## Vocational High School Building Village Program as Link and Match for Community Economic Development

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Abstract. The Ministry of Education and Culture created a synergy between VHS and the village administrators with the support of industry partners. The policy of link and matchis considered to be a strategy for exploring potencies and competencies demanded in the job market and social life. This research is intended to provide a handy reference for VHS and related parties engaged in the VHS Building Village. The kind was descriptive research with a case study design. The findings showed that this program was conducted on the basis of a collaboration of expertise program of 1 of Boyolangu, industry partners, and the administrator of Kepuh Village. This was carried out throught procedures: mapping potency and ecosystme services/integrated patterns, planning the program, fostering collaboration, developing implementation strategies and making performance measurement. The efforts to strenthen the role of VHS in improving village economy were made in the strategies involving education, entrepreneurship, innovation of appropriate technologies, and community empowerment. The performance measurement of the program was made by analyzing its effectiveness and influence on the economic condition before and after the conduction of the program, which can be seen form the program's inputs, processes, outputs, outcomes and impacts.

Keywords: bulding villages, link and match, economic improvement, vocational high school

#### INTRODUCTION

Vocational education is designed to develop skills, competencies, understanding, attitudes, work behaviors, and appreciation workers need in entering the industrial world and making some advances in meaningful, productive labors (Adhikary, 2005). According to Sudira (2012), for pragmatists, vocational education and training is the corcordance between the need for employment and skills and competencies required to achieve the objective of the employment. vocational education and training is challenged to be always dynamic and adaptive to changes of the need of employment. Such philosohy then advanced a theory called the demand driven theory in place of the supply driven theory.

VHS, as educational institutions which provide vocational education in Indonesia and orientate students towards work experience through education and training, play an important role in enhancing the quality of human resources. For this purpose, it is important for VHS to build a creative partnership with industries to have a great support for students' skill improvement. To help their students to perform well in the job market after their graduation, VHS have to implement a curriculum relevant to the demands of industries, and having a good partnership with them will make possible the process of curriculum synchronization.

Meanwhile, the Ministry of Education and Culture (Kemendikbud) tried to creat a synergy between VHS and village administrators to help streamline the village building program in accordance with its potencies and local wisdom. The program is expected to establish the existence of VHS and demonstrate their usefulness to their surrounding people. By way of link and match, VHS are suppossed to provide invaluable human resources to the extent that their graduates can reach the target called BMW, namely, to get employed, to continue their study the higher level of education, and to embark on their own entrepreneurial ventures. To serve this purpose, students' soft skills should be sharpened in addition to their hard skills, which are must-have skills for them.

The problem of human resources in Indonesia does not only lie in the low absorption rate of educated workforce in industry but also in misallocation of human resources, that is, a gap between the market job and the academic world. Many job vacancies are not filled mostly because of the irrelevance

of the demand for workforce to the provision of qualified worforce, and link and matchcan herein be seen as an exploration of competencies demanded in the job market. Hopefully, today's educational orientation exerts the demand-minded paradigm, which accommodates market demands, instead of the spply-minded one.

Nowadays, many vocational-school graduates remain unemployed beacuse of their lack of competencies relevant to the need of industries. Such gap was mentioned in the research of Suparno (2008), stating: "The competencies of job seekers have not made a link and matchfor industry". As a matter of fact, many VHS have not followed the policy of link and match in their educational practices, which include subject matters, information sources, learning activities, and practice facilities.

The link and match policy gives an insight that human resources with a great quality and technical superiority are critical factors for Indonesia to consider to be markedly suprior in the globval competition (Usman & Darmono, 2016). The Indonesian government's huge challenge of providing workforce with relevant skills involves three parties, namely schools, industries and the general public. An educational mismatch can occur in both vertical and horizontal dimensions: a vertical missmatch occurs when employees' level of qualification exceeds the level of the job offered; a horizontal missmatch occurs when employees' qualification does not the field of jobs offered (Disas, 2018). Education should not generate merely human capital in general, but a specific field of studies should provide students with special technical skills for them to compete in the market job (Walters, 2004).

The purpose of the VHS Building Village program is to provide a useful reference for VHS and all the parties involved in their collaborative effort to develop human resources and improve the economy of the village community. The conduction of the VHS Building Village program will produce some benefits: (a) VHS, the village administrators, and other related stakeholders will have the same perception; (b) VHS will have a handy reference on synergy, procedures, and strategy and evaluation processes in conducting their program; (c) the village administrators will have a useful reference on how to create a synergy with VHS to make improvements to schools and village development; and (d) other related stakeholders will have a reference on the way to support the strengthening of VHS' role in village development.

Village development is an integral part of the national development program and contributes to meeting the need for skilled workforce by the international standard; therefore, the the role of VHS herein is to accelerate the process of villagers' paradigm shift, standardize their operating procedures, and urge the adoption of appropriate technology. Article 78 Paragraph (1) of Act of the Republic of Indonesia No. 6 of 2014 on Villages states that village development aims to improve the welfare of the village community and the quality of human life and reduce poverty through the fulfillment of basic needs, development of Village infrastructure, local economic development potential, as well as the use of natural resources and the environment in a sustainable manner. Generating a support for the vision of the Village Laws can be in the form of building an independent society with a strong personality. As ruled by the Act No. 6 of 2014 along with the regulations under it, the village development program is a statutory obligation to be carried out (Fatmawati, Hakim, & Mappamiring, 2020).

#### **METHODS**

This research adopted qualitiative research methods with a descriptive case study design. The research subjects involved the principal, the vice principal, the head of the related expertise competency, the committee of the HVS Building Village program, the related teachers, the Head of the village, the related village community, the related students, and the related industries.

The researcher served as the participant observer and the sole data collector. During the data collection processm, the reseracher held face-toface meetings with all the parties from whom necessary information could be gained. The data collection adopted some data collection techniques, invluding interviews, observation, and relevant documents. The data collected and analyzed in this research were

collected from various data sources, which in general were devided into primary and secondary data sources. The primary data were collected through holding interviews, making observation and using an instrument specifically designed for this purpose. In this regard, the primary data were the ones gained from intervies and field notes taken during the data collection process. Meanwhile, the secondary data were collected from secondary data sources in the form of official documents and archives of the VHS storing information on the implementation of the VHS Building Village program conducted to improve the economy of village.

The data collection techniques were developed based on the information gained from semi-structured interviews, non-participant observation and a study of documents by referring to the research instrument designed before. The data validity assessment was carried out by testing data credibility through data source triangulation, technique triangulation, and member checks. The transferability test was conducted by presenting the data on the research result so comprehensively, clearly, systematically, and reliably that the result can be understood by readers – a confirmability test. The data were analyzed using the descriptive method though three steps, namely data condensation followed by coding of the data collected, data presentation, and verification and conclusion drawing.

# RESULTS AND DISCUSSIONS

## **Concept of VHS Building Village**

The VHS Building Village program was conducted on the basis of a collaboration between Public Vocational High School (PVHS) 1 of Boyolangu and the administrator of Kepuh Village. This program embraced some principles: (1) mutual benefit; (2) result-oriented; (3) transparency; (4) equality; (5) responsibility; and (6) complementarity. The VHS Building Village program takes on four major dimensions: (1) the implementation of village development programs which cover all the activities, such as planning, implementation, monitoring and evaluation, by involving students, teachers, academic staff, and assets; (2) the improvement of the quality of village community's employment and entrepreneurship through the provision of education and training; (3) the identification of the village's great strengths and boost of their production through the introduction of appropriate technology; and (4) the public service by community empowerment.

One of the dimensions which the VHS Building Village take on, the implementation of the Village Sustainable Development Goals (SDGs) program is actually a global action plan approved by world leaders, including the leader of Indonesia, to end poverty, reconcile discrepacies, and protect environment. Action plans forSDGs include: (1) No poverty village; (2) Zero hunger village; (3) Health and well-being care villages; (4) Quality education care village; (5) Female friendly village; (6) Village with clean water and sanitation; (7) Village with affordable and clean energy; (8) Village with decent economic growth; (9) Village with appropriate infrastructure, innovation, and industry; (10) Village with reduced inequalities; (11) Sustainable village and community; (12) Village with responsible consumption and production; (13) Village with adapatbility to climate changes; (14) Village with care for marine life; (15) Village with care for life on land; (16) Peaceful and just village; (17) partnership for village development; and (18) Village with dynamic institutions and adaptive cultures.

The VHS Building Village program conducted by PVHS 1 of Boyolangu in its collaboration with thye adiminstrator of Kepuh Village, Boyolangu, Tulungagung is considered to be apilot project. This program a part of the effort of PVHS 1 of Boyolangu to strengthen its role in developing the quality of human resources and improving the welfare of the village community. Through this collaboration, the VHS performed some actions, including: (1) integrating practical learning, Teaching Factory (TeFa), and internship into activities in the village development program which were relevant to the competencies developed in PVHS 1 of Boyolangu; (2) innovating appropriate technology to accelerate the process of village development; (3) involving members of the school community in the village development program; and (4) using the assets and programs of the school, the village administration

and the related institutions to improve the quality of human resources through education and training or facilitating any other activities in the village development program.

Involved in the VHS Building Village program were some Expertise Competencies in PVHS 1 of Boyolangu, which were selected on the basis of the needs, potencies, and opportunities in Kepuh Village. Those expertise competencies together with some related industries fostered a collaboration to achieve the purpose of the program. For example, the expertise competency of Software Engineering fostered a collaboration with Jun Soft industry of to provide training in creating a website; the expertise competency of Computer Engineering and Networking provided training in developing a business called Internet Service Provider with the help of some industries in Tulungagung; The expertise competency of Net, Multimedia (Mm) in collaboration withhe expertise competency of Television Programming and Broadcasting provided training in creating videos and product marketing; the exepertise competency of Visual Communication Design in collaboration with the exepertise competency of Animation (Anm) provided training in creating interesting product packaging designs with the help of the partner industry, namely CV. Langgeng, in the process of printing the designs; the exepertise competency of Chemical Industry provided training in manufacturing hand sanitizer and liquid soap products, which are highly marketable products during the COVID-19 pandemic as their use is an integral part of health protocols; the exepertise competency of Digital Business and Marketing in collaboration with the franchise Nyoklat Klasik of Tulungagung provided training in digital business; and the exepertise competency of Accounting and Finance provided training in developing micro, small and medium enterprises in Kepuh community with the help of the Tulungagung branch office of BRI in generating start-up capital.

Kepuh Village is actually a home of many home industries whose products have broken into the international market. However, they still have a lot of room for improvement to support their product development. They can create a new attractive designsfor fancy packaging to replace the one they have had as yet, thereby increasing the selling point of their products. Another thing to improve is to employ online marketing strategies, instead of their conventional method, to appeal to a wider market segment, especially during the pandemic of COVID-19. It is within this context that training in doing online business, doing sales promotion through digital social media, and stimulating business development in accordance with the existing potencies and local wisdom of Kepuh Village. Kepuh Village is rich in natural resources of which the community can make use as raw materials for their home industry's products, which in turn ameliorates their economic condition.

The link and match the PVHS 1 of Boyolangu tried to make through the VHS Building Village program was successfully made thanks to its effective collaboration with its industry partners and administrators of Kepuh Village. Likewise, the curriculum formulated in the curriculum synchronization conducted by PVHS 1 of Boyolangu and its industry partners was implemented properly in this program. The obvious benefits of the VHS Building Village program are that VHS located in villages can make a significant contribution to the life of their neighboring people according to the expertise competency the VHS provide and to the local wisdom of the village. Besides, through their involvement in the activities in the program, the VHS students can sharpen their soft and hard skills.

The Link and Match policy was enforced by the Ministry of Education and Culture of the Republic of Indonesia to increase the relevance of VHS to the need of development program in general and in particular to the demand of industries. The policy refers to the relationship (link) and equivalence (match) between the academic world and industries, meaning that the competencies of vovational-school graduates can meet the demand of the industrial world (Putranto, 2017). The implementation the link and match policy then aims to increase the relevance of education to the demand of the job market; in other words, the policy is an effort to find a compromise between educational institutions as producers and industries as consumers. According to Sanjaya (2009), the purpose of the link and match

policy is for suppliers to have a closer look at the quality of human resoirces, especially the quality of workforce. It is obvious that a reciprocal exchange education and industry to successfully make a link and match between both.

From this viewpoint, the term linkshould be seen as a process, which means that learning process should be sensitive to and be based on the needs of development programs in such a waythat the output can fulfill (match) those needs in all of their aspects: quantity, quality, kinds, qualification and time. Given that education is seen as a medium for supporting development, it is important to take into account some factors which predispose educators to make link and match between education and development, either socio-economic and community developments or industrial development.

## The Procedures of the VHS Building Village Program

The platform of the VHS Building Village program is a collaboration between PVHS 1 of Boyolangu and administrators of Kepuh Village. The implementation of this program conducted to strengthen the role of vocational high schools in improve the welfare of Kepuh community is facilitated under the following procedures.

## **Potency mapping**

The potency mapping is aimed at identifying potencies of PVHS 1 of Boyolangu, Kepuh Village, and industry partners involved in the VHS Building Village program conducted to favor the economic development of Kepuh Village. The potency mapping began with self-evaluation (the picture of PVHS 1 of Boyolangu), which was assessing the quality of (1) human resources, namely students, teachers, and academic staff; (2) the curriculum/learning process; (3) facilities and infrastructure; and (4) school management, which contains the rules supporting the VHS Building Village programfor the economic development of Kepuh Village.

Mapping the potencies of Kepuh Village aims to identify its strengths and weaknesses, including its human resources, natural resources, cultures, and other additional resources, like rules on the village government and administration.

Meanwhile, mapping the potencies of industries aims to identify the types of specialized fields they work in to ensure their relevance to the expertise competency developed in PVHS 1 of Boyolangu and to the potencies and local wisdom of Kepuh Village. The link and match between PVHS 1 of Boyolangu and industries on the one side, and administrators of Kepuh Village, on the other side, are expected to support the implementation of the VHS Building Village program conducted to favor the economic development of Kepuh Village.

## Mapping of ecosystem/integrated patterns

The mapping of ecosystem/integrated patterns is an important part of the collaboration of PVHS 1 of Boyolangu with industries and administrators of Kepuh Village. The potencies and local wisdom of Kepuh Village do not necessarily match up to the expertise competncies developed in PVHS 1 of Boyolangu, and therefore the mapping of ecosystem/integrated patterns is highly isntrumental in ensuring the link and match between expertise competencies developed in PVHS 1 of Boyolangu and industries on the one side, and administrators of Kepuh Village, on the other side. The mapping of ecosystem/integrated patterns will make it easier to sychronize the needs of Kepuh Village with those of expertise competencies of PVHS 1 of Boyolangu and those of industries involved.

After mapping potencies and ecosystem of the development of Kepuh Village, the next procedure was to formulate action plans for the VHS Building Village program at a planning meeting among all the parties involved. In addition, PVHS 1 of Boyolangu had also to draw the strategic planning of the school/school development master plans/school roadmap.

The management of the VHS Building Village program can be performed using the School/Community Based Management which encourages the school organization to be managed effectively and efficiently to achieve the goal of the National Education by taking national policies and unique characteristics of PVHS 1 of Boyolangu. The practice of the School/Community Based Management (MBS/M) will foster the independence of the school in managing education in accordance with the potency of its cultural environment, local wisdom, support from community participation and available learning sources based on the favorite features and unique characteristics PVHS 1 of Boyolangu.

PVHS 1 of Boyolangu formulated a strategy for achieving the purpose of strengthening its role invillage development, by fostering a collaboration among its expertise competencies and a collaboration with its industry partners and encouraging the participation of all stakeholderson collaborative initiatives to make a decision and implement it. The planning devised can be a short-term planning, a medium-term planning, or a year-long planning by considering all the resources of PVHS 1 of Boyolangu, the involved industry partners and administrators of Kepuh Village.

Then a collaboration is a key factor in managing organization or business in the VHS Buidling Village program. In its past organization, PVHS 1 of Boyolangu had to possess all the assets like the land, buildings, facilities, and teachers, which put it to a lot of expense of capital and operating costs. However, in its present organization, by fostering a collboration, it can operate withouth having to possess all the assets: PVHS 1 of Boyolangu can make use of the resources of Kepuh Village, and the other way around.

A collaboration should be fostered in a holistic approach, that is, by involving stakeholders with a great capacity with which to guarantee considerable success. For this reason, in fostering a collaboration among its expertise competencies and a collaboration with its industry partners, PVHS 1 of Boyolangu followed an administrative procedure which includes making an application for valid licenses from government officers in charge of Tulungagung Regency, those of Boyolangu District, and those of Kepuh Vilage and strengthening the commitment to the collaboration by signing a Memorandum of Understanding with the administrator of Kepuh Village on the implementation of the VHS Building Village program by way of link and match of PVHS 1 of Boyolangu for development program in Kepuh Village.

The collaboration in this program adopted the penta helix collaboration model, a design integrating five elements involving (1) government, (2) industry, (3) academicians, (4) village community, and (5) media. Each of the elements plays its respective roles to accomplish the desired objectives, which can be seen in the Table 1.

Table 1. The Role of Each od the Five Elements in the Penta Helix Model

Elements	Roles
Government	Organization, Development, Facility, and Supervision
Industry/Private	Providing Startup Capital
Agencies	Creating Job Opportunities
	Recruiting Human Resources as Industry Players
Academicians	Providing training and Human Resource Development
	Making Scientific Mapping
	Making Public Announcement and Providing Community Assistance
Village Community	Serving as Direct/Indirect Industry Players
	Monitoring the Socioeconomic Effect of Industry on Village Community
Media	Promoting and Distributing Information and Image Enhancement

(Source: Kemdikbud, 2021)

The adoption of the pentahelix model in school management can be a model for strengthening the role of PVHS 1 of Boyolangu in accelerating the economic development of Kepuh Village in the

future through sharingassets, accelerating the school independence, and making Kepuh Village the independent, prosperous village.

#### Strategies for Implementing the VHS Building Village Program Learning Processes

Learning processes in the era of industrial revolution 4.0 is more flexible thanks to the availability of various learning sources. Students can also interact with other resource people than their school teachers, take up more private study based on their own passions and talents, and study everywhere they are. In its collaboration with the administrator of Kepuh Village, PVHS 1 of Boyolangu conducted learning activities in some methods: (1) the learning processes based on the existing rule, which include planning, implementation and assessment of learning; (2) the planning for learningformulated in the form of lesson plans and/or other instruments by referring to the syllabus and curriculum made relevant to the demand of industry; (3) the learning activities in the form of practical learning, teaching factory, and internship; (4) the assessment of learning process made based on the assessment guidelinesand the characteristics of subject matters; (5) the learning processes using the models of Project-Based Learning, Problem-Based Learning), and Teaching Factory; (6) competency certification conducted in accordance with the applicable regulations, namely by considering the achievement of the competency certificate based on the second (II) and third (III) levels of the Indonesian National Qualification Framework (INQF); and (7) internship, whose the planning, implementation, assessment and certification apply the regulations and guidelines issued by the Directorate General of Vocational School Education of the Ministry of Education and Culture of the Republic of Indonsia.

The internship program in the VHS Building Village program was designed to prepare students to be ready to come into the industrial world or to be entrpreneurs who establish their start-up ventures in their hometown and develop their attitude and expertise competencies through real-world experience in Kepuh Village. Students can make application for internship in the village office of Kepuh, Micro, Small and Medium Enterprises (MSME) or community members with home industries. In practice, however, there are no technical differences between internship programs conducted in Kepuh Village and the ones conducted in major industries: the procedures like planning, implementation, monitoring, assessment and certification are all the same.

## **Entrepreneurship**

The training in entrepreneurship in the effort to strengthen the role of PVHS 1 of Boyolangu in the Kepuh Village development is designed for students, vocational-school graduates, and members of the community. For students and vocational-school graduates, the training can help prepare them to be entrepreneurs and embark on their entrpreneurial enterprises; meanwhile, for members of the community, the training will give some of them the entrepreneurial motivation to start their own business and give some other insights as to how to improve the quality of their business and make it produce better performance. The entrepreneurship development can be assisted through education, training, and supervision of vocational teachers, industry practitioners, or a combination of both.

Polishing students' entrepreneurial skills can take the forms of (1) transferring basic knowledge of entrepreneurship to those students through the subject matters of Creative Products and Entrepreneurship, either personally or collectively under the supervision of a teacher, by making use of the village partner' resources; (2) Involving them in practical learning in Micro, Small and Medium Enterprises of the village community, either personally or collectively under the supervision of an industry pratictioner; and (3) training them to be independent entrepreneurs by establishing a start-up in accordance of their expertise competencies in a collaboration with other parties.

In their practicing entrepreneurship in the village community, students can actively participate in MSME encouragment. The adoption of technology 4.0 in the production process, online marketing,

and modern business management gives added value to the products of the MSME, thus improving the economy and welfare of Kepuh community members.

As for vocational-school graduates and the community members, the training was given to those who remained unemployed, those affected by termination of employment, and those who wanted to improve their business. The entrepreneurship development program for them was carried out through education, training, supervision, and product marketing.

## **Innovation of Appropriate Technology**

As mentioned in the table above, in the Penta helix collaboration model, PVHS 1 of Boyolangu played a role as innovators in accelerating the development program in Kepuh Village. It was challenged to actively participate in promoting technological innovations with which to satisfy the needs of the community. Only then will the products manufactured live up to the required standard.

Introducing appropriate technology based on a real problem is aime at speeding up the development of poductive economic enterprises of the village community, creating more employemnt opportunities, developing broader job classifications, and enhancing the quality of production. The effort of innovating approriate technology should include introducing digital technology of industry 4.0, not only because its use becomes an unavoidable consequence in today's development program, but also because it can help attract the interests of the youth to actively taking part in village development.

The task of introducing appropriate technology can be performed by students in a group, teachers, or a group consisting students and teachers. If necessary, the school will collaborate with a higher educational institution, experts, industry practioners, or industry parterns. The task was performed by taking the following steps: (1) identifying problems confronting the community in their production process and producing a solution to the problems; (2) conducting a preliminary study by seeking necessary information in print or electronik media to obtain a comprehensive picture of the problem faced in the introduction of appropriate technology; (3) creating preliminary designs and then selecting the best one, arranging the production schedule, and providing human resources, facilities and infrastructure neede for introducing appropriate technology; (4) developing an initial product; (5) putting the initial product to a small-scale product testing, for example, in a school environment; (6) making an improvement to the product on the basis of the result of the small-scale product testing; (7) putting the product to a large-scale product testing, namely to the social community of the village partner; (8) making an improvement to the product on the basis of the result of the large-scale product testing; and (9) distributing and making use of the product, namely appropriate technology to those who need it. Besides, appropriate technology with novelty and economic values can be registered for intellectual property rights.

#### **Community Empowerment**

Community empowerment is believed to ensure the involvement of the village community in education. It is aimed at providing access, enhancing quality and management, and increasing competitiveness, relevance and accountability of the management of education administration.

Community empowerment isto strengthen the role of education in community development, and the other way around, it is also to strengthen the role of community in educational development. However, the community empowerment in the VHS Building Village program stressed more on the role of vocational schools in the economic development of the community Kepuh Village.

The empowerment of the communityin Kepuh Village took forms of (1) the use of assets of individuals or institutions for enhancing the quality of education; (2) the use of the school's assests for community actions; (3) household waste management; (4) household waste incineration; (5) internet-based community empowerment; (6) the socialization of the danger of drugs; (7) the giving of seeds to village community; and (8) the carrying out of a simulation of disaster management.

#### Performance Measurement of the VHS Building Village Program

The performance measurement of the program of strengthening the role of VHS in village development aims to examine the efficiency and effectiveness of the VHS Building Village program in improving the economy of Kepuh Village by comparing the village's economic conditions before and after the implementation of the program. The performance of the program can be measured by considering the following aspects.

## Input

Measuring inputs can help make a decision, identify existing sources, develop plans and strategies to be adopted to accomplish the desired purpose, and establish application procedures for achieving the purpose. The components of the input performance measurement involved (1) human resources; (2) supporting facilities and infrastructure; (3) fund/budget; and (4) some necessary procedures/regulations.

#### **Process**

The process performance measurement is aimed at knowing the effectiveness and efficiency of the implementation of the planning. The components of the process performance measurement involved (1) the effectiveness and efficiency of learning processes; (2) the effectiveness and efficiency ofthe training in entrepreneurship; (3) the effectiveness and efficiency oftechnological innovations, namely the introduction of appropriate technology; and (4)the effectiveness and efficiency of community empowerment.

## Output

The output performance measurement is to measure the result or the product of the a program or activity. The components of the output performance measurement involved (1) the quality of graduates according to graduate competency standard and the demand of industry partners; (2) competency certification for graduates according to the level II and the level III of INQF, and competency certification for community members; (3) the increasing number of students, graduates and community members who start their entreperentrial entreprises; (4) the increase in the use of appropriate technology; and (5) the increase in the quality and quantity of communicty empowerment programs.

#### **Outcome (Short-Term Effect)**

The performance of outcomes can be measured three years after the implementation of the program. Some aspects taken into consideration to measure the success in acomplishing the desired purpose included (1) the absorption rate of graduates in the job market; (2) the independence of graduates according to their expertise competencies; (3) the increased competencies of the village's human resources in managing the village's resources; and (4) the increase in the village's productivity and product marketing.

#### **Impact** (Long-Term Effect)

The performance of impacts can be measured three years after the implementation of the program. Some aspects taken into consideration to measure the success of the VHS Building Village program conducted by PVHS 1 of Boyolangu to demonstrate its link and matchfor the economic development of Kepuh Village included (1) the increase in the community's trust in PVHS 1 of Boyolangu; (2) the increase in the career and wlefare of the graduates of PVHS 1 of Boyolangu; (3) the realization of independent schools; (4) the improvement of the community welfare in Kepuh Village;

(5) the decreasing rate of unemployment in Kepuh Village; and (6) the greater independence and welfare of the village community.

## The Welfare Improvement of Village Community

The result of the research shows that many members of Kepuh community prefer working in big towns to working in their village. This causes the urbanization rate of working-age population to increase. In fact, it is not easy for the urban population to get a job relevant to their expertise competencies. The growing number of working-age population exceeds the number of employment prospects available in urban areas, thereby increasing the unemployment level in Indonesia. The implementation of the VHS Building Village program is expected to draw the interest of the young generation of Kepuh Village to participate in improving the community welfare of their own village.

The VHS Building Village program has brought about a positive effect on Kepuh Community. This can be seen from the fact that the community members are eager to speed up the development of the home industries that they have built and run. They have changed the method of their product selling from the conventional method to the online one thanks to the training in online business provided by the students of Digital Business and Marketing expertise competency. Their product marketing has covered a wider area compared to the one before the implementation of the program. Likewise, interesting, and fancy packaging the community learned from the training in graphic design provided by the students of the Visual Communication Design expertise competency and the students of the animation has greatly affected the community's product selling point. The negative effect of the pandemic of COVID-19 which was strongly marked has begun to be overcomes. After attending the training in video creation provided by the students of the Net, Multimedia expertise competency and the students of the expertise competency of Television Programming and Broadcasting, the community began to promote their products through social media.

The involvement of industry partners in this program undoubtedly contributes to the economic improvement of Kepuh community. For instance, BRI (People's Bank of Indonesia), who visited the village and met the community in person, along with students of the AKL expertise competency, opened up the opportunity the community to develop their business in MSME. Meanwhile, the training provided by the franchise Nyoklat Klasik brought new, valuable experience as well as job opportunities to the village community. The training in internet service provider provided by the students of the expertise competency OF Computer Engineering and Networking helped them to develop a business in internet and computer which has won support and recognition from Tulungagung.net. The use of joint assests like laboratories and computers of PVHS 1 of Boyolangu during the training in creating a website for the village community which was provided by students of the expertise competency of Accounting and Finance under the supervision of CV. Junsost elucidates the role of VHS in the life of surrounding people. Meanwhile, CV. Langgeng helped the village community to have fancy packaging by printing product designs which help yield satisfactory result of the selling point of their products.

The development of new products and online marketing during the pandemic of COVID-19 encourage the village community to rise from the negative effect of COVID-19. The hand sanitizer and liquid soap produced by sthe students of the core expertise competency have received a positive response. The VHS Building Village program has produced new insights and accelerated the development of village community's business.

#### **CONCLUSION**

According to the result of the research, it is important for VHS to have link and match for the demand of industry partners which can be implemented by the village administrator to support the economic improvement of the village. The link and match should be developed to sharpen students'

competency so that they have superior softskills dan hardskill with which they can be competitive in the global competition.

The VHS Building Village program should be conducted every year and developed further because of its marked effect either on the economic improvement of the village community and of students' competencies. For this purpose, the involved stakeholders should formulate the concept to be applied by way of the improvement form the previous implementation. The involved stakeholders include the regent of Tulungagung, the subdistrict head of Boyolangu, the village head of Kepuh, the principal of PVHS 1 of Boyolangu and some industry partners involved in this program. The members of executive committee, teachers, students should be still involved in a collaboration among the expertise competencies within the PVHS I of Boyolangu to accomplish the purpose of the VHS building Village program.

The use of joint assets should be scheduled to take place after leaning time so as not to cause any disturbance to the learning processes. The products village community produced can be collaborated with those of students in TeFa activities, which can develop their business and increase the income of the community and the students' TeFa. The commitment of the collaboration should be affirmed through a Monument of Understanding.

#### REFERENCES

- Adhikary, P.K. (2005). Educational Reform for Linking Skills Development with Employment In Nepal. In M SINGH (Eds), *Meeting Basic Learning Needs in the Informal Sector Integrating Education and Training for Decent Work, Empowerment and Citizenship*. Hamburg, Germany: UNESCO Institute for Education.
- Amalia, Y. (2021). Murid Pendidikan Vokasi Jenjang SMK Perlu Dibekali Keahlian Alternatif. Retreived from https://www.merdeka.com/peristiwa/murid-pendidikan-vokasi-jenjang-smk-perlu-dibekali-keahlian-alternatif.html
- Deitmer, L. & Heinemann, L. (2009). TVET and R&D Evaluation: The Potential for Optimizing TVET. In R. Maclean, D. Wilson, & C. Chinien (Eds.), *International handbook of education for the changing world of work, bridging academic and vocational learning* (pp. 1521-1534). Bon: Springer.
- Disas, E. P. (2018). Link and Match Sebagai Kebijakan Pendidikan Kejuruan. *Jurnal Penelitian Pendidikan*, 18(2), 231-242. Doi: 10.17509/jpp.v18i2.12965
- Djojonegoro, W. (1999). Pengembangan Sumber Daya Manusia: Melalui Sekolah Menengah Kejuruan (SMK). Jakarta: PT Balai Pustaka.
- Faberman, J., & Mazumder, B. (2012). *Chicago Fed Letter*. This article reviews the concept of skills mismatch in the labor market and examines its role in explaining ongoing low levels of hiring and high levels of unemployment during the current economic recovery.
- Fatmawati., Hakim, L., & Mappiring. (2020). Pembangunan Desa Mandiri melalui Partisipasi Masyarakat di Kecamatan Pattalassang Kabupaten Gowa. *Journal of Public Policy and Management*, *I*(1). Retreived from <a href="https://journal.inismuh.ac.id\_pdf">https://journal.inismuh.ac.id\_pdf</a>
- Heinz. W. R (2009). Redefining the Status of Occupations. In J. A. Athanasou, R. V. Esbroeck. International Handbook of Career Guidance. Springer Science Business Media B.V.
- Indriaturrahmi., & Sudityano. (2016). Peran Dunia Usaha dan Industri dalam Penyelenggaraan SMK berbasis Kearifan Lokal Kota Mataram. *Jurnal Pendidikan Vokasi*, *6*(2), 162-172. Retreived from https://journal.uny.ac.id/index.php/jpv/article/view/6277/ 8013
- Judisseno, R. K. (2008). *Jadilah Pribadi yang Kompeten di Tempat Kerja*. Jakarta: PT Gramedia Pustaka Utama.

- Kemdikbud. (2021). SMK Pusat Keunggulan Jadi Daya Dorong Penciptaan Lulusan Unggul dan Kompeten. Retreived from https://www.kemdikbud.go.id/main/blog/2021/03/smk-pusat-keunggulan-jadi-daya-dorong-penciptaan-lulusan-unggul-dan-kompeten)
- Mahfud, T., & Ade, N. (2010). Peran SMK Sebagai Specific Human Capital Dalam Memembangun Ekonomi Indonesia. Retreived from http://mahfudz30.wordpress.com
- Majid, A. (2012). *Perencanaan Pembelajaran: Mengembangkan Standar Kompetensi Guru*. Bandung: Alfabeta.
- McGowan, M. A., & Andrews. (2015). *Skill Mismatch and Public Policy in Oecd Countries*. Economics Department Working Papers No. 1210. OECD Better Policies for Better Live. Paris, Cedex.
- Putranto, I. (2017). Peengembangan Model Kerjasama *Link and Match* untuk meningkatkan Kesiapan Kerja Bagi Lulusan SMK Kompetensi Keahlian Akuntansi di Kota Semarang. *Jurnal Mandiri: Ilmu Pengetahuan, Seni dan Teknologi, 1*(1). Retreived from https://core.ac.uk/download/pdf
- Sanjaya, W. (2009). *Perencanaan dan Desain Sistem Pembelajaran*. Jakarta: Kencana Prenada Media Grup.
- Setyaningsih, T. (2016). Manajemen Sumber Daya Manusia dalam Implementasi Kurikulum Berbasis Kempetensi di SMK Negeri 9 Surakarta. Tesis. Tidak diterbitkan. Surakarta: Universitas Muhammadiyah Surakarta.
- Solehudin, I. (2019). Pendidikan Vokasi Industri Dibuka, Kurikulum SMK Harus Menyesuaikan. Retreived from https://www.jawapos.com/nasional/pendidikan/06/03/2019/ pendidikan-vokasi-industri-dibuka-kurikulum-smk-harus-menyesuaikan/
- Sudira, P. (2012). Filosofi dan Teori Pendidkan Vokasi dan Kejuruan. Yogyakarta: UNY Press.
- Sudira, P. (2012). *Pendidikan Kejuruan dan Vokasi Berbasis Tri Hita Karana*. Kongres Pendidikan, Pengajaran & Kebudayaan 1 (Pusat Studi Pancasila UGM).
- Suparno. (2008). Ketrampilan Dasar Menulis. Jakarta: Universitas Terbuka
- Sutrisno, J. (2006). *Penyelenggaraan Sekolah Menengah Kejuruan*. Jakarta: Direktorat Pembinaan Sekolah Menengah Kejuruan.
- Suyanto. (2008). *Peran SMK Dalam Mendukung Partumbuhan Ekonomi Daerah. Jakarta: Direktorat Pembinaan Sekolah Menengah Kejuruan.* Jakarta: Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah, Departemen Pendidikan Nasional.
- Tilaar, H.A.R. (2008). Manajemen Pendidikan Nasional. Bandung: Remaja Rosdakarya
- Tilaar, H.A.R., & Riant, N. (2008). Kebijakan Pendidikan. Yogyakarta: Pustaka Belajar
- Totoh, A. (2021). *Filosofi Pendidikan Kejuruan Vokasi*. Retreived from https://www.kompas.com/edu/read/2020/09/17/143055171/kemendikbud-pendidikan-vokasi-percepat-lulusan-smk-peroleh-kerja
- Usman, H., & Darmono. (2016). *Pendidikan Kejuruan Masa Depan*. Yogyakarta: Pusat Kurikulum dan Perbukuan Badan Penelitian dan Pengembangan Kementerian Pendidikan dan Kebudayaan.
- Wagner, T. (2010). Overcoming The Global Achievement Gap (online). Cambridge, Mass: Harvard University
- Wahyuni, N. C. (2021). Perkuat Vokasi Kemdikbud Ubah Signifikan Kurikulum SMK. retreived from https://www.beritasatu.com/nasional/728397/perkuat-vokasi-kemdikbud-ubah-signifikan-kurikulum-smk
- Walters, D. (2004). The Relationship between Post secondary Education and Skill: Comparing with Credentialism with Human Capital Theory. *The Journal of Higher Education*, 90(2), 97-124. Retreived from https://eric.ed.gov/?id=EJ720719
- Wibawa, B. (2017). Manajemen Pendidikan Teknologi Kejuruan dan Vokasi. Jakarta: Bumi Aksara.
- Wiranto, R. (2019). Bagaimana *Link and Match* Diterapkan di Pendidikan, retreived from https://www.kompasiana.com/rihadwiranto8428/5dc657d3097f361bae252a83/bagaimana-link-and-match-diterapkan-di-pendidikan

Zuniarti, S., & Budi, T. (2013). Pengaruh Mativasi Belajar, Kinerja Intensitas Pembimbingan Prakerin terhadap Kesiapan Kerja siswa SMK Pariwisata DIY. *Jurnal Pendidikan Vokasi*, 3(3), 405-415.