

The School Strategy to Produce Graduates Ready to Work at SMK-SMTI Padang

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Abstract—This research was conducted at the SMK-SMTI Padang using descriptive qualitative methods. The purpose of this study was to determine the efforts made by SMK-SMTI Padang in increasing the absorption of graduates in the occupational world. Considering the achievements achieved by Padang Vocational High School-SMTI, it needed to be emulated by other vocational schools to improve the quality of graduates so they can be accepted in the occupational world. Padang Vocational High School is known as a school with a waiting period for graduates to work less than 2 months. On average each year around 80% of graduates of Padang Vocational High School were accepted to work in the workforce. This figured exceeds the target set by schools that is 60% of graduates absorbed by the workforce each year. The findings in the field stated that the Public Relations Department at Padang Vocational High School has several programs that have succeeded in making the achievements of graduates ready to work after graduating school. The efforts undertaken included visits to industry, internship teachers, collaboration with both domestic and foreign institutions.

Keywords— Cooperation, curriculum, Industrial Vocational School

I. Introduction

Vocational High School (SMK) is a formal level of education that provides special skills and prepares graduates ready to work. As one of the alternative educational channels to overcome unemployment, SMKs are responsible for creating and producing human resources who not only have academic abilities but are also accompanied by expertise in certain fields of science. Vocational schools are able to facilitate the young human resources with enthusiasm and fighting spirit that are still 'fresh'. Of course, the Business World and the Industrial World (DU / DI) tend to choose a young and skilled workforce because they can be more creative and innovative at work.

Based on data from the West Sumatra Central Statistics Agency (BPS), it was recorded that from 2.62 million workforce in February 2017 there were

7.86% of unemployed people who came from SMK graduates. This is an indicator of the low absorption of labor by the occupational world and the lacking of quality human resources that meet the demands of the workforce from vocational graduates. This fact is certainly not in line with the expectations of the government towards vocational schools, in fact, the unemployment rate is mostly contributed by vocational education levels.

Table 1. The Rate of Opened Unemployment Population Aged 15 and Over

Pendidikan Tertinggi yang Ditematkan	2015		2016		2017
	Februari	Agustus	Februari	Agustus	Februari
(1)	(2)	(5)	(6)	(5)	(5)
SD Kebabawah	2,44	2,98	4,81	2,63	4,24
Sekolah Menengah Pertama	4,45	3,80	2,65	4,43	4,96
Sekolah Menengah Atas	8,34	12,30	5,66	8,17	6,76
Sekolah Menengah Kejuruan	11,75	13,32	7,67	7,46	7,86
Diploma I/II/III	8,87	11,25	13,69	6,71	7,88
Universitas	11,40	8,23	10,12	5,76	8,12
Jumlah	5,99	6,89	5,81	5,09	5,80

Source : BPS Sumbar No. 28/5/13/Th XX, 05 May 2017

There are several factors that cause this problem to happen. In terms of the learning process, SMK itself has sought to maximize and guarantee the quality of graduates. Such as establishing cooperation with the world of occupation and industry through several programs that have been designed in the learning system, for example doing field practice for students at a certain level. However, these efforts face several obstacles and challenges such as competency gaps resulting from schools sometimes not in accordance with the competencies expected and needed by the occupational and the industrial world.

This can be caused by school curricula that are not in line with what is expected by the occupational world and student practice tools that could be far behind the world of occupation and industry which tend to be more updated with the latest technology. Bentri et al., (2014) that "The implementation of the curriculum is important in the stages of the implementation of education, the actual implementation of the curriculum that is the learning process occurs in the classroom, and outside the classroom". This means that curricula in vocational

schools must also be adjusted to the needs of business and industry as school partners. Based on the constraints mentioned, it needs continuous efforts towards a systematic, concrete and measurable program from educational institutions to develop an adequate education model so as to produce graduates who truly meet the qualifications to enter the business world and the industrial world.

In order to fulfill that responsibility, SMKs must have a strategy and develop a curriculum that is in line with what is needed in the workforce. The goal is that vocational graduates can be accepted at business world (DU) and industrial world (DI) when they finish school later. Some efforts are needed from the school management to collaborate with stakeholders in order to build public trust in SMK. As revealed by Hanif (2015) "The implication of this definition is that all the systems and the responsible parties (students, community, government, universities) for the success and failure of higher education". Schools as well as tertiary institutions need to maintain a sense of responsibility in implementing education and ensure each component of performance to its stakeholders that universities (in this case schools) have provided quality education.

In order to fix the curriculum, the strategies that schools undertake should produce something that is truly beneficial for the school. Vocational Schools with their characteristics that can produce skilled young workers, must strive for something to realize it. The example can be establishing cooperation with DU/DI, holding workshops for students involving speakers from target companies of SMK graduates, visits to DU/DI and other programs in order to boost business interests of SMK graduates.

The efforts made to produce competent graduates in vocational schools also need to be done continuously. The strategy drawn up is not just square off but a series of work which is clearly sitting on the case. Umar (2010) says that strategy always starts from what can happen not starting from what happened. This means that in order to produce competent graduates, it must be dealt with by predicting the challenges that will be faced in the field or observing the needs needed by the workforce now and for the future.

The research result of Ali (2013) proved that cooperation (partnership) between SMKs and stakeholders was one of the plus points of schools in developing the quality of graduates. It is clear that a successful school, in this case a vocational school, creates graduates who are ready to work not only produced by the school as individuals, but it needs intervention from other parties to achieve this success. Schools need to engage with the wider community or with other stakeholders (Gistituati, 2009).

The cooperation that is formed will certainly broaden school relations in placing students in carrying out industrial practice activities (Prakerin). Moreover, the cooperation formed will also help graduates to get

jobs because they have tested their competence when implementing internship. It can also be taken into consideration for the business world and industry as well as private companies in the selection of labor recruitment based on the experience possessed by students graduating from vocational schools.

In order to form a school collaboration with DU/DI, many things must be fulfilled. One of them is in terms of internal schools in order to be able to adjust the needs of DU/DI which are the target of cooperation. Murniati (2009) said that all school programs involved internal members of the school and school committees, the applicable curriculum and its development were adapted to the needs of DU/DI as well as regional developments or conditions. The statement explains that the collaboration established by the school is not only about the signing of the work agreement, but also have to be adjusted to the needs of the school partners.

One of the vocational schools that continues to strive to create graduates ready to work is the SMK-Middle School of Industrial Engineering (SMK-SMTI) of Padang. Based on data cited from the Public Relations Department of SMK-SMTI of Padang, on average each year graduates of this school are absorbed by the workforce as much as 80%. In 2017, 110 of 197 students worked after graduating from school and some were even recruited by the company before graduating from school. This data would certainly be good news for SMK graduates. Padang Vocational High School is able to produce graduates needed by DU/DI with a waiting period of approximately two months.

Padang Vocational High School (SMK-SMTI) itself is basically the same as other vocational schools, carrying out learning on normal days and implementing industrial work practices programs for students at a certain level. The difference is that Padang Vocational High Schools have established many MoUs with several companies which are targeted for graduates. Teachers through the direction of School Public Relations go directly to DU/DI to introduce their schools as well as to carry out promotional activities and establish good communication until a work agreement is formed. As expressed by Dardiri (2015) that the promotion aimed to persuade stakeholders to react to the products or services offered.

Based on the background of the problems above, the purpose of this research is to find out the efforts made by Padang Vocational High School in improving the absorption of graduates in the occupational world. Considering the achievements achieved by Padang Vocational High School-SMTI, it needs to be emulated by other vocational schools to improve the quality of graduates so they can be accepted in the world of work.

II. Methods

The research on school strategies in producing graduates ready to work at SMK-SMTI Padang uses a qualitative approach with descriptive research type. Moleong (2007) emphasized that qualitative research was research that aimed to understand phenomena about what was experienced by research subjects such as behavior, perception, motivation, actions and others. The using of a qualitative approach is inseparable from the suitability of the research topic carried out using a qualitative approach. Thus, in order to explain the topic of this study, the qualitative approach is considered appropriate to explore information and data obtained from informants related to the research problem. The informants in this study are the principal, vice principals, teachers, and students who have carried out practices in industry or have not yet implemented. Other information was also obtained from alumni. Some of these informants were chosen because they are the people who can provide the data needed in this study. However, the key informants in this study were the vice principals in the field of public relation and curriculum.

The instrument or data collection tool in qualitative research is the researcher. Researchers as instruments must be ready to conduct research and go into the field directly. By using a qualitative approach, the data will be obtained more complete, more in depth, credible and meaningful so that the research objectives can be achieved. The data needed in the form of programs designed by schools to realize graduates who are ready to work, forms of cooperation and steps to establish cooperation and the percentage of graduates absorbed in the world work. This type of descriptive writing was chosen to describe and systematically explain the school's strategy in producing graduates ready to work at SMK-SMTI Padang. Information and data obtained in the field will be explained descriptively.

III. Results and Discussions

Results

Padang Vocational High School is a vocational school located at Jalan Haji Juanda No. 2 Padang, West Sumatra. The school which was founded in 1967 was originally known as the High School of Technology (STMA) with a four-year study period. Based on the Decree of the Minister of Industry, Number: 235 / M / SK / 1985, on July 25, 1985 there was a change in name from STMA to SMTI with a 3-year education program by having one study program namely Industrial Chemistry. In 2019/2020 school year, SMK-SMTI Padang opened a new major, Industrial Automation Engineering with a 4-year educational program.

Padang Vocational High School is a school under the auspices of two ministries, namely the Ministry of Education and Culture and the Ministry of

Industry. Under their management, the school follows the rules that apply from both ministries. SMK-SMTI Padang has a good reputation in the ranks of Padang City environmental vocational schools. A series of achievements achieved by this school both intra and extracurricular. For example, getting first place in the West Sumatra Provincial Student Competency Competition and representing it up to the national level, getting second place at the provincial level National Examination and many other achievements.

Besides various achievements in the academic and non-academic fields, SMK-SMTI Padang is also known as a school with a waiting period for graduates to work less than 2 months. On average each year, 80% of graduates of Padang Vocational High School are accepted to work in the workforce. This figure exceeds the target set by schools that is 60% of graduates absorbed by the workforce each year.

The results of the study provide findings that SMK-SMTI Padang have done their best in producing graduates ready to work. The success of schools delivering graduates to the occupational world is an effort made by school management from planning to implementation in the field. The efforts undertaken by the school are to provide training to students and teachers in the form of practical material and to hone soft skills, form partnerships with various parties such as the apprenticeship of teachers and students in companies to facilitate several companies that are willing to recruit special employees of SMK-SMTI of Padang graduates.

The achievement of SMK-SMTI Padang in preparing graduates ready to work is one of the Public Relations Work Programs and is fully supported by other fields such as curriculum, student affairs and infrastructure facilities. This program is the flagship of 9 programs owned by the Public Relations Department of SMK-SMTI Padang.

The work program designed by public relations is a strategy to produce graduates who are ready to work. The 9 work programs owned by SMK-SMTI of Padang include:

- 1) School of Industrial Entry, namely activities in the form of comparative study activities to companies conducted by students and accompanied by teachers;
- 2) Sister School is a collaboration program formed by schools with schools and universities originating from the same field as SMK-SMTI of Padang;
- 3) School Promotion and Dissemination, namely activities carried out by schools by empowering teachers and employees who come directly to the company to promote schools and graduates;
- 4) Praktek Kerja Industri (Prakerin) namely apprenticeship activities for students in companies that have collaboration with schools;
- 5) Graduation Ceremonial, which is ceremonial activities because they have completed their studies;

- 6) Company Recruitment, which is an activity in which the school facilitates companies that are willing to recruit special workers for Padang-SMK vocational high school graduates;
- 7) Junior High School Science Week, which is a science competition for junior high school students as well as a form of school promotion to prospective new students.
- 8) Ethics Training, namely training conducted by schools for students who will carry out internship activities by bringing in resource persons from practitioners who work in the company, the material provided in the form of work climate in the company and provision for becoming employees in a company
- 9) Active in the Industry Association. SMK-SMTI of Padang is participating in the Industry Association Forum to approach several companies that are targeted by schools to establish cooperation. The purpose of this activity is to produce an MoU with companies in apprenticeship activities both teachers and students.

The work program designed by the Public Relations Division can be maximally implemented with support from other fields. The curriculum field is one of the most important parts in this regard. There are several important activities in the curriculum work program to support the Public Relation work program in producing graduates who are ready to be accepted to work.

The curriculum field designs curriculum development programs which include activities that have a major contribution in supporting the Public Relation program in producing graduates ready for work, including:

1) Synchronizing the curriculum

It is a program that is carried out with a Focus Group Discussion (FGD) pattern involving practitioners from companies and industries. The activity discusses the compatibility between the material taught in schools with those needed by industry. Therefore, representatives from schools and industries were brought together to discuss it in discussion forums. The result of this activity is an evaluation for the school especially in the field of curriculum to develop in the field of curriculum. This activity is a routine activity every year carried out by the Bidang Kurikulum.

For example in the national curriculum, the total number of hours of study that must be carried out is 48 hours of learning in one week. To meet the industry needs of the competencies of students who carry out apprenticeships or graduates who are recruited later, the school hours can be up to 50 hours of study in one week. The additional class hours contain material needed by students to have competence while in the workforce. Some new subjects will emerge because they are adopted

from industry needs that are not included in the national curriculum.

2) Teacher Internship

The internship program for teachers is also a program that supports students having the competencies needed by companies to be recruited into the workforce. Some competent teachers are traded in companies or industries to learn about work life, with the aim of returning to school, the teacher can give a real picture to students about the needs of the workforce for the workforce.

3) Silver Expert

Invite guest teachers who come from practitioners who work in the industry to provide technical knowledge in the form of the use of equipment in the industry to students.

4) Cooperation with PT VAPRO Indonesia-the Netherlands

The field of curriculum has been collaborating with PT VAPRO Indonesia-Netherlands since 2012 including in the field of curriculum synchronization that is studying the curriculum implemented by vocational schools that are applied in European countries and adopted into the curriculum at SMK-SMTI of Padang and conducting professional certification examinations international scale for students of SMK-SMTI of Padang.

Discussion

Creating graduates who are ready to work is the main target of vocational schools. To realize this a good program formulation is needed and involves many parties in its implementation so that the intended results can be achieved well. In vocational schools the success of a school is marked by the absorption of graduates in the business and industrial world. Because it indicates a confirmation or acknowledgment given by the stakeholders to the school because it has produced the needed labor.

The business and industrial world needs a lot of skilled and young and productive human resources. Resources needed by DU/DI can be produced by schools that have a vision and mission in line with DU/DI needs. That way, schools have demands that inevitably have to be met, namely producing graduates who can be accepted in the world of work.

Creating graduates who are competent and in accordance with market needs is an important task of vocational schools. For this reason, schools need to develop strategies to achieve this. Strategy is like a tool to achieve goals in the organization. Wina (2014) says that strategy refers to a plan to achieve something. To realize the objectives, the strategy requires a comprehensive effort from ideas, planning to the implementation of an activity within a certain period of time, so that the ideals of the school can be realized.

Efforts made to produce competent graduates in vocational schools also need ongoing efforts. Umar (2010) says that strategy always starts from what can

happen not starting from what happened. That is, to produce competent graduates, it is necessary to predict the challenges that will be faced in the field or observe the needs needed by the workforce now and for the future.

SMK-SMTI of Padang as a vocational school which is engaged in Industrial Engineering has succeeded in realizing its goal of creating graduates ready to work. From data obtained through interviews with Deputy Principal Public Relations, an average of 80% of Padang-SMK vocational high school graduates were accepted by companies and industries. This figure is higher than the target number of schools set out in the School Strategic Plan, which is 60%. The waiting period for graduates to obtain employment at this school is less than two months. This condition is a pretty good achievement achieved by vocational schools. Because vocational graduates do have a role to meet the needs of the world of work for skilled workers. The situation that occurred at SMK-SMTI of Padang is a recognition that vocational graduates deserve to work in companies or industries even at a relatively young age.

Based on the findings in the field, several data were found about the program designed by SMK-SMTI regarding their achievements in marketing their graduates to DU/DI. In this case good school management in becoming various collaborations with outsiders is the key to the success of this achievement. The Public Relation field is the most important part in realizing this.

The Public Relations sector has 9 work programs in realizing the goals of the school producing graduates ready to work. The nine work programs are a series of processes to create competent graduates by involving various elements from both the school and non-school parties. As a field that is responsible for collaborating with outsiders to market graduates to be accepted in the world of work, the Public Relations Department of SMK-SMTI of Padang has carried out its duties well. Work programs are arranged well with due regard to good work processes.

Forms of cooperation that are formed are not only focused on the final results, but prepare input and the process of a goal. For example, so students can carry out internship smoothly and have competence, the Public Relations Division equips students with various activities before implementing internship. SMK-SMTI of Padang has a target when students carry out internship, the company can provide opportunities for students to work after graduation. For this reason, the mental readiness of students going to the field must be mature.

The series of activities such as industry visits and ethics training are very good programs to be given to students. With this experience, students have begun to know what activities they will encounter when they are going to the workforce. This knowledge will shape students' mentality to be ready to work.

Other activities that are partnerships are also a measure of school success in increasing the percentage of graduates who are ready to work. Forming cooperation with companies or industries is a must for vocational schools. SMK-SMTI of Padang does not only collaborate in the form of student apprenticeship, but also in terms of mental development and provisioning of competencies needed by DU / DI or work recipients. SMK-SMTI of Padang is serious in channeling graduates until they are accepted in the company. Up to the stage of facilitating the DU/DI to conduct a special recruitment of graduates of SMK-SMTI of Padang. This condition is an activity which is very helpful to increase the percentage of graduates who are accepted into the world of work. In this case the school acts as a provider of information for students who want to work.

On the other hand, the role of the curriculum is also important. Activities that are considered to have a very helpful role are curriculum synchronization activities. As a school that educates students to be able to work in DU/DI after graduation, efforts to synchronize the curriculum that are owned by schools and those needed by industry are symbiotic activities of mutualism, namely mutual benefit between one another. Schools know what the prospective workforce really needs from the industry.

Cooperation with PT VAPRO Indonesia-the Netherlands is an activity that can support schools for the better. In this collaboration, SMK-SMTI of Padang obtained information about the development of vocational schools in European countries. The information obtained can be used as a reference as a step in innovating and planning school development in a better way.

IV. Conclusion

Based on the results of research and discussion of the efforts made by SMK-SMTI of Padang in the process of excavation that is ready for work, conclusions can be drawn about cooperation with various parties for vocational schools that are very important to do. Therefore, the collaboration created will produce work agreements to make the graduates ready to work.

Some of the activities that become work programs in the Public Relations Field in SMK-SMTI of Padang are 1) Schools Enter Industry; 2) Sister School; 3) School Promotion and Dissemination; 4) Industrial Work Practices; 5) Graduation Ceremony; 6) Company Recruitment; 7) Junior High School Science Week; 8) Ethics Training and 9) Active in Industry Associations. This activity received full support from all elements in the school.

The curriculum field also has a large contribution. Programs Field curriculum that helps in supporting public relations work programs to create graduates who are ready to work are 1) Synchronizing the curriculum; 2) Teacher Internship; 3) Silver Expert

and 4) Cooperation with PT VAPRO Indonesia-the Netherlands.

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