International Journal of Education and Life Sciences (IJELS)
Vol. 2, No. 1, 2024 : 69-82

Analysis of "Productive and Educative" Performance in the Lesson Studies of the Center of Excellence Smk (Study at State Vocational High School 4 Bandar Lampung)

Nurhayani[1]*, Risma Margaretha Sinaga[2*], Pujiati[3*]
[1,2,3]Master of Social Studies Education Study Program, Faculty of Teacher Training and Education, University of Lampung

Corresponding Author: Nurhayani nurhayani80@gmail.com

A R T I C L E I N F O

Keywords: Teaching Factory, PjBL, Planning and Implementation

Received : 21, November
Revised : 22, December
Accepted: 29, January

A B S T R A C T

This research was carried out to determine the implementation of the teaching factory learning model and Project Base Learning in an effort to improve the productive and educational performance of grade XI students in specialization subjects at the State 4 Bandar Lampung vocational school. This research is qualitative research using data analysis techniques, namely Data Resolution, Data Presentation, Conclusion Drawing/Verification. The results of the Operational Research of the Education Unit by using the suitability of the Teaching Factory and PjBL planning models with the integration of the curriculum with each stakeholder and the appropriate assessment, the planning of the Teaching Factory and PjBL is able to improve Educational and Productive Performance. The Teaching Factory and PjBL models have a good contribution in improving the Educational and Productive Performance of Students in the Vocational School of Negeri 4 Bandar Lampung in the Department of Hospitality.

DOI: https://doi.org/10.59890/ijels.v2i1.1169
https://journal.multitechpublisher.com/index.php/ijels

INTRODUCTION

Vocational High School is a formal pathway education as a form of vocational education unit. Vocational High Schools must be able to carry out learning optimally and must be oriented to the business world of the industrial world, but facts in the field show, not all Vocational High Schools are able to carry out the learning process optimally. The Minister of Education, Culture, Research, and Technology's (Kemendikbudristek) Center of Excellence Vocational High School Program is one of the tactics described See Presidential Instruction Number 9 of 2016 and Presidential Regulation Number 18 of 2020 for information on the National Medium Term Development Plan for 2020–2024. One of the tactics outlined in Minister of Education and Culture Regulation Number 22 of 2020 about Strategic Plans Ministry of Education and Culture 2020–2024 is raising the standard of secondary school education.

In general, Program for Center for Exceptional Vocational Education is expected to have a vision to move other schools to be able to improve the quality of student learning outcomes, as well as be able to develop vocational education that is increasingly relevant to the demands of community needs that are constantly changing according to how the workplace has evolved, as well as supporting local wisdom/excellence in certain economic development sectors or supporting government policies with specificity others so as to increase the number of Vocational High School graduates who get jobs and entrepreneurship.

To be more specific, the Center for Exceptional Vocational Education Program seeks to: 1) enhance collaborations between local governments and the Ministry of Education and Culture in order to provide mentorship for the program; In order to achieve Workplace-based education and management, 2) improving the caliber of Vocational High School, including principals, human resources, instructors, supervisors, technicians, and administrative staff; 3) enhance students' technical (hard skills) and non-technical (soft skills) competency in line with industry demands and foster character development in line with Pancasila ideals; 4) putting data-driven planning into practice by using school-based management; 5) use digital tools to simplify and boost productivity in classrooms; 6) enhancing the infrastructure and facilities for student learning practices to meet industry standards; and 7) fortifying collaborations and alliances between the industry and the Ministry of Technology, Culture, and Education in order to support and develop the Center of Excellence Vocational High School Program.

The Center of Excellence Vocational High School holds the key to the successful implementation and implementation of the new curriculum 2021 replacing the previous curriculum 2013. There is a difference between the old curriculum and the new one. Among the obvious differences that are very clear is the emergence of new teaching tools called Learning Outcomes and Teaching Modules. Learning outcomes replace the previous tools both fundamental and core talents comprise as well as the syllabus as an initial description of learning planning. While the teaching module is to describe in more detail how the learning steps will be planned by the teacher, which was previously described in the form of a lesson implementation plan (RPP).

The government program through the Directorate of Secondary Education, not only provides examples of how Vocational High Schools move forward with a new curriculum model, then the Directorate puts the burden on PK vocational high schools to immediately compile and prepare the School Operational Curriculum (KOS), in preparation for stepping in the next school year. However, in today's reality, the large number of Vocational High Schools also contributes to the unemployment rate. The open unemployment rate of Vocational High School graduates is influenced by many factors, including the availability of the number of job vacancies that are not in accordance with the competencies possessed by students. The results of observations on the distribution of questionnaires through google form to 210 students who graduated from Vocational High School 4 Bandar lampung majoring in Hospitality from 2020, 2021 and 2022 worked in accordance with their fields of work as much as 29%, and graduated as much as 20.39%., continued their studies as much as 9.54% while graduates did not report as much as 41.07%.

Table 1. 1 Open Unemployment Rate (TPT) by Education

No	Out Put Level	Agustus 2020	February 2021	Agustus 2021
1	elementary school and below	3,61	3,13	3,61
2	junior high school	6,46	5,87	6,45
3	senior high school	9,86	8,55	9,09
4	Secondary School Of Concretion	13,55	11,45	11,13
5	Diploma I, II and III	8,08	6,61	5,87
6	University	7,35	6,97	5,98

Official News Statistics 84/11XXIV November 5, 2021

It is evident that the open unemployment rate for graduates of vocational high schools in August 2020 was 13.55%, in February it was 11.45% and decreased to 11.13% in the August 2021 period. The open unemployment rate of Vocational High School graduates is influenced by many factors, including the availability of the number of job vacancies that are not in accordance with the competencies possessed by students. The absorption of Vocational High School graduates in 2021 tends to increase, while the open unemployment rate in 2021 decreases. This shows that graduates of Vocational High Schools are increasingly in demand and get jobs in 2021. It is suspected that There are four reasons for the high unemployment rate among vocational high school graduates: there is an oversupply, namely the number of graduates of certain vocational high schools in certain majors compared to others; incompatibility of certain vocational high school majors with industries in need in their area; quality of graduates that are not up to industry standards,; and the average age of graduates is only 17 years old, so they have to wait 1 more year to work.

According to Nugroho (2016: 46), the hard skills required by the industry are those related to their professions, while the soft skills are those related to attitude, collaboration, and motivation. The typical Indonesian school has not prepared its graduates with the two aforementioned abilities, therefore in the end, graduates will struggle to compete in the workforce. In order to ensure that graduates from Vocational High School are truly prepared to enter the workforce, lengthy training is required. In contrast to the objectives of vocational education per se, it may be said that instruction at vocational high schools is not conducted properly or efficiently.

At order to match what is taught at vocational high schools with the demands of the industrial world, the government launches the Teaching Factory program, which aims to promote vocational education in these institutions. According to the Directorate of Vocational High School Development, the Teaching Factory is an expansion of the production units that are already in place at vocational high schools. According to the Ministry of Education and Culture (2013: 3) in the Learning Material of the School/Madrasah Production and Services Activity Program by stating that The process of commercial activity is called the production unit carried out by schools/madrasahs on an academic and business basis by empowering school/madrasah residents and the environment in the form of production/service business units that are professionally managed. With the growth of the school's commercial sector through the Teaching Factory, the school's revenue may be increased and utilized toward efforts to maintain equipment, enhance human resources, and provide students practical job experience. As a result, the Teaching Factory is implemented in accordance with both commercial and academic goals.

An innovative approach to education in Indonesia is the Teaching Factory initiative. Work-based learning is one approach to producing competent and prepared Vocational High School graduates who can meet the needs of the workforce. The Directorate of Vocational High School Development is working to further develop the synergy or collaboration between vocational high schools and industry, and one of their initiatives is the adoption of the Teaching Factory learning model in vocational high schools.

In practice, the Teaching Factory learning model will be more successful if the learning is carried out using a combination and collaboration with the right model. One of the right models is Project Based Learning (PjBL), which is expected to support learning success, especially in specialization subjects in vocational high schools. The Teaching Factory Learning Model (TEFA) will be stronger when applied with the project-based learning model (PjBL), and will be even stronger if the implementation uses a block schedule pattern (block system). The block schedule in the experience of some Vocational High Schools so far has provided tangible results in increasing student competence and productivity.

Purnami & Utomo (2021) state that developing one's entrepreneurial skills inside the educational setting is one of the objectives of the Teaching Factory program. As to the findings of Cahyaningrum and Hery (2019), Risnawan (2019), and Jariah (2019), the implementation of Teaching Factory learning has become nearly ubiquitous in all Vocational High Schools across Indonesia, accompanied

by management innovations that showcase their distinctive features. Real-world data demonstrates that the Teaching Factory can progressively address today's issues. It is characterized by rising graduate enrollment rates, a growing recognition of vocational school accountability, and an increase in students' capacity to manufacture goods that meet industry requirements and quality.

A learning approach called project-based learning (PjBL) encourages students to use their personal experiences to seek information and work together with the process of learning (Sari, Sartijono, & Sihono, 2015). Through a protracted and planned search/inquiry process of real and challenging questions and tasks, as well as product design, this methodical project-based learning approach incorporates students in the production of knowledge and abilities (Suryandari, Sajidan, Rahardjo, Prasetyo, & Fatimah, 2018). Problems are the initial stage in gathering and integrating new information based on experience in real activities in project-based learning (Diah &; Riyanto, 2016; Istiningrum, 2017).

By using the outcomes of the aforementioned data processing, the PjBL model seeks to enhance learning outcomes. Motivation, problem-solving abilities, teamwork, resource management, and management are a few benefits of PjBL (English, &; Kitsantas, 2013). The greatest possibility for students to acquire the content in authentic settings and gain experience to optimize their individual sensory instruments is thus afforded by the usage of real items (Ibrahim & Sudjana, 2010). Real object media and the PjBL Model have benefits that may be used to enhance learning through mutual engagement. Students with restricted senses, space, and time may find it simpler to obtain information through learning media. Students' imaginations will be stimulated by the use of actual item media in PjBL learning, which will allow them see three-dimensional space in two dimensions for the project. To form quality graduates, Vocational High School 4 Bandar Lampung, it is necessary to prepare hard skills and soft skills that are mature enough to support the implementation of the Teaching Factory (TEFA) program.

This fact is a balance between the world of vocational school education and the industrial world, so to overcome the existing balance, it is necessary to carry out various strategies in the development of hard skills and soft skills in balance. Student skills need to be considered both in terms of physical and non-physical skills, so as to produce good graduates and able to compete in the world of work. To prepare qualified or competent graduates, Vocational High School 4 Bandar Lampung needs to develop programs that can improve students' hard skills and soft skills. Soft skills, which affect a person's ability to be well-accepted in the workplace, are just as important in determining a person's success at work as hard talents. Soft skills are the knowledge and abilities that students gain from taking part in extracurricular activities, industrial practice activities in the field and at school, and character education training. Hard skills are the scientific understanding of each student's ability according to their fields.

Thus, after graduating and either starting their own firm or working in other business sectors, students are prepared for the workforce with a skill set they have acquired while still in school (Afriani &; Setiyani, 2015). Compatibility

between the workplace and the educational system necessitates a grasp of certain abilities that are applicable in the workplace. Vocational education is education that generates graduates who master information and skills in line with their domains of specialization. Students that graduate from Vocational High School are proficient in both hard and soft skills. As a result, students may produce high-quality work (Suryanto, Kamdi, & Sutrisno, 2013).

Based on the description above, the author will conduct a research study of productive and educational performance analysis of students, especially Class XI in specialization subjects at Vocational High School 4 Bandar Lampung. The objectives to be achieved in this study are: To ascertain the execution, learning model of teaching factory and PjBL in an effort to improve the productive and educative performance of grade XI students in specialization subjects at Vocational High School 4 Bandar Lampung.

METHODOLOGY

According to Creswell (2017), this kind of study is qualitative descriptive research, which aims to investigate and comprehend the significance of individuals or groups assigned to societal or human issues. As stated by Moleong (2017), qualitative research is a method that yields descriptive data from people's spoken or written words as well as their observed behavior. One of the PK (Center of Excellence) Vocational High Schools, State Vocational High School 4 Bandar Lampung, is the location of the research.

The subjects of this research were students of State Vocational High School 4 Bandar Lampung who were the main informants. As triangulation, the researcher utilized the Principal of State Vocational High School 4 Bandar Lampung, Vice Principal for Curriculum, Head of Expertise Program, and Vocational Teacher. In terms of collecting this data, researchers went directly to the object of research to obtain valid data, so researchers used qualitative observation methods, qualitative interviews and qualitative documentation. Data analysis strategies are actions in qualitative data analysis that are carried out interactively and constantly until completion, so that the data is saturated, according to Sugiyono (2019).

Data reduction is a process that involves summarizing, choosing the key points, concentrating on aspects that are relevant to the research question, searching for themes and patterns, and finally producing a more lucid image that facilitates additional data collection. Data Dispay (Data Presentation) is the yiatu display of structured data that has been grouped according to a relationship pattern for ease of comprehension. As said previously, problems and problem formulations in qualitative research are still transient and will evolve after the study is conducted in the field. Therefore, while conclusion drawing and verification may address the formulation of problems created from the beginning, it may not.

RESEARCH RESULT AND DISCUSSION

Implementation of Teaching Factory and Project Based Learning on Student Productive and Educational Performance

1. Implementation of Teaching Factory on Productive and Educational Performance of Students

The results of the interview showed that the concept of TeFa planning in improving performance productively and educively is contained in the KOSP. In the improvement of Productive Performance, it is stated that the implementation of KOSP in order to be one way to overcome the gap between education and industry needs by providing practical experience to students, the application of TeFa as the main learning model in practice. Things that can be generated from this program are in the form of Services. In addition, in the Teaching Factory, students are involved in work and projects similar to those found in the industrial world. so as to produce a tangible product or service. In addition, on the other hand, the implementation of learning requires students to be more active in the practice of applying the lessons taught. The Hospitality expertise program that is followed at least there are things that must be achieved including Front Office service products, House Keeping and Food and Beverage Service.

Students not only do the work, but also understand the concepts underlying the work. They learn why and how a process or technique works. The Teaching Factory promotes critical thinking and problem solving. Students are expected to identify problems, analyze potential solutions, and make informed decisions. The implementation of learning requires students to be more active in the practice of applying the lessons taught. Educatively, we have been given detailed guidance since grade 10 in the form of theory in accordance with expertise competencies. Expertise competencies include Front Office service products, House Keeping and Food and Beverage Service. So that basically the concept has been explained since grade 10.

The competences developed by vocational high schools and the demands of industry can be bridged by the findings of observations on the implementation of Teaching Factory in these institutions. In order to evaluate the caliber of educational achievements in vocational high schools, the industry must be fully involved in the Teaching Factory's implementation. A few fundamental principles that need to be established in order to facilitate the Teaching Factory's implementation preparedness are: (1) Sense of quality (quality conscious), which involves teaching students the fundamentals of objective criteria of quality. (2) Efficiency sense (awareness of quality, time, and cost), giving students the tools they need to perform effectively in order to achieve optimal job efficiency and gauge productivity levels, as is typically done by industry.

So that the application of TeFa-based learning becomes an important role in improving student performance both productively and educationally. Some of the implementation things carried out by State Vocational High School 4 Bandar Lampung in improving the productive and educational performance of students, namely Curriculum Alignment, Subject Teacher deliberation, Student Management, and Link and Match Management. These four things are efforts to apply learning in State Vocational High School 4 Bandar Lampung. The

completion of Kurikukum is carried out by aligning the curriculum with the world of work in identifying, mapping and analyzing learning outcomes for all skill programs. So that the curriculum applied is in accordance with the objectives of TeFa, which is in line with the world of work.

Then collaboration between vocational teachers by equalizing perceptions on the elements contained in the subject of interest and determining learning resources before learning activities are carried out at the beginning of the school year, this is important to do so that there is no gap between the conveyor and recipient of information, namely students. So that equalizing perceptions is important to be able to be in an environment that is in accordance with the skill program that is owned from learning to work practice.

Student Management where the School together with BK teachers and homeroom teachers conduct diagnostics on students in determining the selection of expertise concentrations with criteria (1) Have knowledge values above the criteria for achieving learning objectives, (2) Have skill values in accordance with the grade (grade level) that has been determined for each concentration of expertise, (3) Have a minimum attitude value of Good. This is applied in harmony between general life and life in the world of work so that students are able to be responsible for their environment.

Link and Match management is prepared based on the readiness of learners in mapping themselves to be ready and in accordance with the world of work of interest. Some important things to focus on are the Curriculum prepared Together and standardized by the World of Work. Strengthening aspects of soft skills and work character to complement aspects of hard skills in accordance with the needs of the World of Work. Real learning from the World of Work from the beginning, ensuring hard skills will be accompanied by soft skills and strong job readiness characters. The number and role of teachers / experts from the world of work is significantly increased, reaching a minimum of 50 hours / semester / expertise program. Internship/fieldwork practice (PKL) at least 1 Semeser. certification of competence in line with the requirements and norms of the working world for educators and students alike. For the purpose of the teaching and learning process, teachers receive frequent training and updates on technology from the working world. Utilizing real-world situations or societal demands as the foundation for the Teaching Factory, applied research is conducted in partnership with stakeholders and the workplace. dedication to preparing graduates for the workforce.

Based on the application above, the roleof TeFa is toperfect every learning implementation optimally and fairly in each student. The application of TeFa learning is very decisive for the direction that will be carried out by most companies to get the right graduates with the industry being run.

So that with the application of learning carried out by State Vocational High School 4 Bandar Lampung starting from curriculum alignment, equalization of percing system with links and matches with a standard curriculum in the world of work, real lessons with the world of work, competency certification to the commitment given, it will be able to improve student performance both educatively as well as productive.

The aforementioned claim is supported by Dewi & Sudira's (2018) research, which demonstrates that the Teaching Factory program's 34.6% implementation impact has a major impact on Makassar vocational high school students' preparedness for the workforce. These findings demonstrate the necessity for the Vocational High School Teaching Factory program to be implemented as optimally as possible in order to increase the work preparedness of students and raise the employment rate of graduates. Research by Habiba et al. (2020) demonstrates that the Teaching Factory program yields beneficial outcomes by fostering an industrial culture that can boost students' entrepreneurial spirit and productive competence.

2. Implementation of Project Based Learning on Student Productive and Educational Performance

The interview results clearly mentioned that PjBL is arranged in KOSP, besides that in improving productive and educational performance, it is stated that PjBL is an absolute requirement in the KOSP-based curriculum in grade XI, this can show a commitment to provide relevant and integrated learning experiences with the real world to students at a higher stage of education. However, the implementation of PjBL must be supported with adequate training and resources for teachers and schools to ensure its effectiveness. This approach helps students prepare to enter the workforce with a solid understanding of what it takes to succeed in the industry. In addition, students are required to master Front Office, House Keeping and Food and Beverage Service. Because schools have facilities in the form of hotels, they can usually directly practice in hotels by applying service products that have been described in previous learning. Students not only do the work, but also understand the concepts underlying the work. They learn why and how a process or technique works.

To improve student education, educators are required to be able to have creative and innovative ideas during the process of teaching and learning Therefore, many educators are starting to develop and apply learning models according to the material and conditions of students. At the Vocational High School level, the majority of learning is practical learning. One method used in practical learning is called Project Based Learning (PjBL). The "project-based learning" approach to education is predicated on real-world tasks and educational activities that provide problems that students must address in groups and are relevant to their everyday lives.

Based on the results of observations, the implementation of State Vocational High School 4 Bandar Lampung begins by compiling learning objectives which are then detailed into learning outcomes, which then from the learning outcomes are compiled the flow of learning objectives. With the flow of learning objectives, it is hoped that it can improve students' productive and educational performance,

The flow of learning objectives is a series of learning objectives that are arranged systematically and logically in phases as a whole and in the order of learning from the beginning to the end of a phase. This flow is arranged linearly as a sequence of learning activities carried out from day to day to measure learning outcomes.

Some of the focus learning objectives in the hospitality major are first, Front Office competencies have materials on Communication By Phone, Reservations, and Presenting Information Needed by Guests. Both Housekeeping and Laundry competencies have material Housekeeping Services for Guests, Cleaning Locations/Areas and Equipment, Handling Employee and Guest Uniforms, Carrying Laundry Processes, and Valet Laundry Services. The three Food and Beverage Service competencies have material on Food and Beverage Knowledge, Restaurant Equipment, Napkin, Table Set-Up, Menu &; Service, Taking Order, Clear-Up, and Squence of Service. Furthermore, from each competency and material that will be obtained by State Vocational High School 4 Bandar Lampung, then a flow of learning objectives is formed from each competency and teaching module of each competency in the hospitality department.

The flow of learning objectives is prepared by detailing the lesson hours of each competency and also the learning objectives that apply at State Vocational High School 4 Bandar Lampung, in detail can be seen in Table 4.6 of the flow of learning objectives. As for the teaching module, it consists of 3 teaching module competencies, namely teaching module 1 specifically for Front Office competencies, teaching module 2 specifically for Housekeeping and Laundry, and teaching module 3 specifically for Food and Beverage Service competencies.

Based on this, Bandar Lampung State Vocational High School 4 prepares a detailed record in the form of teaching modules from each skill competency (attached file). This teaching module consists of general components and core components. General components consist of school identity, elements, learning outcomes, student profiles, learning materials, infrastructure, facilities, students target, learning models used. The core components comprise goals and significant comprehension, lighter questions, preparation and learning activities that are compiled in detail from each meeting.

With the compilation of teaching modules and with the application of these teaching modules, it can be ascertained that the application of PjBl with teaching modules in detail and detail can improve the Educational and Productive Performance of Students at State Vocational High School 4 Bandar Lampung. This is also supported by the application of every element of learning applied at State Vocational High School 4 Bandar Lampung.

The above statement is in accordance with Ismuwardani, et al. (2019) which shows a significant increase in the application of Project Based Learning to creativity and independence of poetry writing skills.

CONCLUSIONS AND RECOMMENDATIONS

Learning Implementation at SMK Negeri 4 Bandar Lampung by assessing the implementation steps with the Teaching Factory model and assessing the Teaching Module and the Flow of Learning Objectives with the Project Based Learning Model, it is concluded that the Teaching Factory Model and Project Base Learning have a good contribution in improving the Productive and Educational Performance of Students at SMK Negeri 4 Bandar Lampung in the Hospitality Department.

The results show that there is an increase in performance with the implementation of learning made by SMK Negeri 4 Bandar Lampung with the

Teaching Factory and Project Based Learning models. It is expected that each module and the flow of learning objectives can run well, and the unification of perceptions as educators can be built properly so that no mistakes occur that can hinder the growth and development of student knowledge and productivity.

ADVANCED RESEARCH

Researchers suggest that there should be more comprehensive research, especially by involving larger subjects so that better and in-depth analysis can be carried out and conducted anonymously.

Researchers suggest that the research object can be expanded again by looking at the entire Teaching Factory and Project Based Learning learning model by looking at variables that can affect both, so that further research gets a better picture of the application of the Teaching Factory and Project Based Learning learning model.

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