



Implementation for Strengthening Field Work Practices in Improving Technical Skills Students of Vocational School of Building Modeling and Information Design (DPIB) for Dealing with the World of Work (Study case at SMKN 9 Garut, West Java)

Totok Hermawan*, Iim Wasliman, Hanafiah, Yeni, Muliani

Universitas Islam Nusantara, Bandung, Indonesia

Email: totokuninus@gmail.com

Abstract. The background of this research is that vocational school graduates do not match their competence with what is expected by the world of work. Therefore, there is a need for strengthening management of field work practices in improving the skills of Vocational School students in the competency of Design Modeling and Building Information Design Modeling and Building Information Design (DPIB) to face the world of work (Case Study at SMKN 9 Garut). The general purpose of this research is to obtain an overview and analysis of the Planning of Strengthening Field Work Practices in Improving Technical Skills of Vocational School Students for Facing the World of Work in the competency of Modeling Design and Building Information Design and Building Information Modeling Design (DPIB) competency in SMKN 9 Garut. This research uses qualitative research with a descriptive approach. Data collection techniques through observation, interviews and documentation study. The theory in this research is the theory of Management according to Hasibuan, M (2017: 10), Mangkunegara, A (2017: 2), the PKL theory in the Fieldwork Practice Guidelines (PKL) for Vocational School Students at the Ministry of Education and Culture's SMK Development Directorate (2018: 2), namely: "Field Work Practices (PKL) are learning activities carried out in DUDI and / or other work fields for the application, consolidation, and competency improvement. The implementation of PKL involves expert practitioners who are experienced in their fields to strengthen learning by guiding students during field work practices ". The results of this study are:

Keywords: Management, street vendors

1. Introduction

In the competency of Building Modeling and Information Design Skills, Modeling and Building Information Design (DPIB), curriculum objectives include four aspects of competence, namely (1) aspects of spiritual attitude competence, (2) social attitudes, (3) knowledge, and (4) Skills. These aspects of competence are achieved through intracurricular, cocurricular, and extracurricular learning processes. DPIB is a department that studies building planning, implementation of building construction, and building repairs. The activities include learning to draw designs for houses, buildings, and apartments, calculating building costs, carrying out construction, and maintaining building construction.

In addition to learning at school, the source of learning for vocational students is the Business World/Industrial World (DU/DI). So that SMK needs good cooperation with DU/DI. DU/DI is currently developing dynamically, for this reason, Vocational High Schools need to prepare graduates who are professional and trained regarding technological developments.

SMK has an early introduction program in DU/DI, namely through Field Work Practices (PKL). Preparation of students before entering DU/DI must be equipped with skills according to the field of expertise. This is not possible only for the Vocational High School, because although the vocational practice learning organized by the Vocational School is supported by complete and modern equipment, it is basically only able to present the basic skills in a simulated situation. Therefore, to achieve the goals of vocational education, it is necessary to have the cooperation and participation of DU/DI. Collaboration with DU/DI for student street vendors is needed, because technological advances develop faster than SMK and can provide new experiences for students in preparing graduates to enter DU/DI.

In a study conducted by Darmono et al in 2014 it was stated that "The success of vocational education is not only measured in terms of quality, but also in terms of relevance." The quality of graduates can be considered relevant if what graduates get is greater than what is expected. This is in line with the opinion of Muftihatun (2017: 2):

"The role of DU/DI is very important when participating in setting standards, only accepting cooperation from the school, but it is necessary to apply production-based learning in order to become competent human beings, formulate a competency-based joint curriculum, participate in the learning process by providing opportunities for street vendors and provide certification and participate in the competency test so that graduates of vocational education are ready to use in DU/DI".

In this case, the involvement of DU/DI in vocational learning even though its implementation is not in school can be beneficial for both parties, both for DU/DI and the school. According to Bennett (2006:1) that: "The biggest challenge in the world of education today is to produce graduates who have academic skills (academic skills) and the ability to master skills (technical skills) are balanced".

In accordance with the results of the study, mastery of technical skills is useful for knowing how well academic skills and technical skills can be processed by students during field work practice (PKL).

In the Ministry of National Education (2008) Preparation of pre-PKL regarding various components related to student PKL is the responsibility of the school such as implementation time, debriefing of students and mentors. The timing of the implementation of the PKL is the school party as the determining party, but the timing must also be mutually agreed between the school and the DU/DI where the practice will be later. The school, which has to take the initiative to pick up the ball, is looking for the right time for street vendors and the agreed time is so as not to interfere with the production process in DU/DI. However, in fact, these things are not in accordance with what is expected, especially in producing graduates who are ready to work, because the managers of vocational education are still oriented towards improving the organization's internal and lack of socialization from the school to DU/DI so that street vendors are only carried out as a formality.

Based on the initial assessment obtained based on interviews with the chairman of the Construction Technology and Property Expertise Competence Competency Modeling Design and Building Information Design Modeling and Building Information (DPIB) SMKN 9 Garut that the obstacles faced by this skill competency are as follows:

- 1) Student input on DPIB skill competencies is the remainder of other skill competencies during registration, therefore the spirit of learning also affects students. There are some students who are not able to participate in learning such as drawing practice so they resign.
- 2) In the PKL process there is a gap between DU/DI, because the school lacks a link to DU/DI.
- 3) The understanding between the existing curricula is very different from the needs of DU/DI.
- 4) The equipment or computer specifications in core I3 schools and in DU/DI have core 7 differences, so that when street vendors learn to adapt again.
- 5) The limitations of computers are 1:2, so 1 computer is used by 2 students alternately.

Based on these facts, the authors want to know how the implementation of strengthening street vendors in improving the technical skills of vocational students to face the world of work.

2. Methodology

This study uses a qualitative research with a descriptive approach. Data collection techniques through observation, interviews and documentation studies.

3. Results and Discussion

Based on the findings of the implementation of strengthening street vendors in improving the technical skills of vocational students to face the world of work are as follows:

Based on the findings of the implementation of strengthening street vendors in improving the technical skills of vocational students to face the world of work, it is carried out based on the opinion of Siagian, P (2004: 120): "Motivation is as a whole process of providing encouragement to work to subordinates in such a way that they want to work sincerely in order to achieve organizational goals efficiently and economically". In line with the opinion of George R. Terry in Sukarna (2011: 82) that:

"Actuating is setting all members of the group to want to achieve and to strike to achieve the objective willingly and keeping with the managerial planning and organizing efforts.

The activities are as follows:

a) Preparation of street vendors journal

Based on the research findings, the preparation of PKL journals for SMKN 9 and SMKN 7 Garut students filled out their respective journals independently. This journal is made as complete as possible in accordance with learning topics/types of work and other tasks given by industry supervisors, accompanied by notes of important events (learning experiences) during street vendors activities.

Journaling by students is a student's daily record during street vendors in DU/DI. This journal is reported to the DU/DI supervisor once a week. So as not to disturb the end of the street vendors as well as consultation. Consultations and evaluations are carried out every week or after the targets given by DU/DI. Journals containing daily activities can be added with input/suggestion fields for work from DU/DI. Small but routine suggestions will make students learn faster than the overall evaluation at the end of the implementation because the progress at the end of the evaluation cannot be monitored.

In addition to making journals, students also make a portfolio of street vendors. The PKL portfolio documentation is prepared by students under the guidance of the DU/DI supervisor. Portfolio documentation is made by compiling learning experience notes from all work/learning activities in DU/DI which come from PKL activity journals. The compilation results are then poured in the form of a portfolio document. Portfolio documents of the results of PKL activities in DU/DI are used as material for student assessment, because the results of this portfolio are presented to DU/DI and schools.

With these activities, it can be seen what activities students do while at the street vendors, the materials obtained and their respective assignments, either in 1 place of DU/DI or different DU/DI.

b) The PKL process in schools and in DU/DI Competency of Building Modeling and Information Design (DPIB) expertise.

PKL DPIB SMKN 9 Garut is held for 3 months every year. There is something different with street vendors in 2020, because with the covid 19 pandemic the implementation of street vendors is carried out in schools. Of course there are differences between street vendors in DU/DI and in schools. This is also related to the policies of DU/DI and their respective schools.

DPIB SMKN 9 Garut students carry out street vendors in DU/DI. Students are handed over by a supervisor to the DU/DI which then the authority lies with the DU/DI what will the PKL implementation look like DU/DI have different PKL implementation models DPIB SMKN 9 Garut students carry out street vendors in DU/DI. Students are handed over by a supervisor to the DU/DI, which then the authority lies with the DU/DI what will the implementation of street vendors look like. DU/DI has a model for implementing street vendors that differs from one another given the complex and varied types of work in DU/DI. The following are some of the implementation of PKL DPIB SMKN 9 in DU/DI:

(1) Studio Work

On the competence of DPIB expertise, the field of work in DU/DI is drawing buildings or planning areas. In this PKL model, students during the PKL are in the office or studio to draw only. Most of the DU/DI assign assignments to students. Students are only given a brief explanation of the description of the location and function of the building which is then continued to draw the design of the building. The disadvantage of this model is that students cannot see directly but only get an image. The advantage of this model is that students can be more proficient in drawing because they can learn more models and designs of buildings such as not only houses and offices but also hotels, towers and so on. However, this kind of work is due to the limitations of DU/DI, where the project is located outside so that there is no opportunity for students to see the location directly.

Based on the results of research at PT. Dirgantara Jaya Konsulindo, students who follow street vendors at PT. Dirgantara Jaya Konsulindo received a lot of material that was much different from the material that had been studied at school, in addition to the material and facilities provided at this company, it was much better than the one in the school, for example, from the computer capacity there were Lumion specifications, at school there were no students can develop soft skills.

(2)Fieldwork and Studio

The planning work can be divided into two jobs, namely survey work and drawing work. In survey work, students are given the task of measuring the land and knowing the location of the project to be built. The field experience provided by DU/DI is also different. At PT. Dirgantara Jaya Konsulindo invites students in the field to observe or see the shape, size and details of the building directly. So that from seeing objects that already have hope when drawing students, there are immediately shadows. Because the image items on the building are quite numerous and detailed, so it takes experience in the field to present it visually. And this is where the difference in school with DU/DI students can immediately see the objects of practice in the field when street vendors so that the learning provided is more memorable and not just a shadow. After students observe what students see, it can be visualized through working drawings in the studio.

If you look at the findings of this research, of course the PKL implementation process runs according to what is the PKL guide from the Ministry of Education and Culture for students, this is of course the role of the DPIB teacher is very influential in being able to establish good communication with DU/DI so that PKL can be implemented in partners.

This is in accordance with the decision of the Minister of Education and Culture No. 323/U/1997 that the implementation stage is the stage where students carry out learning in industry. Ideally, the duration of the prakerin implementation refers to the achievement of competency targets in accordance with the standard of expertise. Elements involved: teachers, principals, vice principals for public relations, school committees, and partner institutions (DUDI). Monitoring the implementation of prakerin in the Business/Industrial World (DU/DI) is very necessary because the supervision aims to determine the success of the prakerin implementation.

This is also consistent with research from Hergert (2009) that Field Work Practices (PKL) play an important role in helping students make connections between traditional courses and their workplaces, while research from Nicholas (2016) states students connect and apply their academic experiences to street vendors can increase their chances of working or entrepreneurship.

This is also reinforced by the results of research conducted by Moses (2017) that school industry cooperation is very important for both institutions (schools and industry) because it allows industry to get competent and knowledgeable workforce at low costs because industry without knowledge cannot develop to survive. , developing its public reputation while increasing its corporate social responsibility (CSR). For schools it is possible to produce quality, competent graduates with quality skills in accordance with the needs and demands of DU/DI.

However, if you look at the results of the implementation of PKL DPIB SMKN 7 during the covid 19 period, PKL was only carried out in schools, the assignment was also based on the duties of the teacher, of course the experience gained between street vendors at school and in DU/DI was different. As a result, there must be innovation from teachers so that the implementation of PKL remains in

accordance with the PKL goals aspired to in the Ministry of Education and Culture's PKL Implementation Guidelines for Vocational High Schools.

c) Use of learning media in schools and in DU/DI Competency of Building Modeling and Information Design skills (DPIB)

The use of PKL learning media in DU/DI certainly varies depending on the tools and media owned by each DU/DI. However, when compared to the existing learning media in schools, such as the computer specs in DU/DI, of course, it is more sophisticated than the computer specs at school. This needs to be a special concern for schools, especially the competence of DPIB expertise, where for this competency students really need computer specs with supporting applications so that students' technical skills can continue to be honed, because with frequent practice, students' imagination and innovation will continue to develop.

d) Communicating the objectives to be achieved in the PKL Competency of Building Modeling and Information Design (DPIB) skills with DU/DI by the school.

In terms of communicating the goals to be achieved in street vendors, the supervising teacher conducts monitoring which is carried out once a month. In addition, to monitor students who are in DU/DI. Monitoring of teachers to DU/DI is also intended to connect communication with DU/DI. Because it is also necessary to discuss about students with DU/DI in the middle of the PKL because the progress or improvement of student learning in DU/DI is also still the responsibility of the school. Inputs from DU/DI become school records to make and implement their programs better.

Based on the results of the study, the benefits that students get from PKL activities are increasing knowledge from what schools have not been taught in where street vendors are taught to do the work, learn to adapt to new environments, especially in the world of work, learn to be independent and more mature.

Meanwhile, according to PKL organizers in the Public Relations section, that the benefits of street vendors are many, such as adding knowledge, insight, mental training to be more confident, independent, work faster too because students already have links to work in industry, and for those who have internships on average they have been appointed. as employees of the industry where they are street vendors with a contract system.

Based on the results of the study, the benefits that students get from PKL activities are increasing knowledge from what schools have not been taught where street vendors are taught to do the work, learning to adapt to new environments, especially in the world of work, independent learning and being more mature

e) Holding meetings that can stimulate students in PKL Competency of Building Modeling and Information Design (DPIB) skills with DU/DI.

Monitoring is also carried out with the aim of: monitoring and responding to information and problems faced by students during street vendors, serving student consultations about the problems they face in companies where street vendors are implementing and serving student consultations in making reports through existing communication media, especially with regard to report writing.

In addition, this activity is intended to obtain feedback in order to improve the quality of the implementation of street vendors. The scope of monitoring the implementation of PKL includes placement, preparation of PKL programs, PKL material, implementation of PKL programs, intensity of mentoring, problems while students carry out PKL and others.

Based on this description, it can be concluded that the implementation of strengthening street vendors in improving the technical skills of vocational students to face the world of work has been carried out.

4. Conclusion

The implementation of strengthening street vendors in improving the technical skills of vocational students to face the world of work has been carried out simultaneously by all vocational school managers and expertise competencies.

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