

Evaluation of Link and Match Vocational High Schools - Industry and Bussiness World in Improving Human Resources

Amin Nurita Fajar Astuti*, Samsudi Samsudi, I Made, Hadromi Hadromi

Universitas Negeri Semarang, Indonesia

* Corresponding Author: aminnurita@students.unnes.ac.id

Abstract. The government's efforts in improving the quality of human resources for Vocational High Schools graduates through the revitalization of Vocational Schools are divided into 5 managements (curriculum, human resources, cooperation, quality assurance, infrastructure). One form of cooperation is the Link and Match for Vocational High Schools - Industry and Bussiness World. The purpose of the study was to determine the evaluation of the implementation of link and match in improving the competence of Human Resources. The study was conducted using a qualitative method taking 7 Vocational High Schools in Wonosobo Regency. Data retrieval through data link and match Vocational High Schools - Industry and Bussiness World, Basic Education Data as of May 10, 2020, and open-question research data for 7 Vocational Schools. The data is processed by descriptive analysis. The results showed that the implementation of the link and match of the Vocational High School - Industry and Bussiness World that had been carried out was the implementation of industrial work practices, student competency tests and some had implemented industrial curriculum synchronization. Vocational High Schools have not succeeded in utilizing Human Resources from the expertise of industrial practitioners to the fullest. Based on the results of the study, it is recommended that there is a need for a review in the implementation of link and match of Vocational Schools-Industry and Bussiness World in improving the competence of Human Resources.

Key words: link and match; human resource competence.

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INTRODUCTION

Vocational Education is “the total process of education at developing the competencies needed to function effectively in an occupation or group of occupations” (Wenrich, 2004). In vocational education implicitly contained in the elements of thinking (cognitive), acting (psychomotor), and feeling (affective) in different proportions following the competency needs at the type and level of related work (Wenrich, 2004). Vocational education is a form of education that focuses on mastering skills to work. The better its implementation, the higher the level of industrial growth in a country will be (Malley and Keating, 2000).

Through vocational education, it can facilitate students' understanding of work experiences and equip them with work skills (Miller, 2020). Vocational education and training can play a fundamental role in enhancing a country's ability to cope with rapidly changing labor market conditions, providing not only youth but also older age groups with skills that match the needs of the labor market.

Various programs launched by the government to achieve the goals of Vocational High School have been carried out, such as the

Vocational School revitalization program which includes: curriculum, Human Resources, cooperation, quality assurance, and infrastructure. The success of the program is still not maximized. This is evidenced by the data of Vocational High School graduates who are still the largest contributor to unemployment as the Statistic Centre data in 2020 is a challenge for Vocational Education. Implementation in the field of each vocational education unit has not all been able to carry out the link and match program between vocational schools and industry to the fullest. Most of these programs are still at the level of formality programs.

To find out the gaps that occur, a general evaluation of the link and match program between Vocational School-Industry and Bussiness World is needed, as a guide for the future the program can be implemented by all state and private vocational schools, so that the vocational learning process can be in accordance with industry standards. The link and match policy has been implemented including the preparation of projections for the development of types, competencies and industrial locations, especially those related to vocational graduates; increase cooperation with the business world to

provide wider access for vocational students to carry out field work practices for educators and education staff, encourage industry to provide support in the construction of factories and teaching infrastructure, and accelerate the completion of work ability formulations which include aspects of knowledge,

To find out how far the evaluation of the implementation of link and match management in Vocational High School-Industry and Business World in improving human resources, this article will describe the results of research that has been carried out by collecting data on 7 vocational high school in Wonosobo Regency.

LITERATURE REVIEW

Link and match is a policy of the Ministry of Education and Culture of the Republic of Indonesia which was developed to increase the relevance of Vocational High School with the needs of the world of work, the business world and the industrial world in particular. "Link" and "match" requires that graduates have competitive insight or attitudes, such as work ethics (work ethic), achievement motivation (achievement motivation), mastery (mastery), competitive attitude (competitiveness), understanding the meaning of money (money beliefs), and attitude saving (attitudes to saving). The "Link" and "match" programs require a change in the mindset of all education implementers, both educational institutions and teaching staff, to be proactive in developing "Links" and "matches" with Industry and Business World. The process of implementing the "Link" and "match" programs for vocational schools requires collaborative management that is understood in the workflow by both parties Industry and Business World.

Cooperation management is a unique process and consists of actions such as planning, organizing, and monitoring that are carried out to regulate a relationship between educational institutions and industry. Meanwhile, according to Moss (1984) cooperation between schools and the business and industrial world is a continuous business unit to achieve common goals by dividing authority and responsibility. This collaboration is not only a supporter, but also cooperation in the sense of an equal partnership (partnership). In this kind of cooperation, the industry is not only a complement in providing advice or consultation on vocational education, but also in providing training and sharing the same authority and responsibility in improving the quality of education.

The implementation of the "Link" and "match" programs, in the context of the learning process in vocational schools, can refer to the theory of vocational education as stated (Prosser and Quigley, 1950) as the father of vocational education (vocational education) stated:

"vocational education is essentially a matter of establishing certain habits through repetitive training both in thinking and in doing, it is primarily concerned with what these habits shall be and how they shall be taught. When consider the matter a little further we find there are general group of habits requires 1. Habits giving adaptation to working environment 2. Process habits 3. Thinking habit".

This opinion is supported by Clarke & Winch (2007) in Suryadharma (2013), defines "vocational education is confined to preparing young people and adults for working life, a process often regarded as of a rather technical and practical nature".

This real link and match program is a collaboration program with Industry and the World of Worksuch as the development of industrial classes, on the job training of (OJT), Industrial Work Practices, and the role of Vocational High School as industrial relations for other schools. The implementation of good and mutually beneficial Vocational High School-Industry and Business World cooperation is very important to support the achievement of school programs. School development will be more optimal if the collaboration with relevant industry related agencies with expertise competencies is stated in the MOU / understanding / cooperation agreement text. Through engagement optimizationindustry overall learning in vocational schools is expected to be able to encourage an industry-standard vocational education ecosystem, such as curriculum, educational facilities, productive teacher capacity, instructors from industry, assessment and competency test.

METHODS

Research Goals

This research is conducted to find out how far the evaluation of link and match between Vocational High Schools - Industry and Business World implementation in improving human resources.

Samples and Data Collection

The data research are taken from the result of interviews using open question and data

documentation. Data documentation is taken from the ministry of Education and Culture in the part of link and match between Vocational High Schools - Industry and Bussiness World implementation. The data of open question interview were taken from the result of interview involving 7 vocational school in Wonosobo regency.

Analyzing of Data

The data in this study are analyzed in descriptive style. This finding certainly cannot be generalized to other locations. Still, it can be a consideration for practitioners in making the policies. This is as stated by (Cresswell & Poth, 2018), that although the findings of this method are difficult to generalize, understanding one case can develop a perspective on what is happening

in the field, which can shape practitioners' consideration for similar contexts and inform further research.

RESULTS AND DISCUSSION

Form of link and match Vocational High Schools - Industry and Bussiness World obtained from the basic education data of the Ministry of Education and Culture on May 10, 2020, 14.084 SMK collaborated, 272,788 collaborations between Vocational High Schools - Industry and Bussiness World the form of relationships, 190,842 industries that are partners of Vocational High Schools and 87 business fields of industry partners. The following is a table of forms of link and match Vocational High Schools - Industry and Bussiness World which has been running as of May 10, 2020.

Table 1. Form of Cooperation between Vocational High Schools - Industry and Bussiness World

Collaboration	Number of Cooperation	Number of VHS involved	Total Industry which is involved
Scholarship training	9	8	9
Industrial Grade	301	45	267
Teacher Intern	111	52	103
On the Job Training	4	4	4
street vendors	1.070	72	967
Recruitment	200,649	10.9795	146,026
Infrastructure	532	251	491
Certification	49	39	44
Workshop	946	426	826
More cooperation	12	10	10
	69.103	6.394	56,148

Source: Basic Education Data Kemendikbud as of 10 May 2020

The data in table 1 shows that vocational schools need efforts to increase the quantity and quality of the form of cooperation/partnership between Vocational High Schools - Industry and Bussiness World. Forms of cooperation between Vocational High Schools - Industry and Bussiness World the form of link and match, this is a collaboration that must continue to be improved to overcome the lagging behind of Vocational High Schools from Industry and Bussiness World. Through link management collaboration and match Vocational High Schools - Industry and Bussiness World It is hoped that Vocational High Schools graduates will become graduates as human resources who have competence according to industry needs.

The role of the Ministry of Education and Culture in the development agenda to increase superior human resources and be able to have

competitiveness is carried out by increasing the distribution of quality education services and increasing productivity and competitiveness through industrial cooperation-based vocational education and training. This program is implemented through optimizing engagementindustry comprehensively in the implementation of vocational education and training in order to encourage the quality of the industry standard vocational education and training ecosystem (curriculum, education and training facilities, teachers/instructors, internships, assessments and competency tests).

The Vocational High Schools curriculum must adapt to the needs of the industry in the field of educationimplementation of link and match collaboration Vocational High Schools - Industry and Bussiness World. The world of education must create learning conditions that are able to

synergize with industry. To achieve your link match, there must be achievement targets, including: 1) what kind of education the industry wants; 2) conduct jointly between Vocational High Schools - Industry and Bussiness World; 3) human resources like what the industry wants. Aspects of good character, able to communicate, able to work in teams, innovative, leadership, mastering foreign languages, mastering technology and information. If the soft skills of Vocational High Schools graduates are good, then the hard skills will be easier to create. As the philosophy of education is not only providing knowledge, but shifting towards guiding students to the spirit of learning and being able to learn without limits.

The concept of link and match is not only limited to an MOU but includes curriculum alignment, blended learning, guest teachers, industrial work practices, appreciation, training for teachers, commitment between vocational schools and industry, and scholarships from industry. The implementation of link and match is expected to be able to prepare qualified future generations to fill the future market. Until now, this ideal condition has not been maximally achieved, because there are obstacles faced in each educational unit.

Obstacles faced by Vocational High Schools, both public and private, especially in the facilities owned by Vocational High Schools are not yet in accordance with industry standards. The results of Sungkowo's research (2019) show that partnership management planning is carried out to manage potential schools for collaboration with the business and industry worlds including planning for school promotions, curriculum synchronization, internship students, graduate placement, teacher training, industry as guest teachers.

Research results about link and match Vocational High Schools - Industry and Bussiness World taken from 4 State Vocational

Schools and 3 Private Vocational Schools in Wonosobo Regency can provide an overview of implementation at the education unit level. The results of open questions to 7 Vocational High Schools about your link management match Vocational High Schools - Industry and Bussiness World as follows.

a. Link and match Vocational High Schools - Industry and Bussiness World

Link and match Vocational High Schools - Industry and Bussiness World in 7 (seven) public and private vocational schools in Wonosobo Regency, in general, they have implemented link and match programs for vocational schools and industry and the world of work. The link and match carried out is still limited to local industries around Wonosobo Regency, in accordance with the competence of expertise in each vocational school, including Motorcycle Workshops around Wonosobo, Krisna Hotel, KSPS BMT, Puskesmas, RSUD, BKD, Bank Jateng, and PT . Telkom in Wonosobo Branch.

b. Link and match management of Vocational High Schools - Industry and Bussiness World

Link and match management of Vocational High Schools - Industry and Bussiness World, from 7 (seven) Vocational Schools it was found that link and match is still very limited in the form of curriculum synchronization, which has not been maximized in its implementation. The team that handles the link and match of Vocational High Schools - Industry and Bussiness World in education units usually consists of Deputy Head of Public Relations, Deputy Head of Curriculum and Head of Expertise Competence, some Vocational High Schools have involved BKK.

c. Evaluation of link and match Vocational High Schools - Industry and Bussiness World

Evaluation of the link and match of Vocational High Schools - Industry and Bussiness World, from 7 Vocational High Schools the results were obtained as follows.

Table 2. Implementation of link and match evaluation of Vocational High Schools - Industry and Bussiness World

No	Evaluation Indicator	Percentage
1	Education unit evaluation	42.86
2	Industry evaluation	42.86
3	Evaluation of the Education Office	57.00
4	Supervisor Evaluation	42.86

Data Source: Results of open interviews via google form

From table 2, it can be seen that the implementation of the link and match evaluation

of Vocational High Schools - Industry and Bussiness World from 7 Vocational High Schools

is still very low with results below 60% who have carried out evaluations both in the evaluation in the education unit, evaluation from industry, evaluation from the Education Office and evaluation from supervisors.

d. Form link and match Vocational High

Schools - Industry and Bussiness World
The form of link and match Vocational High Schools - Industry and Bussiness World from 7 Vocational High Schools can be described as follows.

Table 3. Types of cooperation between Vocational High Schools - Industry and Bussiness World

No	Type of cooperation	Percentage
1	Curriculum synchronization	85.71
2	Apprentice Teacher	57.14
3	Guest Teacher	14.29
4	Intern Student	28.57
5	internship	100.00
6	Labor Recruitment	42.86
7	Competence test	100.00
8	Industry visit	42.86
9	Teaching Factory	0
10	Industrial Grade	0

Data Source: Results of open interviews via google form

From table 3. it can be seen that the type of cooperation between vocational schools and industry from 7 Vocational High Schools, for internship activities and competency testing of 100% of vocational students has implemented link and match, curriculum synchronization is 85.71, while other forms of link and match are still relatively low. Meanwhile, the form of link and match in Tefa and Industrial Class does not yet exist.

e. Utilization of Information Technology in link and match Vocational High Schools -

Industry and Bussiness World
Utilization of Information Technology in link and match Vocational High Schools - Industry and Bussiness World, does not yet have a special application that is used to support the link and match program for Vocational High Schools - Industry and Bussiness World. The new use is limited to email.

f. Industrial Work Practice Evaluation

Evaluation of the implementation of Industrial Work Practices, from 7 Vocational High Schools obtained the following results.

Table 4. Implementation of Industrial Work Practice Evaluation

No	Prakerin Evaluation Indicator	Percentage
1	Education unit evaluation	100.00
2	Industry evaluation	42.86

Data Source: Results of open interviews via google form

From table 4, it can be seen that the implementation of the evaluation of Industrial Work Practices from 7 VHS 100% of Vocational High Schools have carried out evaluations of Industrial Work Practices at the education unit level. Meanwhile, the evaluation of the implementation of Industrial Work Practices by Industry is only 42.86%.

g. Source of funds link and match Vocational High Schools - Industry and Bussiness World
Sources of funds for the link and match program for Vocational High Schools - Industry and Bussiness World, for State Vocational High Schools using the allocation of Students Operational Funds (StOF) and School

Operational Funds (SOF), except for industrial visits, fees from student fees. Meanwhile, Private Vocational High Schools to link and match Vocational High Schools - Industry and Bussiness World use Students Operational Funds (StOF) and Committee funds.

h. Obstacles in link and match Vocational High Schools - Industry and Bussiness World

Obstacles in linking and matching Vocational High Schools - Industry and Bussiness World, among others, Industry and Bussiness World involvement in learning which is still difficult to realize, lack of human resources in developing VHS, VHS curriculum that is not yet in sync with the industry curriculum, facilities and

infrastructure that are not adequate according to industry standards. , alignment of industrial needs and student competencies that have not been in line with industry expectations.

i. Suggestions for implementing link and match Vocational High Schools - Industry and Bussiness World

The results of interviews with 7 Vocational High Schools, provided suggestions for implementing a link and match for Vocational High Schools - Industry and Bussiness World, among others, namely: 1) Acceleration steps are needed so that fide Industry cares for small VHS, both in terms of management and other forms of assistance. The government needs to facilitate small Vocational High Schools to access Industry and Bussiness World who are really ready to share with schools; 2) the Vocational High Schools - Industry and Bussiness World link and match program has continuous monitoring from Industry and Bussiness World; 3) Vocational High Schools - Industry and Bussiness World can provide services to each other's needs; 4) The MoU on Industrial Work Practices needs to be made on an ongoing basis between Vocational High Schools - Industry and Bussiness World; 5) The Education Office facilitates the needs of Vocational High Schools as a link and match requirement for Vocational High Schools - Industry and Bussiness World; 6) intensive communication and alignment of Industry and Bussiness World and student competencies required by Industry and Bussiness World.

How far is the evaluation of the implementation of link and match of Vocational High Schools - Industry and Bussiness World n improving the competence of Human Resources? The findings of the evaluation of the implementation of link and match Vocational High Schools - Industry and Bussiness World in improving the competence of Human Resources inFrom the results of interview data research with 7 Vocational High Schools in Wonosobo Regency, it can be seen that the gap is visible, with the data on certain Vocational High Schools link and match Vocational High Schools - Industry and Bussiness World have gone well, but in other Vocational High Schools through link and match interview data Vocational High Schools - Industry and Bussiness World still shows very minimal results. There are still many link and match matches between Vocational High Schools - Industry and Bussiness World which are just a formality, not in accordance with the expected link and match target between

Vocational High Schools - Industry and Bussiness World. The form of link and match between one Vocational High Schools and another is still very diverse. Reality in the field with the ultimate goal of the link and match program Vocational High Schools - Industry and Bussiness World still visible gaps obtained include industrial work practice programs that still have a lot of formalities, guest teachers from industry that have not been all implemented by Vocational High Schools, apprentice teachers in industry,

CONCLUSION

Based on the results of research conducted by the author, it was found that link and match Vocational High Schools - Industry and Bussiness World in human resource improvementimprovements must still be made so that the implementation of the Vocational High Schools - Industry and Bussiness World link and match can be maximized and get maximum results so that the learning process in Vocational High School can improve human Resources according to industry standards. The learning process by implementing link and match Vocational High School - Industry and Bussiness World becomes a learning strategy for achieving Vocational High School goals. It is recommended that the evaluation of the implementation of link and match management of Vocational High School - Industry and Bussiness World be carried out on an ongoing basis as data for improvement in link and match management of Vocational High School - Industry and Bussiness World.

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