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COOPERATION BETWEEN VOCATIONAL HIGH SCHOOLS AND WORLD OF WORK: A CASE STUDY AT SMK TAMAN KARYA MADYA TAMANSISWA

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Abstract

The purpose of this study was to find out: the school strategy, procedure, forms, and evaluation to cooperate with the world of work. The type of research is qualitative with a case study approach. The subjects in this study were the head of the department, the chairman of the special job fairs, the vice-principal of public relations, the vice-principal of curriculum, the head of competence skills, and industry that were in cooperation with the school. The methods of collecting the data were in-depth interviews and documentation. The results show that: (1) the school strategy in cooperation with industry began with industry visits, requesting permission to do industrial practice, good communication, submitting proposals related to school potential in the form of profiles, being active in participating in school promotions, utilizing the role of industry as a guest teacher, being a pre-service place and outsourcing to industry; (2) the cooperation procedure analyzed the community, in this case, the world of work, established communication, and Involved world of work; (3) the forms of cooperation were the training of skills improvement in the field of science and technology, exchange of information, curriculum synchronization and development, implementation of internships, implementation of competency and certification tests, industry visits, industrial work practices, special job fairs, recruitment; (4) the evaluation of management in the implementation of the cooperation was included in the "good" category.

Keywords*: strategy, cooperation procedures, evaluation*

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INTRODUCTION

Improving the quality of education is a process that is carried out continuously. The improvement of education quality is expected to be implemented from elementary to higher education levels. Vocational High School (*Sekolah Menengah Kejuruan* or SMK) is one of the educational institutions built by the government of Indonesia to advance education, especially in preparation to face the demands of quality workers and improve the economy in the country. Vocational schools have distinctive characteristics that distinguish them from other high schools (*Sekolah Menengah Atas* or SMA and *Madrasah Aliyah* or MA), namely, their close relations with the world of work. At the beginning of the establishment, vocational schools are designed in such a way to make students work, continue or become entrepreneurial and, in their learning process, using learning by doing method (Hamid & Sudira, 2013, p. 3).

Based on Law of Republic of Indonesia No. 20 of 2003 on National Education System article 15 paragraph 2, vocational education is secondary education that prepares participants to study, especially to work in certain fields. However, based on data from the Central Bureau of Statistics, the number of the labor force in August 2018 was 131.01 million people, which is an increase of up to 2.95 million compared to August 2017. In line with that, the labor force participation rate also increases by 0.59%, and viewed from education level, the open unemployment rate for vocational high schools is still dominating, which is 11.24% (Central Bureau of Statistics, 2018).

Vocational education in Indonesia is getting into a new phase. Presidential Instruction No. 9 of 2016 concerning the revitalization program of vocational high schools, followed by a memorandum of understanding between the relevant ministries, apparently becomes the driving force for vocational education in the country. Even, some people call it the third vocational education reform, after the first vocational education reform in 1964, and the second reform in 1976. Vocational high school revitalization is expected to en-hance the quality of Indonesian workers who are statistically still growing below the level with the majority of basic education levels. This program is expected to give a positive impact on improving the quality of vocational secondary schools with two new orientation pillars. The first pillar strengthens the links of SMKs with business and industry in the 21st century, and the second pillar pushes local excellence into global excellence.

It is related to the principles of vocational education described by Prosser (1925) in Djojonegoro (1998, p. 38) that 16 princi-ples can be found in vocational education, and some of them are related to the role of indus-try. There are three principles, namely:

> *"Vocational education will be effective if (1) training tasks are done in the same manner, tools, and machinery as specified in the workplace, and (2) training someone in the habit of thinking, and work as needed in work itself. (3) Voca-tional education will be efficient if the environment where students are trained is a replica of the environment in which they will work".*

Based on the research by PH (2011), in building harmony (link and match) with other systems, especially harmony with the general economic system or the world of work particularly, vocational education is more directed to demand-driven than supply-driven, which is done through more actual learning that is not merely textual, more concrete than ab-stract, which refers to more reality than artifi-cial, to be more real than virtual, and all of them demand vocational education to draw closer to the world of work proactively. It is in line with Soenarto, Amin, and Kumaidi (2017) that vocational education must always adjust to the needs of the community, espe-cially industry needs, so that vocational high schools (SMKs) must establish cooperation with the industry as the users of graduates. Vocational education must be designed so graduates have the skills, abilities, knowledge, attitudes, and work habits that are appropriate to the needs of the workforce.

The government has launched a Link and Match program between SMK and industry since 2017. Until its tenth launch, Monday (3/18/2019), 5,000 vocational high schools were not covered by this program. The Director-General of Primary and Secondary Education of the Ministry of Education and Culture, Hamid Muhammad, said that his institution appreciates the link and match vocational edu-

cation program between SMK and the industry. Moreover, in Indonesia, there are 14,260 vocational high schools, and 10,600 of them are private schools. "In addition, 5,000 SMK did not cooperate with the industry. We are worried that these SMKs will produce graduates who are unable to compete for jobs," he said on the sidelines in the launching of the Link and Match vocational education program with the Java Region Industry, West Java, Indonesia, at PT Anugerah Indofood Barokah Makmur, Sukabumi (Arief, 2019).

The cooperation of vocational schools with the industry has many benefits, one of which is based on the results a research by Wibowo (2016) which concluded that the concrete steps that schools could take to reduce the gap between SMK and industries related to the competency of SMK graduates are to prepare competent workforce both in terms of hard skills and soft skills according to the industry expectations. SMK could implement program activities as follows: (1) teaching factory program, (2) management of industrial work, (3) management of industrial visits, (4) organization of industrial classes, (5) on job training programs, and (6) counseling and coaching from stakeholders related to labor.

Pillay, Watters, Hoff, and Flynn (2014) examine dimensions of effectiveness and efficiency: a case study on the industry – school partnerships. Internationally, the delivery of vocational education and training is challenged by increasing skills shortages in specific industries or rapidly changing skills requirements. The study found that some evidence of partnership activities related to efficiency and effectiveness could be assigned to the gateway school project. Nevertheless, little evidence was found that those under-lying principles were handled systematically. Some of these partnerships are loosely facili-tated by individuals who have limited infra-structure or strategic support. The implication is that partnerships in schools will benefit from applying the partnership principle re-garding implementation and management to ensure the sustainability of the partnership.

However, many problems are still found in the implementation of cooperation. An evaluation research by Syari and Ma'arif (2017) explains the problems found in the cooperation's implementation are the lack of students' enthusiasm to work in the industry, the delay in the announcement of test results, and the industry has less attention to students. Other researches also found the problem of the cooperation's continuity between SMKs and the industry, such as, a research by Arifin (2012) which aims at obtaining an empirical picture and developing the patterns of partnership cooperation between SMK and industry in strategic planning, implementation, effectiveness, results and benefits in the quality development of SMKs. These results show that generally, all vocational schools in the city of Yogyakarta have collaborated in partnership with industry partners, especially in the implementation of street vendors programs. As a form of partnership with the industry, the scenario of developing partnerships is outlined in School Development Plan (*Rencana Induk Pengembangan Sekolah* or RIPS) as a form of implementation of strategic management and partnership in school development. However, the majority of SMKs have not been able to empower all potential industry partners for the schools' development, especially in developing learning resources needed in the development of the learning process, production units, and services, as the production-based education and work-based education cannot be implemented yet.

Until the end of 2015, there were still SMKs that had not been able to maximize the procurement of infrastructure needed for direct learning (practice). Even these things sustained by the school were pioneered by Ki Hadjar Dewantara, started on July 3, 1922, in Yogyakarta. Only 30% are eligible to operate, 300 schools belonging to Tamansiswa College have been suspended due to lack of funds. "Tamansiswa College has difficulty supporting itself, due to lack of students," said Sunarno Hadiwijoyo, the Deputy Chairperson of the Noble Council of Tamansiswa Asso-ciation, on the sidelines of the meeting (or *sarasehan)* event (2/5/2012) located in the Tamansiswa Meeting Hall, Central Jakarta (Indriasari, 2012).

Besides, Indriaturrahmi and Sudiyatno (2016) believe that the role of the industry in encouraging local government policies related to the development of vocational-based local wisdom has not been adequate; there is no cooperation related to the provision of facilities and infrastructure, and curriculum development in the form of curriculum workshops.

Commonly, the cooperation between SMKs and industry is in the form of industrial work practices (Arifin, 2012a). The most prominent research findings at the school cooperation program are the implementation of street vendors, internships for teachers and technicians, curriculum validation, competency tests, and recruitment of prospective employees.

The indicators of school success in establishing cooperation are shown by (1) the formation of a special public relations team or cooperation team with main tasks and programs to be able to (successfully) build partnerships, (2) the implementation of exploratory cooperation with related parties to obtain input before implementing the program, (3) the realization of the cooperation contract as outlined in the memorandum of understanding (MoU) or cooperation agreements with related parties, (4) the realization of various activities in the successful implementation framework program such as (a) exchange of students, teachers, principals, school committees, and school leaders to add insight and competence; (b) teacher apprenticeship to other institutions to improve competence, etc (Department of National Education, 2009, p. 64).

Collier and Mcmanus (2005) examines setting up learning partnerships in vocational education and training: lessons learned. Their article reported what is helping and hindering the integration of learning partnerships in this program. Some of the issues explored include: how to build learning partnerships to encourage participation best; desirable quality of effective learning partners; and the important role played by facilitators in preparing learning partnerships.

Then, SMK Taman Karya Madya Tamansiswa Purworejo is a suitable vocational school to be a reference for other vocational schools because of the 100% graduation rate and 95% community satisfaction. Besides, it also has successfully cooperated with the largest and well-known industries in Indonesia, such as PT PLN (Persero), PT Dirgantara Indonesia, PT Bukaka Teknik Utama, PT Pama Persada Nusantara, PT Pindad, PT Mekar Armada Jaya, PT Plasindo Plasma, Jasatec Engineering Purworejo, PT Gaya Motor, UPT LLK Purworejo, and other industries that have a good impact on the absorption of graduates.

Based on the description of the problems, in this study, it is clear that the cooperation of vocational high schools with the industry starts from the school's strategy in cooperating with the industry, the procedures for cooperation with the industry, describing the forms school cooperation with the industry, and evaluation of the school cooperation implementation with the industry. Thus, from the research objectives, a flow profile starting the cooperation between the vocational school and the world of work is found.

RESEARCH METHOD

This research was conducted at SMK Taman Karya Madya Tamansiswa Purworejo with competence in Computer and Network Engineering, Electrical Utilization Installation Engineering, Mechanical Engineering, and Industrial Mechanical Maintenance Engineering. The process of data collection is divided into three phase, they are: (1) the phase before the study, (2) the phase during the study, and (3) the phase of leaving the research location. The data were collected using the following techniques: (1) interviews, (2) observations, (3) document analysis, and to meet the requirements of ontology and epistemology issues, participatory observation, interviews, audio records, video records, and potential photography naturally as part of the reality of SMK Taman Karya Madya Tamansiswa Purworejo vocational cooperation with the industry were also employed.

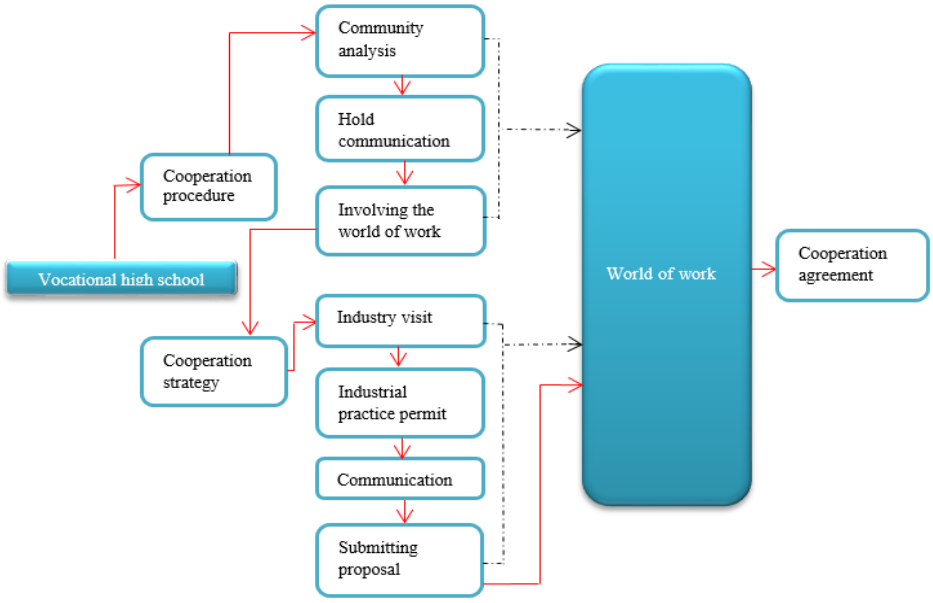
The type of data in this study are primary data and secondary data. Primary data were collected by researchers directly from data sources. The researchers used observa-tions and interviews to collect primary data. The informants in this study are (1) school principal, (2) vice chancellor for curriculum (3) chairperson of special job fairs, (4) public relations, (5) heads of Computer and Network Engineering, Electricity Utilization Installation Engineering, Mechanical Engineering, and Engineering Industrial Mechanic Maintenance, and (6) representatives of key industries. Secondary data were collected by researchers from various sources available at SMK Taman Karya Madya Tamansiswa Purworejo in the form of cooperation agreements with the working world. The study was conducted in three months, from February to April 2019, and was previously surveyed in December 2018 to January 2019.

RESULTS AND DISCUSSION

The results of this study found that the cooperation strategy with the working world of a profile in the SMK Taman Karya Madya Tamansiswa Purworejo starts from the first procedure, namely community analysis. Some activities are conducted in community analysis, such as examining various potential industries and institutions that exist around the school area which include business types, production types that include goods and services produced by companies or institutions, qualifications of available workforce, tasks performed, and expertise/skills that can be obtained at the company, practice facilities or production facilities available, making sure that the capacity or number of students acceptable for training institutions and qualifications from the world of work can be classified as large, medium or small companies, and making an assessment of all relevant skills that can be obtained in each industry, in this case, examining the right skills that stu-dents can obtain for each study program in parts or divisions and subdivisions.

The second process in maintaining schools' relations with the industry is communication. In this context, after SMK Taman Karya Madya Tamansiswa Purworejo obtained various information needed about the industry, the school then communicates with the working industries, which will be invited to work together. The next procedure involves the industry in school activities such as pro-viding motivation and direction before the de-parture of industrial work practices, introduc-ing the industrial culture, and participating in monitoring students' developments during the industrial work practices.

After the procedures for the cooperation process are carried out, it is followed by a strategy in working with the world of work (the industry). The strategy includes industrial visit activities, then proceed with obtaining permission to conduct industrial practices, and holding a communication that leads to the establishment of cooperation in this communication. SMK Taman Karya Madya Tamansiswa Purworejo explained the profile of the school, then proceed with the submission of the proposal for cooperation. The process is shown in Figure 1.



Line description:

Cooperation flow : ⟶

Coordination line : - - - - -

Figure 1. Profile of Cooperation Strategy Taman Taman Madya Tamansiswa Purworejo Vocational School

Through the aforementioned explanation, it is clear that the process of implementing cooperation between SMK Taman Karya Madya Tamansiswa Purworejo with the world of work needs to follow some procedures. All of the procedures are crucial, especially in creating good communication with all parties responsible for cooperation with the world of work, such as the Chairperson of the Special Occupation Exchange for requesting permission from the Chair of Public Relations, the Chair of Public Relations then establishes communication with the industry. Information about the results of communication is conveyed to the Principal, and the Principal made an agreement related to the cooperation to be carried out.

Then, SMK Taman Karya Tamansiswa Purworejo has a special team in cooperation with the working world. This team is in the scope of community relations work, where the task of the group is establishing and maintaining good communication between the institution and both internal and external parties related to the world of work as the whole stage of cooperation, starting from procedures and strategies in cooperation, and also the distribution of graduates of SMK Taman Karya Madya Tamansiswa Purworejo.

Community relations are supported by a special job fair, which aims to provide (1) career selection guidance for graduates so that they find jobs suitable with their interests, talents, and competencies, (2) inter-work services which include registration and data collection of job seekers, data collection of job opportunities, providing guidance to job seekers of graduates, bidding to users of the workforce regarding labor supply, implementation of verification as a follow-up to the delivery and placement that has been carried out, the implementation of labor market exhibition activities and other activities, (3) workforce planning, which includes helping to identify skills and abilities as well as identifying suitable jobs, helping to build skills for getting a job such as the ability to complete correspondence and completing requirements for applying for jobs, preparing for work interviews and developing the ability to market them-selves, (4) job market information, and (5) job analysis in terms of providing career counsel-ing and work placement information, which is aimed at making better decisions of work leading to more satisfying and productive careers for students or graduates to enter the workforce, they are ready to make decisions about better job choices for more satisfying and productive career goals.

Based on the cooperation strategy, SMK Taman Karya Madya Tamansiswa Purworejo also has several stages in coopera-tion, including the implementation of a co-operation assessment with related parties to obtain suggestions before implementing the program. The cooperation assessment is con-ducted in the form of good communication and coordination that continues to be carried out at the stage of the cooperation process, which finally turns out to be the realization of the cooperation contract as outlined in the memorandum of understanding (MoU) or cooperation agreements with the world of work. In line with the research results conducted by Isbianti (2009) stated in a series of public relations activities, the flow of information, both incoming and outgoing information, is very important. The target of information can be said in the form of internal and external communities, which, indeed, in public relations activities convey information inevitably occurs. This information can arrive at its destination through communication, so the success of this communication plays an important role for the success of public relations activities.

All processes in the strategy need good communication with the industry because all of them determine whether the industry wants to work together or not. Industrial visits and industrial work practices are the forms of cooperation that are generally carried out by SMKs, so the assessment of the vocational workforce will be invited to cooperation is taken when the process of applying industrial work practices and good communication during the industrial visit. Therefore, the school must prepare students who will be apprentices in industries to have indeed passed the separated examinations conducted by teachers at school. All of the process through the procedures and strategies are united as an effort to make the world of work knows SMK Taman Karya Madya Tamansiswa Purworejo well. Thus, from these efforts, it is hoped that the world of work will work together in supporting the course of education in SMK Taman Karya Madya Tamansiswa Purworejo.

The cooperation agreement between SMK Taman Karya Madya Tamansiswa Purworejo with the industry is not only in the form of industrial work practices but also in other forms of cooperation that have been carried out, including increasing skills training participants in the fields of science and technology, exchanging information in the form of science and technology, synchronizing and curriculum development, implementation of internships for teachers, implementation of competency testing and certification, industry visits, special job fairs, and recruitment/placement of graduates, explained as follows:

Improvement of Training Participants in the Field of Science and Technology

The role of humans in an organization is very important. As technology demands and intense competition, human resource competencies in organizations must be optimized through competency-based employee education and training. It has a positive impact when competent human resources are able to bring personal success to enhance organiza-tional performance. Human development in organizations provides quality and work capabilities that will have an effect on improving organizational performance. Thus, the higher frequency and quality of education and training will increase human resources.

Competent and quality human resources can be obtained by developing the existing human resources in the agency. One of the development activities is through education and training activities. By providing education and training, human resources are expected to be able to work more efficiently and be able to carry out tasks better so that a reliable workforce can be realized. According to PH (2013), the excellence of human resources was the key to competitiveness because human resources will determine who is able to maintain survival, development, and victory in global competition. Superior quality human resources have creative, innovative, flexible, technologically literate, skilled, and multiple intelligences.

Exchange of Information in The Form of Science and Technology

One of the exchanges of information programs in the form of science and technology is between PT Bukaka with SMK Taman Karya Madya Tamansiswa Purworejo. Thus, using technology together with other resources to integrate (assimilate) and adapt existing technology. The development of science and technology in the world of work can be a reference for SMK Taman Karya Madya Tamansiswa Purworejo to improve and think long-term, then to be able to plan how to learn in the future, so that it can be in accordance with the development of existing technology in the future. Through this cooperation, the industry also gets an overview of vocational school development in the field of technology.

A research by Suhartanta and Arifin (2010) expressed several forms of cooperation carried out by schools with stakeholders in increasing information exchange, particularly in terms of exchanging information on technological developments related to qualifications and labor competencies needed by industry to support activities in his business. Technology and information networks must be optimized as far as possible, so the information can be useful for those who need it, especially in the development of education in educational institutions to improve the quality of education.

Related to the opinion of Dean (1997), the experience of business network development was initiated through a network program project between 1991 and 1993. The pilot business network project in Australia was carried out by The National Industry Extension Service (NIES), which is a joint venture between the commonwealth government with eight territory states. From the pilot project, according to Dean, two business conceptions of the developing business can be classified, namely "hard" and "soft" networks, where soft networks are more towards informal business networks, which are basically for information exchange. Further, Dean revealed that the business network should not be forced, but the government continues to provide direction, and business people are allowed to conduct business cooperation on their own initiative.

Synchronization and Curriculum Development

SMK Taman Karya Madya Tamansiswa Purworejo cooperates with PT Main Technical Bukaka in the form of validation and synchronization, and curriculum development. The result of interview with the deputy

head of curriculum at SMK Taman Karya Madya Tamansiswa Purworejo is as follows:

> *"Synchronization and curriculum development are the main agenda once a year at SMK Taman Karya Madya Taman-siswa Purworejo. We invite the world of work, both those who are bound by the memorandum of understanding (MoU) or not to each competency expertise so that it is truly learned that we will teach according to work carried out in the world of work. Curriculum development can only be carried out by competent instructors. Discussions with industry must still be implemented intensively".*

It is expected that the synchronization and curriculum development at SMK Taman Karya Madya Tamansiswa Purworejo, with the assistance of the world of work, will pro-duce a curriculum which has a content more relevant to the competencies needed by the industry.

The results of this study are the development of previous research conducted by Jatmoko (2013), which states that revamping the curriculum is one of the important things that must be the focus to improve vocational graduates. However, this improvement must also involve all relevant elements so that the results can be significant. As an example, the results of research conducted by Yudantoko and Arifin (2016) which state that the level of competence relevance between the competency profile in the curriculum document school-based curriculum Vocational Automotive Body Repair Engineering in Bantul Regency and the competency profile of the business world and the automotive body industry sector shows a figure of 27.211% or it can be said not relevant to what is needed by the industry.

Implementation of Internships for Teachers

To increase the competence of productive teachers to miss the development of the technology developed by the industry, teachers in SMK Taman Karya Madya Tamansiswa Purworejo were sent to attend On the Job Training (OJT) in the industry in accordance with the competency to be applied in the school activity. In line with Gunadi (2013), there needs to be a partnership between the Educational Workforce Educator Institute, schools, and industry to realize the quality human resources of prospective teachers.

Each expertise competency of at least two people is sent to join the OJT every year. Thus, the teacher can know which potentials must be sharpened in learning to produce competent students according to the competencies needed. In this case, the teacher can start from the first step, which is analyzing Competency Standards and Basic Competencies to be learned. Then what indicators must be done to achieve these basic competencies and competency standards. Next, the teacher can design teaching preparation and arrange strategies and learning methods suitable to be given to students. Therefore, students can easily understand in learning these competencies, and students can be competent and apply them in the industry after graduation.

Implementation of Competency Tests and Certifications

Vocational high school is a vocational education institution that prepares skilled workers ready for work. SMK graduates also take the skills competency test to get a competency certificate that can be used to find work in the industry. Competency Certificate is written recognition proof of competency achievements in certain qualifications given by an accredited education unit or an author-ized certification body.

An SMK graduate can have more than one competency certificate, depend on the expertise program he has taken at the vocational school. For example, an SMK graduate with a Mechanical Engineering expertise program can have six certificates for the competence of Welding Engineering, Metal Fabrication Engineering, Metal Casting Engineering, Mechanical Engineering, Industrial Mechanical Maintenance Engineering, and Mechanical Drawing Engineering.

Competency certificates for vocational students are given after they have passed the skills competency test. The skills competency test is part of the national exam for vocational students, consisting of vocational theory exams and vocational practice exams. After students graduate the skills competency test, a certificate of competency is given by the Professional Certification Institute, recognized by the National Professional Certification Board.

One of the objectives of the skills competency test is to facilitate vocational cooperation with the world of work to carry out competency tests that are in line with the industry's needs. In implementing skills com-petency tests, SMK involves the world of work or international, national, or local scale institutions, which have main jobs that are relevant to the competency of the tested student skills. Hopefully, the world of work can see directly and recognize the competence of vocational students so that it can be directly absorbed as a workforce by the industry.

Examiners in the skills competency test also consist of internal examiners (teachers) and external examiners. External examiners are human resources from the world of work /industry/professional associations/institution have educational background and assessors who have competency certificates and work experience relevant to the competency expertise to be tested. The results of competency tests that are successful/competent obtain a certificate from the world of work, who failed/ did not competent is required to repeat.

World of work involved in the skills competency test implementation includes PT. Bukaka, Jasatec Engineering, and the world of work are not even bound by the MoU. The competency test is held at the SMK Taman Karya Madya Tamansiswa Purworejo. SMK Taman Karya Madya Tamansiswa Purworejo hopes through cooperation in the form of the skills competency test and certification, and it is expected that the world of work can support the activities so that they can find out about developments in the SMK.

Industrial Visits

During industry visits, students will learn about activities in the industry, and see the work processes carried out by employees, and they can also learn how the standard operating procedures must be practiced by an employee. Industrial visit is important to give insight to students as early as possible and get an overview of the world of work environ-ment before the they carry out their jobs.

The implementation of industrial visits through public relations programs is specifically for tenth-grade students because this activity is a provision for them before later attending the Dual System Education, which will be held in eleventh grade. An example of the industrial visit undertaken by SMK Taman Karya Madya Tamansiswa Purworejo is at the Wadas Lintang Kebumen Reservoir, in Kebumen, Central Java, which was attended by 64 students of the Electricity Utilization Installation Engineering expertise program.

Industrial Work Practices

Industrial work practice is an educational training and learning activity done in the world of work relevant to competence. Students do an industrial internship at the world of work for three months after receiving report cards and declaring grade XII. It is expected that students will know and feel the working climate in the industry directly. In practice, students may choose/determine the location of the industry for new industries that can be done by conducting an MoU in ad-vance or a review by the school to determine the feasibility of the industry as a place of industrial practice. According to the results of a research by Firdaus (2012), schools need to establish synergistic work with industry, in order to find an appropriate and relevant prac-tice apprenticeship with an organized exper-tise program.

Good communication between the school and industry can always maintain cooperation. It greatly helps in the implementation of further internships. Then, it always endeavors that in the implementation of internship there are no problems between students, the industry and schools, so the internship implementation always gives a good impression (Iriani & Soeharto, 2015, p. 15).

The pattern of selecting the world of work for internship places are (1) relevant and representative to the world of work to expertise competencies, (2) meeting the standard of work carried out, (3) and the world of work care for students who carry out an internship. Provisioning of participants in the apprenticeship program was done before and after the apprenticeship, which usually provided the material from relevant industries that cooperated with the world of work. As long as students do practical learning activities continually, the teacher gives the material to students by giving assignments or in the form of modules. To find out the development of students while in the industry, monitoring and evaluation by the school supervisor are done once a month.

Cooperation in industrial work practices is in line with Baiti and Munadi (2014) who found that there is a positive and significant effect between practical experience on work readiness and a variable that shows the greatest contribution to other variables in the research. Thus, it is expected that from the experience of industrial work practices, students are ready with work in the workforce. Lestari and Siswanto (2015) state that through the apprenticeship activities, schools need to continue to improve synergistic cooperative relationships with industry. This cooperation is expected to improve the quality of the results of the internship both for students and the industry. With good labor practices results, it will provide many benefits both for industry, schools, and students.

Special Job Exhibitions

The indicator of the success of a vocational education institution is not only assessed from the acquisition of the National Examination that produces a high graduation rate, but it is also determined by how much graduates that can be absorbed by the world of work. Schools usually have work programs that can provide career guidance to their students at certain times, provide information on job opportunities to prospective graduates, and have open links and matches with graduate user institutions in order to foster cooperation with institutions to improve student competencies. Special job exhibitions is a job market that provides job market information, registration of job seekers, provides counseling, and mentoring positions, as well as the distribution and placement of job seekers.

According to Pambayun and Wagiran (2014), the performance of special job exhibitions from each SMK will influence the absorption of graduates into the relevant workforce. Special job exhibitions that have good performance can carry out programs that become obligations and other programs that have been planned, have relationships with many companies or industries so that the dis-tribution of graduates becomes wider and can reduce the waiting period for graduates to get a job. Further, it can provide career guidance to both students and graduates, so they can choose and have career knowledge and are better prepared to enter the workforce.

A common special job exhibition management strategy is establishing mutually beneficial partnerships with the world of work. The affairs of graduate placement are not solely the needs and advantages of the school. However, special job exhibitions must also be able to convince partners that they will also have benefits if they can develop cooperation with special job exhibitions. The form of industrial cooperation with the Taman Karya Madya Vocational School Purworejo scholarship related to the major tasks of the special job exhibitions itself is information about employment vacancies in the industry, so that all developments, especially in the search for new workers in the industry will be conveyed directly to the Chairman of the special job exhibitions in SMK Taman Karya Madya Tamansiswa Purworejo.

Recruitment/Placement of Graduates

Graduates of SMK Taman Karya Madya Tamansiswa Purworejo are expected to working, continuing to college, or even becoming entrepreneurs. Through a good process in school activities, it is expected that the graduates are high in quality so that the absorption of the requests from the industry to use the graduates increase. The special job market for schools is obliged to facilitate/ bring together job seekers (graduates) with users (labor search companies). The absorp-tion of graduates received in the world of work in 2017/2018 is 91% working, 4% conti-nuing education, 0 entrepreneurship, and 5% not working. An example of an industry that cooperates with SMK Taman Karya Madya Tamansiswa Purworejo in the form of labor recruitment is PT Pama Persada Nusantara.

The implementation of each activity has been prepared as well as possible. Meeting with all members in the school and the internal meeting between each head of the expertise program have been planned as well as possible so each division in the school supports each other. Each activity is always started with a briefing, and evaluation is always conducted after the activity ends. The course of the activities is reported to the principal so that they can be appropriately monitored.

Researchers also found potential in supporting cooperation with the world of work, one of which is the admission of new students

is different from other schools. The enrollment for new students is earlier than other schools, and stricter selection for new prospective students based on junior high school report from semester 1-5 is appropriately maintained, so that good input is obtained. In line with that, based on the results of research conducted by Arif and Sofyan (2019), the supporting factors in vocational cooperation with industry include support from the government related to link and match, school and industry commitments, enthusiasm from students and teachers, adequate school facilities and infrastructure, as well as the high quality of human resources.

SMK Taman Karya Madya Tamansiswa Purworejo also instills a basic sense of responsibility in teaching and learning activities following the school motto "Discipline of Success". The discipline character is always attached to SMK Taman Karya Madya Tamansiswa Purworejo. As one of the main strategies in shaping students' better character, SMK Taman Karya Madya Tamansiswa Purworejo also cooperates with Kodim (a military service office) 0708 Purworejo, for coaching the younger generation through scouting activities.

Scouting activities are compulsory for class X (ten) to familiarize students' disciplinary attitudes and are also equipped with a book entitled "Fixed Procedures for Integrated Discipline Development", which explains various procedures when becoming a student at SMK Taman Karya Madya Tamansiswa Purworejo, including sanctions for violations. Every violation committed has an index record, which, if the index has reached 100, students can be expelled from school.

It is in line with the research results conducted by Wahyuna (2013), that one of the characteristics of work that they want to instill in schools is discipline. All regulations written in the rules and sanctions are regulated closely related to the inculcation of the character of work carried out. Efforts to embed the character of work are outlined in various activities, both in intra-curricular, co-curricular, and extra-curricular activities. Many parties help to inculcate this work character, both from the community, the business world, and from the relevant agencies. From institutions, there are the village, sub-district, district, and provincial governments, the Education Office, Naval Base Commander, the National Police, the Marine and Fisheries Service, the Sea Transportation Office, the Health Office, the marine and fisheries schools or shipping schools, beach SAR (search and rescue), and the world of work.

Through learning, the values of these characters do not stop at the cognitive level, but they touch the level of internalization and real experiences in the daily lives of students in the community. It is in accordance with the life teachings of Ki Hadjar Dewatara, called "*Tringa*", which includes understanding, feeling, and implement, reminding all teachings, the ideals of life that we profess require understanding, awareness, and sincerity in its implementation. Knowing and understanding are not enough if we do not feel and realize, and they have no meaning if we do not implement them and fight for them.

It is in line with the aim of developing vocational education by Sudira (2012) that, holistically, it should not be reduced only to the process of forming technical skills merely for meeting the economic needs. Vocational education and vocational training are not limited to schooling. Vocational education is education that leads to the process of enculturation and acculturation which processes the civilization of a new generation of future that takes place in schools, families, industries, businesses, and a porous open society, so that the implementation of character education in vocational schools can promote harmony between the characters developed in schools with habituation at home and society.

Then, for improving teacher competence, once a year, In House Training is still held. The material in this In House Training covers teacher professionalism improvement, development of teaching and learning strategies, classroom action research, preparation of teaching and learning instruments, improvement of teacher character, and curriculum 2013. The materials provided in the In House Training were from Sarjanawiyata Tamansiswa University, Yogyakarta. In the In House Training industry, bound cooperation also takes part in curriculum development, so that what is taught is really what is done in the industry.

One of the advantages in cooperation with the world of work is that students have more opportunities to get jobs in industries that

are bound by cooperation with SMK. Based on the latest data from the tracing data of SMK Taman Karya Madya Tamansiswa Purworejo in the 2017/2018 academic year, of the total 330 students of class XII, 280 are already working, 31 are continuing to higher education level, six graduates are becoming entrepreneurs, and 13 graduates have not worked yet. The distribution of labor in SMK Taman Karya Madya Tamansiswa Purworejo has begun since students are in class XII, so before graduating, they have joined the selection to the industry first. Even some of them have been accepted to work in the industry before graduating from SMK Taman Karya Madya Tamansiswa Purworejo. Thus, based on the success indicators in establishing cooperation/partnerships, the cooperation maintained by SMK Taman Madya Tamansiswa Purworejo with the industry/the wolrd of work is good.

CONCLUSION

The results of the study conclude that (1) the school's strategy in cooperation with industry begins with industry visits, asking permission for industry practice, establishing good communication, submitting proposals related to school potential in the form of profiles, the school's active participation in school promotions, utilizing the role of personnel from the world of work as a guest teacher, and providing sources for pre-practice and outsourcing to industry. (2) Cooperation procedures at SMK Taman Karya Madya Tamansiswa Purworejo include analyzing the community, in this case, the world of work, conducting communication, then involving the world of work. (3) The forms of coopera-tion with others are: improvement of training participants' skills in the field of science and technology, information exchange in the form of science and technology, synchronization and curriculum development, implementation of apprenticeships for teachers, implementa-tion of competency tests and certifications, industry visits, industrial work practices, special job fairs, and recruitment/graduate placement. (4) Evaluation of the management implementation of SMK Taman Karya Madya Tamansiswa Purworejo in its cooperation with the world of work is included in the good category.

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