to maximize the effectiveness of this program:

1. Planning

Immature planning can result in a curriculum that is not in line with industry needs, a lack of adequate facilities and equipment, and unclear goals and objectives.

2. Organizing

Inefficient organizational structures and incompetent teaching teams can hinder the learning process and student adaptation to the latest industry practices.

3. Implementation

Ineffective curriculum implementation, inexperienced instructors, and students' lack of direct experience in the industrial world can reduce the relevance of education to the world of work.

4. Evaluation

The lack of a comprehensive evaluation system to monitor and assess student progress as well as a static curriculum can result in programs not evolving in line with industry changes.

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