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Evaluation of The Teaching Factory Program at SMK Pancasila 1 Kutoarjo

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Abstract

The research aim to analyze teaching factory as product-based learning model that utilizes the synergy of schools with industry to produce graduates who are competent and in line with the needs of the business and industry world. The CIPP program evaluation model is designed to improve the program implementation system comprehensively so that it can be considered in the future for implementing the program. SMK Pancasila 1 Kutoarjo has implemented a teaching factory learning program in order to improve the competence of its students. This study uses a qualitative descriptive method, for data collection techniques using observation, interviews, and documentation. Researchers conducted interviews with school principals, program administrators, TBSM skill competency heads and teachers of automotive productive subjects at SMK Pancasila 1 Kutoarjo. The results of this study indicate that; (1) the results of the context evaluation regarding the implementation of the teaching factory learning program are in line with the school's vision, mission, and goals, (2) the results of the evaluation of inputs have gone well, 3) the results of the evaluation of the process in the teaching factory learning program have gone well because so far the learning process of the program has been running well according to the plan and has not encountered any significant obstacles; (3) the results of product evaluation in the implementation of the teaching factory learning program have gone well.

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INTRODUCTION

Referring to the National Education System Law No. 20 of 2003 article 3 concerning the purpose of national education and an explanation of Article 15 which states that vocational education is secondary education which specifically has the aim of preparing students to work in certain fields. Presidential Regulation No. 9 of 2016 concerning the revitalization of Vocational High Schools (SMK) to face the Industrial Revolution 4.0, so Vocational Schools are expected to be able to have a positive impact on improving quality with two orientations. First, anticipating the coming of the Industrial Revolution 4.0 with all the destructive technologies that accompany it; and second, creating national competitiveness by being oriented towards developing regional potential advantages as national advantages. Therefore, Vocational High Schools must strengthen cooperation with the business/industry world and must also be able to increase regional advantages into global advantages.

One of the priorities for revitalizing vocational schools is the school's partnership with the business/industrial world (DU/DI). Therefore, curriculum synchronization between SMK and the business world/industrial world (DU/DI) must be able to prioritize the suitability of technological developments with the needs expected by the business and industrial world (DU/DI). The productivity and innovation of SMK graduates will be encouraged by the implementation of the teaching factory program in schools. Teaching factory is the development of the production unit, namely the application of the partner industrial system in the existing production unit in SMK. Teaching factory is a product-based learning model (goods/services) through school synergy with industry to produce competent graduates according to industry needs. According to Kuswantoro (2014), the concept of teaching factory learning is to apply the learning process as in the working environment. So as to be able to overcome the competency gap between the knowledge provided by the school and the needs of the industry.

SMK Pancasila 1 Kutoarjo is one of the private vocational high schools in Purworejo Regency that has implemented a teaching factory learning program with the aim of improving the quality of its students' graduates. This is one of the efforts of SMK Pancasila 1 Kutoarjo in facing challenges in the globalization era so that graduates from these schools can be absorbed in the industrial world. However, the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo has not fully gone well.

Based on the results of observations made by researchers, information was obtained that the teaching factory learning program that was already running at SMK Pancasila 1 Kutoarjo had new competence in Business and Motorcycle Engineering (TBSM) expertise, where the program began to be held in the 2018/2019 school year.

The success of the teaching factory learning program is marked by the creation of students who have a work culture and also have a good entrepreneurial spirit. To achieve this, adequate facilities and infrastructure are needed, well-organized program management and implementation schedule, and competent facilitators/accompaniments.

The teaching factory learning program conducted by SMK Pancasila 1 Kutoarjo has not been fully running well. This condition can be seen when field observations there are several discrepancies in the implementation of the teaching factory, including, (1) the work culture of students has not been well developed. In the industrial world, the work culture consists of; diligent, concise, neat, tidy, and caring, (2) lack of group cooperation when learning in the workshop, (3) lack of assistance in the workshop, (4) consumers are still limited to the school environment, (5) there is no comprehensive evaluation of the implementation teaching factory learning program that is already running. (6) students are seen only doing light work when in the production workshop, this is of course to avoid unwanted mistakes in the work. This can reduce the achievement of student competencies in carrying out subsequent tasks. Based on the description above, the author is interested in carrying out an evaluation of the implementation of the teaching factory learning program at the Pancasila 1 Kutoarjo Junior High School with the aim of knowing the inhibiting factors that caused the program not to be successful, as well as to provide corrective solutions to the program, so that the success of the program can be achieved.

The type of evaluation used in this study is the CIPP evaluation model developed by Stufflebeam, et al in 1967 at Ohio State University quoted by Arikunto, and Abduljabar (2009), CIPP is an abbreviation of Context evaluation, Input evaluation, Process evaluation and Product evaluation. The researcher chose the CIPP evaluation model because this evaluation model is unique in every aspect of evaluation that involves planning and operating a program. In addition, this evaluation model has the advantage of providing a comprehensive evaluation format at each evaluation stage, which consists of the context, input, process, and product stages.

Aspects that need to be considered in the evaluation of the teaching factory learning program include aspects of context, input, process and product. the teaching factory learning program is in the parameters or management aspects of the teaching factory learning program, laboratory or workshop layouts, human resources, learning patterns, industrial relations, promotions and products/services.

Departing from the discussion above, it can be formulated that the aspects that need to be evaluated in the teaching factory learning program consist of context aspects including: the background of the establishment of the program, the principal's policy, the needs to be achieved or fulfilled. Aspects of input evaluation include: teaching factory learning program curriculum, human resources, students, budget allocation and use, completeness or feasibility of infrastructure. Aspects of process evaluation include: suitability of the plan with program implementation, program implementation activities and the role of the supervising teacher or facilitator, meaning that process evaluation is also directed at the conformity of planning with implementation that has been conceptualized. While the product evaluation aspects include: the achievement of student competencies, service quality and increasing the number of customers/consumers.

METHOD

This study uses a qualitative approach, this evaluation research aims to determine the success of the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo. The evaluation model used in this study is the CIPP evaluation model.

This research was conducted at SMK Pancasila 1 Kutoarjo, which is located at JL. Major General. S. Parman Kutoarjo, Bandung Village, Kutoarjo District, Purworejo Regency, Central Java Province.

The primary data sources in this study were: the principal, the vice principal in the curriculum field, the administrator of the teaching factory learning program, the facilitator/teacher assistant, and the students who participated in the program. While the secondary data sources in this study were taken from curriculum documents, lesson plans, activity schedules, documentation and direct observations during the implementation of the teaching factory. The data collection techniques used to evaluate the teaching factory implementation program at SMK Pancasila 1 Kutoarjo are interviews, observation, and documentation.

RESULTS AND DISCUSSIONS

Evaluation of the context of the Teaching factory program at SMK Pancasila 1 Kutoarjo

In this discussion, the researcher will explain the results of research on the teaching factory learning program at SMK Pancasila 1 Kutoarjo on the aspect of contextual evaluation. Context evaluation aims to check whether the goals and priorities are aligned with the needs of whoever is being served. The results of the context evaluation should provide a solid basis for adjusting existing goals and priorities and targeting required changes. Context evaluation, produces information from various needs that have been regulated (needs analysis) of the object/target so that the objectives can be implemented. According to Suharsimi Arikunto (2014) there are four questions that can be asked in context evaluation, namely; 1) what needs have not been achieved by the program; 2) what development objectives have not been achieved by the program; 3) what development goals can help the community; and 4) which goals are the easiest to achieve.

In this study, aspects of context evaluation include; the background of the establishment of the

teaching factory learning program, the principal's policy, and the needs to be achieved or fulfilled. Based on the results of the research regarding the evaluation aspect of the teaching factory learning program context at SMK Pancasila 1 Kutoarjo, data obtained that the program was formed by the school principal because the school has a vision, mission and goals so that the output or graduates of its students have competent soft skills and hard skills so that SMK graduates Pancasila 1 Kutoarjo is able to compete in the world of work, entrepreneurship, and to continue education to a higher level of education.

Based on the description above, it can be concluded that from the aspect of context evaluation regarding the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo, it is in line with the vision, mission, and objectives of SMK Pancasila 1 Kutoarjo.

Evaluation of the Teaching Factory Program Process at SMK Pancasila 1 Kutoarjo

The results of the research regarding the evaluation of inputs in the teaching factory learning program at SMK Pancasila 1 Kutoarjo obtained data that:

a Synchronization and preparation of the curriculum for the teaching factory learning program is in accordance with the procedure, because in the preparation of the school curriculum all school members and also from the business world/industrial world are invited.

b The human resources (HR) involved in the teaching factory learning program at SMK Pancasila 1 Kutoarjo have met the requirements, both in terms of educational qualifications and linearity, because all the accompanying teachers are already S1 certificated and are already linear to teach in the competence of Business Engineering and Motorcycle Engineering However, in terms of the quantity of teachers who teach/assistant the number is still lacking. In addition, all teachers have also attended training from Astra Honda Motor (AHM). Apart from the accompanying teacher, the assisting toolman is also experienced and expert in motorcycle repair. In the teaching factory learning process while in the workshop, the ratio of the accompanying teacher is one subject teacher assisted by one toolman accompanying four students. The subject schedule for the teaching factory learning program uses a block schedule, where in the preparation of the schedule it is proposed by the Head of Business and Motorcycle Engineering expertise competence to be further compiled by the Deputy Principal for Curriculum.

c Budget management for the teaching factory learning program is also good because there is already a treasurer who is given the task of managing the teaching factrory learning program budget, then the bookkeeping of the budget management is always reported and controlled periodically by the principal.

d Workshop teaching factory At SMK Pancasila the layout and practical infrastructure are in accordance with standards, because the school cooperates with AHM (Astra Honda Motor) so that in terms of layout, placement of tools and materials, as well as for practical equipment must be the same as the workshop at AHM.

From the description above, it can be concluded that from the results of the evaluation of the inputs to the teaching factory learning program at SMK Pancasila 1 Kutoarjo it has been going well. The obstacle faced is in the quantity or number of accompanying teachers when learning in the workshop is still lacking so that when there are consumers or customers who come in large numbers, learning activities cannot run optimally.

Product Evaluation of the Teaching Factory program at SMK Pancasila 1 Kutoarjo

The process evaluation aspect is basically checking the continuity of the planned implementation. According to Akpur et al., (2016) argues that "Process evaluation observes the convenience and parallelism between the planned and actual activities". According to Stufflebeam (1986) which offers questions for process evaluation are: a) whether the program is running according to schedule; b) whether the human resources involved meet the qualifications; c) whether the facilities and infrastructure provided are of optimal use; and d) what obstacles were found during program implementation.

The results of the research regarding process evaluation in the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo are:

a the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo has been going well, the school has established cooperation with the business world/industrial world.

b Students are fully involved in the learning process in the workshop, the accompanying teacher is

only limited to accompanying and giving directions.

c Facilities and infrastructure to support learning activities are adequate, workshop layouts, tools and practice materials are also standard from AHM, so that in the learning process students are like working in the business world or the industrial world. In the learning process, work culture is also always taught to students, so that it fosters discipline, hard work, responsibility and builds a systematic and planned partnership mechanism between students.

d The obstacle faced by schools in implementing the teaching factory learning program is the COVID-19 pandemic, so that learning should be based on students or direct practice in the teaching factory workshops, but because of the pandemic so the learning process can only be done online, it's clear not in accordance with the teaching factory learning concept.

From the description above, it can be concluded that the teaching factory learning program at SMK Pancasila 1 Kutoarjo has been going well because so far the implementation of the learning program has been running well according to the plan and has not encountered any significant obstacles. However, several factors that need to be considered are; The work culture for students must be further improved, after the Covid-19 pandemic ends, the teaching factory learning program must be carried out according to the plan.

Product Evaluation of the Teaching Factory program at SMK Pancasila 1 Kutoarjo

The benefit of product evaluation is to find out the achievement of the program. Mathew (2001) argues that product evaluation is an assessment of program results. This means that product evaluation emphasizes the sustainability of the program that has been implemented or after the program is completed, whether there are positive impacts and benefits.

Based on the results of research on product evaluation aspects in the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo it has been going well. This is shown by after the implementation of the teaching factory learning program, the facilities and infrastructure that support learning become complete, the establishment of good cooperation between the world of education and the world of business/industry, the learning motivation of students increases so that the achievement of student learning outcomes to meet the minimum completeness criteria (KKM). becomes easier, the quality of schools also increases, especially in the competence of TBSM skills because at the beginning of each year of learning or at the time of acceptance of new students the number of prospective students who register for the competence of TBSM expertise increases every year. While the thing that needs to be a concern is that marketing/promotion needs to be improved again, so that customers/consumers are not only from school residents or the school environment. The monitoring activities on the learning program at SMK Pancasila 1 Kutoarjo are carried out every one or two months depending on the intensity of the services carried out in the teaching factory workshop. The monitoring process is carried out by UPHI (Production and Industrial Contact Unit) which was formed by the school principal to oversee the teaching factory learning program.

According to Soenarto (2015) the teaching factory learning program is said to be successful if there are the following characteristics; 1) The learning process is like in the world of work/industry, 2) Good cooperation between schools and the business/industry 3) Teachers are easier in guiding students to learn so that KKM can be fulfilled, 4) Vocational graduates are easy to adapt to the business world/industry, so that many SMK graduates are absorbed in the world of work, 5) improving the quality and infrastructure of schools is easier to achieve, 6) the existence of mutually beneficial conditions for the school and industry after the establishment of cooperation, especially in the recruitment of expert workers needed by industry.

Based on the description above, it can be concluded that the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo has been going well. The obstacles faced by schools are the lack of accompanying teachers, the cultivation of a work culture has not been fully successful, the spare parts or spare parts available in the teaching factory workshops are not complete, there is no comprehensive and structured evaluation of the program, and the most hindering obstacle for this year is the existence of the covid-19 pandemic

so that the learning process in the teaching factory program cannot run optimally.

CONCLUSION

Based on the results of data analysis and discussion of the results of the evaluation of the implementation of the teaching factory learning program at SMK Pancassila 1 Kutoarjo. Based on the results of research on the aspect of context evaluation regarding the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo it is good, because it is in line with the vision, mission, and goals of SMK Pancasila 1 Kutoarjo. Based on the results of the evaluation of inputs, the teaching factory learning program at SMK Pancasila 1 Kutoarjo has been going well. While the thing that needs to be considered is the fulfillment of the ratio between accompanying teachers and students.

Based on the results of the evaluation process on the teaching factory learning program at SMK Pancasila 1 Kutoarjo it has been going well because so far the learning process of the program has been running well according to the plan and has not encountered any significant obstacles. However, the thing that needs to be considered during the learning process in the workshop is that the habituation of work culture to students is further improved.

Based on the results of research on the aspect of product evaluation in the implementation of the teaching factory learning program at SMK Pancasila 1 Kutoarjo it has been going quite well. The thing that needs to be considered is that program monitoring and evaluation activities are carried out in a structured manner and use monitoring and evaluation guidelines from the Ministry of Education and Culture or the Directorate of Vocational Development. school only.

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