



The Vocational High School Partnership Program with Industrial and Business World to Improve Graduates' Quality

Yayat Suharyat^{1*},
Wawat Mulyawati^{2,}
Nomin^{3,}

^{1*}Universitas Islam "45" Bekasi, Indonesia yayatsuharyat@unismabekasi.ac.id ORCID ID:0000-0002-0082-7046

²Universitas Islam "45" Bekasi, Indonesia Wawatmulyawati62@gmail.com ORCID ID: 0000-0002-3848-0025

³PTDI-STTD nomin@ptdisttd.ac.id ORCID ID: 0000-0002-0245-2399

***Corresponding Author:** - Yayat Suharyat

*Universitas Islam "45" Bekasi, Indonesia yayatsuharyat@unismabekasi.ac.id ORCID ID:0000-0002-0082-7046

Abstract.

This study aimed to examine the relationships between vocational high school with industries or businesses in implementing the partnership program to improve the graduates' quality. It is observed and analyzed from the documentation of vocational school programs, and the stakeholders' experiences and perspectives on the development of vocational high school partnership programs. The study was conducted at a private vocational high school in Bekasi, Indonesia with the principal, the vice-principal of curriculum division, the vice-principal of human and industrial relations, and the students as sources of research. The data were collected by using interviews and observation to find the legitimate situation of the partnership program development at vocational school. It is also added with documentation to support the descriptive interpretative analysis used as a research method. The study results concluded that: (1) there were no partnership programs implemented at the vocational school, (2) there was not even any evidence of a Memorandum of Understanding had by the vocational school, (3) There was lack of facilities at the vocational school. In conclusion, these are affected the quality of the vocational school graduates.

Keywords: partnership, vocational school, industries

INTRODUCTION

The vocational high school program is purposed to strengthen vocational education that aims to prepare the graduates to enter the industrial or business world related to the fields' competencies. Conceptually, vocational education has been defined by Ireland (2008) as a range of courses or skills that prepare students for entry into the labor market. In addition, Byram and Wenrich (1956) state that from an academic point of view, it teaches people how to be productive. As an institution that aims to prepare for the needs of the workforce, the vocational high school is expected to act as a preeminent tool for business and industry in Indonesia to face the competition. global picture. Therefore, vocational high schools must enhance the skills of their graduates by undertaking the learning process in partnership with the industrial or commercial world (Jackson, 2015, p. 351). It is aimed to internalize the real world of workplace circumstances into a learning program so that the students will be able to master the exact competencies needed.

Therefore, vocational training programs applied in vocational schools are designed to focus on training students with specific vocational skills, also known as the dual education system. It

emphasizes the practical and psychological aspects of learning activities. The dual education system includes many forms, each of which encourages students to experience real-world work and learn and practice skills and knowledge in a real-world setting (Jackson, 2015). In addition, in order to maximize and ensure the quality of their graduates, vocational schools have introduced their students to the world of work as soon as possible through a number of programs designed within the system. apprenticeship system for a certain period of time.

However, the reality shows that vocational education development still faces a high unemployment rate due to an imbalance between educational production and employment. In addition, the availability of formal employment in which the number of the labor force annually continues to increase and does not match the availability of employment opportunities. Based on data from the Central Bureau of Statistics, the number of unemployed in August 2021 was 9.10 million with an open unemployment rate (OPR) of 6.49%.

In addition, to ensure the quality of graduates, vocational schools also face many obstacles and challenges. One is the emergence of a skills gap between vocational school graduates and the skills needed in the world of work (J Puckett, et.al, 2012). Missing organizational structure, theory-based learning, and ineffective planning are problems that contribute to unsuccessful implementation (Suharno, et.al, 2020, p.1). It then persisted structural problems that make it less relevant to employment which distressingly creates plentiful unemployment. Additionally, in the academic administration aspect, the development of learning programs is constant and structuralized because the educational instruments are legally-formally established, which can limit the creativity of program managers and seem to "avoid" change. Curriculums developed by vocational schools are sometimes not demand-driven (Suharno, et.al, 2020). On the other hand, the business world continues to evolve (change), although new technologies enter the business world first because they follow a market need. According to Walter (2010, p.613), vocational education is an educational program that prepares people for the world of work, both formal and informal. This understanding indicates that the outcomes of education in vocational secondary schools should create close partnerships with industrial or commercial parties as it will help graduates master a certain level of competence to enter the workplace in the future. This foundation has fit the concept of implementing the dual education system at vocational schools.

In conclusion, he pointed out that cooperation between educational institutions and the business or industry world is the key to the success of the dual training system in vocational schools. Then, organize and evaluate together to increase the relevance of the graduates' skills to the requirements of the labor market.. Some indicators related to graduates' quality improvement are the job waiting period, the suitability between the field of expertise and the type of work, and absorption in the world of work. The Dual System Education (J Puckett, J Davidson, E Lee, 2015, p.100):

- 1) Understanding industrial work culture packaged in learning patterns,
- 2) Introducing schools with expertise programs in the world of work,
- 3) Conduct promotions by distributing brochures to the world of work containing the competencies possessed by students,
- 4) Inviting industry and institutions to inform the program and as a bridge for the implementation of internship and recruitment.

The relevance of the partnership is to bring in a skilled and trained workforce. Partnership is a clear facilitator and approach in promoting sustainable national development, especially in vocational education (Okpor, Ikchukwu; Najimu, Hassan, 2012, p.92). This can be realized if the world of education is willing to establish a relationship to partner effectively as is the case with technical vocational education.

In summary, the partnership with the private sector in education becomes a tool to achieve development in a country, especially in the field of education to prepare and develop skills to improve human resources through vocational training. Moreover, practice proves that the country's economy relies not only on an educated population but partly on skilled workers who can quickly adapt to the needs of the market. labor. To achieve this, of course, cooperation with the private sector is necessary to achieve common goals. The partnership between vocational

education and the private sector needs support from the government, one of which is financial support as a strategy for successful governance and recovery of the country.

To build the system as mentioned above, one of them is to build a partnership so that vocational secondary schools can recognize the map of the world of work very early because when implementing learning Explore opportunities from the world of work through partnerships. with relevant agencies (Vinayan, G., 2020, p.96). Form of cooperation between the world of education and the world of business/industrial world in developing the concept of education can be started by harmonizing and developing sustainable communication. So, the students get sufficient and adequate provisions to be able to compete in the world of work.

The development of an educational partnership will be effective, as demonstrated by the success in achieving the indicators identified in the policy of establishing the partnership, such as improving the quality of learning. , the quality of student success, the relevance and relevance of the curriculum to the business world as well as increasing the absorption of graduates into the world of work.

The development of partnerships between vocational schools to improve the quality of graduates is the participation of all parties, of which the most dominant is the principal, vice-principal in charge of the curriculum, and Vice Principal in charge of Hubin/Student Affairs. SMKS students of the Bekasi City Education Development Foundation (YPP) have not shown the identity of the quality of graduates as a whole, they have a tendency to be less productive, human resources are not absorbed, and are unemployed due to weaknesses in the field of partnership and the business world so that the quality of graduates is not absorbed significantly. Thus, the focus of the problem in this research is to know the development of Vocational High School Partnerships with the Business World and to find out how the partnership steps are being taken to improve the quality of graduates at the SMKS Educational Development Foundation in the city of Bekasi.

METHOD

This research is qualitative, it also is said as an interpretative or descriptive method because of the focus on interpreting the data found in the research field, and it describes comprehensively. This method emphasizes the analysis of deductive and inductive conclusions congregating the dynamic relationship between the observed phenomenon with logical science or in a natural setting concept.

This research taken in a private vocational high school in Bekasi, Indonesia included the school's elements of engagement; the principal, the vice-principal of curriculum division, the vice-principal of human resources and industrial relations, and the vocational school students. The research data was collected with observation, interview, and documentation. Then, the results were analyzed by using an interactive pattern such as data reduction, data preview, and interpreting the conclusion. To ensure the validity of the data, a triangulation data technique was used by combining a one-shot data source from documentation with another combination of data from an in-depth interview and observation.

RESULT AND DISCUSSION

This study result found no partnership evidence between the institution and the workplace party in designing the industrial or business-based curriculum. The school, additionally, is lack proper workshop facilities. Moreover, based on fact, the school mostly does not have any agreement or MoU with the industrial or business world. However, the institution continuously establishes the bridge to get a network and synchronization with the industrial world to the school's curriculum to produce qualified graduates for the workforce needs. From the above conclusions, this can be explained by the results as follows:

1. No partnership program between the industrial world and the institution to design a dual system curriculum (industrial or business world curriculum). Based on the interview data interpretation with the school principal, he said that the achievement is insignificant. The partnership programs which mostly set up only for the formality of industrial apprenticeship or internship programs (*prakerin*). The school does not have a collaboration in preparing an industrial or business-based (dual system) curriculum. Even so, one of the indicators of the

success of vocational high schools is the relationship between the curriculum and the needs of the business world. However, not all vocational high schools are able to implement it. It had also stated by Khurniawan, et.al (2021) that the link and match between vocational schools and industry are considered not yet to occur as a whole and is still limited. This is similar to what happened to this private vocational school in Bekasi.

2. There was a lack of practical facilities and infrastructure at this private vocational school. The incapability of fulfilling the proper facilities and infrastructure created an imperfect result production on students' learning experience, especially the practical skills needed by the students to achieve the business and industrial world skills needed. As it is stated by Suharno (2020), mostly the facilities and infrastructures of vocational schools are insufficient, both in their quantity and advancement. In fact for the graduate students who had been working in the industrial or business world at this private vocational school, mostly takes a long time to adjust to the culture and demands needed. Moreover, Most of these schools, especially those in remote areas, both in Java and out of Java have insufficient facilities, whereas in fact heavy equipment and industrial machines are getting sophisticated. Such a condition is worsened by the weak competencies of Indonesian vocational school graduates (Suharno, 2020). It was the unachievable learning experience during the student's period of study that made them to actively practice and enhance their skills because of the lack of facilities and infrastructure.
3. There is no agreement set up by the school and the industrial or business parties. The vice-principal for industrial relations (HUBIN) of the private vocational school stated that there is no synchronization of curriculum, apprenticeship/internship programs, training program collaboration, and graduate distribution program collaboration. The school had difficulty building up networking with the industrial and business world due to the lack of management, networking, and support. Prosser and Quigley (1950) mentioned that vocational education will be effective only if it is properly managed. In fact, a study conducted by the national education department in 2010 on principal management competency proved that 30% of the principals are competent, while 70% of others are not (Suharno, 2020). In fact, the principals have an obligation to provide a quality educational activity for the students and a platform to enhance their technical skills for getting ready for workplace circumstances. One of the causes of weak links and matches between vocational schools and industries is the absence of intensive communication between both sectors. The schools are not well connected with industrial development, whereas, the students involved should have adequate

However, the school's stakeholders did not stop to continue building up a partnership and improving the school and graduates' quality. The school and the elements had set up some formula to reconnect the partnership program for the graduates' quality improvement by:

1. The school keeps taking active and innovative action to sustainably synchronize the learning materials on its curriculum to industrial and business needs. As it is stated by Fakhri & Munadi (2019) that the upgrades in the curriculum about work in the g environment and its adaptation in vocational high school education are always on top of the list for students' industrial internship programs. Additionally, the school will also take a deep analysis of the graduate students' experiences, working tracks, and current industrial and business world circumstances.
2. Extensively engage the graduate students who had excellent experiences, and capabilities in their workplace to equip the other students at this private vocational school through a workshop, a seminar, or coaching clinics to prepare the other students for facing the internship or apprenticeship program. The use of participatory and group learning will inspire students to acquire the necessary skills and achieve teamwork in the future of their careers (Mohammad Shafi, M. et. al, 2021). In addition, experienced graduates are envisioned as a resource to advance the education of current students, thus going "beyond the symbolism and fleeting happiness of the standard day of service." of the alumni association" (Ellison 2015, 53). So that the students of this school will get the knowledge and skills to achieve before they do the internship and their real-world workplace circumstances.
3. The school would also collaborate with independent parties (mentorships) and the industries or businesses world to create an intensive workshop or training to support students' skills development that will be needed at work. The use of participatory and team-based learning will inspire students to gain the necessary skills and to work in groups in their future of their careers (Mohammad Shafi, M. et al, 2021). In addition, experienced graduates are seen as a

resource to enhance the education of current students, thus going "beyond the symbolism and fleeting happiness of a day of service". standard". of the alumni association" (Ellison 2015, 53). An additional view also points out that the use of specialist workshops and laboratory technicians to teach practical units, so that technical and vocational students are expected to work in industry Karma. It is essential that the trainers are selected, especially to provide practical lessons, from qualified and experienced people with vocational training and knowledge of the needs of the labor market. (Mohammad Shafi, M. et.al, 2021). A beginning can be started by actively spreading the partnership proposals with a sustainable positive impact to offer for the quality of vocational education and the industrial or business world.

4. The school will enhance the stakeholder's understanding of creating a legal agreement with the industrial or business world. The first step to do is to contemplate and share opinions to improve the quality of human resources before creating the memorandum of understanding. Then the school design a concept of the partnership and the benefits got for the parties (the school, the students, and the industries or businesses). Lastly, start the communication and strategically build up the partnership and well-organized implement it. Because the effective implementation of the partnership program with the vocational education institution will create a massive benefit for the school by being able to implement the dual education system for the students, and it will help the industrial sector to get skilled workers, have the knowledge, and professional career.

CONCLUSION AND SUGGESTION

A. Conclusion

The graduate students' quality can be achieved from the development of the school program designed by the school and the stakeholders that are experts in adapting the curriculum to the needs of the industry or business world. In the process of providing vocational education, collaboration with internal and external members of the school is essential. The programs designed purposed to support the students in getting the skills for the workforce needs are mostly formulated as school activities including learning process programs, production units, internships, regional centers, relationship development, resource development, and realization of school existence. All these elements of educational activity can be got by actively implementing the partnership program with the industrial and business world.

Based on the results of research, it showed that the development of a partnership program to support graduate students' quality had not yet been achieved effectively. A number of inabilities actions of the schools such as not being able to set up any partnership program except the formal compulsory internship program set up by the ministry of education, not having any legal agreement with the industries and businesses that affect the student's lack of worked skills and experiences, and not having sufficient facilities and infrastructure at schools such as a proper workshop building/classroom, and the tools or the raw materials. However, these three components are essential for enhancing the students' quality based on the workforce's needs. Through the discussion of the research, a few suggestions can be drawn as follows:

1. The school principal and the stakeholders had to reevaluate the school's programs intensively which can lead to the students' quality improvement. The principal should also become actively open chance on connecting to the workplace Moreover, monitoring should also be implemented regularly to the graduate students and the industries or businesses they worked on
2. The management of the partnerships program at vocational school has to be reevaluated by creating a committee or division along with the deputy of industrial and business relations to proactively communicate with the industries and businesses world in promoting the school's existence.
3. Actively submitting the proposals to the related industries or businesses for collaboration programs which include the dual education system implementation, industrial work practice activities, graduate placements, and teacher's professional development in vocational education, utilizing certain roles of the business world as guest teachers or industrial visits. It then set out into a memorandum of understanding or a legal agreement.

REFERENCE

- Amin, M. (2016). *Vocational Secondary Education Spectrum*. Jakarta: Ministry of Education and Culture.
- Baitullah, Muh. J.A., & Wagiran. (2019). *Coooperation Between Vocational High Schools and world of work: A Case Study at Taman Karya Madya Tamansiswa Vocational School*. Jurnal Pendidikan Vokasi 9 (3), 280-293.
- Béduwéa, C., & Giret, J. F. (2011). *Mismatch of vocational graduates: What penalty on French labour market? Journal of Vocational Behavior*. 78(1), 68–79.
- Byram, H. M., & Wenrich, R. C. (1956). *Vocational education and practical arts in the community school*. New York: The Macmillan Company.
- Cachia, M., Lynam, S., & Stock, R. (2018). *Academic success: Is it just about the grades? Higher Education Pedagogies*. 3(1), 434–439. <https://doi.org/10.1080/23752696.2018.1462096>.
- Cantor, L. (1991). *Vocational education and training in the developed world*. The Vocational Aspect of Education, 43(2), 173–182. <https://doi.org/10.1080/03115519108619450>.
- Christine A; Zavotka, Susan L; Teaford, Margaret H. (2010). *Implementing a University-Community-Retail Partnership Model to Facilitate Community Education on Universal Design*. Scholarly Journals. 5(44), 697-702.
- Ellison, Julie. (2015). *Happy Graduation. Now What? From Citizen Students to Citizen Alums*. Change: The Magazine of Higher Learning 47 (1): 51-53. Accessed November 1. <http://www.changemag.org/Archives/Back%20Issues/2015/January-February%202015/perspectives-graduation-abstract.html>
- Henry-Noel, Nayanee., Bishop, Maria., Gwede, Clement. K., Petkova, Ekaterina., Szumacher, Ewa. (2019). *Mentorship in Medicine and Other Health Professions*. Journal of Cancer Education (2019) 34:629–637 <https://doi.org/10.1007/s13187-018-1360-6>
- Jackson. D. (2015). *Employability Skills Development In Work Integrated Learning: Barriers and best Practice*. Studies in Higher Education, 40 (2) Pages 350-367.
- Khurniawan, A.W., Sailah, I., Muljono, P., Indriyanto, B., Maarif, M. S. (2021). *The Improving of Effectiveness School-Based Enterprise: A structural equation modeling in vocational school management*. International Journal of Evaluation and Research in Education (IJERE) Vol. 10, No. 1, March 2021, pp. 161-173
- Nahriana & Arfandi, A. (2020). *The Co-operation of Vocational High Schools and Industries in Achieving Graduates Competence*. Journal of Educational Science and Technology 6 (3), 301-309.
- Neyestani, M. R., Jafari, S. E. M., & Taghvaei, V. (2021). *The Quality Improvement Indicators of the Curriculum at the Technical and Vocational Higher Education*. International Journal of Instruction, 14(1), 65-84. <https://doi.org/10.29333/iji.2021.1415a>
- Okoye, K R E; Chijioke, Okwelle P. (2013). *Private Public Partnership And Technical Vocation Education And Training (TVET) In A Developing Economy*. Arabian Journal of Business and Managemement. Vol.2, 51-61.
- Okpor, Ikechukwu; Najimu, Hassan. (2012). *Public-Private Partnership for Skill Acquisition and Vocational Technical Education Development in Nigeria*. Mediterranean Journal of Social Science. Vol. 3, 91-94.
- Riyanto, Yatim. (2010). *Paradigma Baru Pembelajaran: Sebagai Referensi bagi Pendidik dalam Implementasi Pembelajaran yang Efektif dan Berkualitas*. Jakarta: Prenda Media.
- Rohiat. (2010). *Manajemen Sekolah: Teori Dasar dan Praktik*. Bandung: PT. Refika Aditama.
- Sarjono, Yetty, 2013. *Pendidikan Anak-Anak Miskin Di Perkotaan*. Gumpang Kartasura: Fairus Media.
- Satori, Djam'an dan Komariah, Aan. (2010). *Metodelogi Penelitian Kualitatif*. Bandung: Alfabeta.
- Sugiyono. (2009). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung: Alfabeta.
- Suharno* , Nugroho Agung Pambudi, Budi Harjanto. (2020). *Vocational education in Indonesia: History, development, opportunities, and challenges*. Children and Youth Services Review. <https://doi.org/10.1016/j.childyouth.2020.105092>
- Undang-Undang Nomor 20 Tahun 2003 *Tentang Sistem Pendidikan Nasional*. Jakarta: Depdiknas.
- Usman, Husaini dan Akbar, Purnomo Setiady. (2009). *Metodelogi Penelitian Sosial*. Jakarta: Bumi Aksara.
- Wahjosumidjo. (2011). *Kepemimpinan Kepala Sekolah: Tinjauan Teoritik dan Permasalahannya*. Jakarta: Rajawali Pers.
- Yin, Robert, K, 2011. *Studi Kasus Desain & Metode*. Jakarta: PT Rajagrafindo Persada.
- Zhang, Shujie, & Rob Preece. 2013. *Designing and implementing Customs-Business partnerships: a possible framework for collaborative governance*. World Customs Journal 5 (1)