

The Implementation of Vocational Regulation of Education

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Abstract : The mismatch between the background of education and employment obtained greatly affects the future of the individual and the existence of the industry in which the individual works. In Indonesia until now, there are still many reports mentioning the number of educated unemployed or less relevant competence of vocational education graduates with the needs of the industrial world in Indonesia. Link and match is one of the efforts that can be done to prevent mismatch between the supply provided by educational institutions and the demand needed by the industrial world. This paper aims to analyze the implementation of public policies related to vocational education. The concept of link and match itself has been proposed since the late 80s. The success of this concept is characterized by the occurrence of harmonious coordination between the Industry and Educational Institutions (SMK / Polytechnic) in all related learning components. The Industry must participate in formulating curriculum, learning models, work culture, quality assurance, to graduate uptake. The author uses qualitative methods by collecting data from various libraries, reading, recording and processing from various library sources related to vocational education problems in Indonesia. From the results of the analysis it can be concluded that vocational education in Indonesia is still not able to meet expectations so there still needs to be structural and systematic improvements to overcome the problem.. This synergy is needed so that skilled human resources created later are able to get jobs that are in accordance with their competence. The latest efforts that have been tried to realize the concept of link and match are through the SMK center of excellence program in 2020.

Keyword : Link and Match, Vocational Education, Public Policy

INTRODUCTION

Industry parties in addition to getting the appropriate labor guarantee through smk / polytechnic partners, will also get ease of tax reduction or also called "super tax deduction". The policy is contained in Government Regulation of the Republic of Indonesia Number 45 of 2019 and Regulation of the Minister of Finance number 128/PMK.010/2019(Fikra & Djajaputra, 2021). In addition, the research and development section of the industry can also be synergized with partner schools / polytechnics, so that prototype products or other services can be developed together. The development can be

implemented flexibly both in the concept of teaching industry and through teaching factory (Mavrikios et al., 2018). Then for the perfection of the concept of link and match Vocational education, the thing that also cannot be ruled out is the existence and adequacy of the needs of teachers / lecturers according to competence (Tamrin et al., 2018). These educators can come from university graduate academics and practitioners from the industrial world.

If the concept of link and match Vocational education can be implemented in accordance with expectations, then the mismatch event in the industrial world will not be repeated again (Disas, 2018a, 2018b; Husein, 2019). The industry may even be able to provide input to educational institutions related to what majors or competencies are needed today. So that the existence of graduates who have the opportunity to become unemployed or mismatch can be avoided. Finally, the creation of an entrepreneurial climate and the development of creative culture for graduates can be further honed and become a provision for a better future of Indonesian human resources (Murniadi, 2020).

As a type of education that focuses on mastering certain applied skills, vocational must be able to invite the world of work to enter into the implementation of vocational education (Anam, 2021; Wardina et al., 2019). Kemendikbudristek integrates vocational education and the world of work through the concept of link and match 8 + i, which is not only focused on the ceremonial signing of a mere MOU but focuses on the implementation of the implementation of link and match cooperation or link *suai* with the world of work concretely and thoroughly (Disas, 2018b; Wibisono et al., 2020). The concept of link and match 8 + i should be viewed as a reference and spirit in presenting innovation and vocational development programs. In detail the concept of link and match 8 + i is: First, with the alignment of the curriculum, namely the curriculum of vocational education units from the beginning arranged together with the world of work that we used to analogize with cooking together. Second, continued with real project-based learning from industry or from the world of work called Project Based Learning. Third, present and increase the number of teachers, practitioners, or experts from industry and the world of work to teach in vocational up to 50 hours per semester of study programs or expertise programs. Fourth, is an internship or work practice in the world of work at least 1 semester for each student. Fifth, certification of competencies in accordance with the standards and needs of the world of work for graduates and teachers, teachers, lecturers and, instructors. Sixth, both teachers, lecturers, instructors, and teachers in vocational education units must routinely get updates and training from the world of work. Seventh, is to conduct applied research that supports teaching factory or teaching industry that starts from real cases or needs in the industry or community, so that the results of the research can be directly downstreamed to the community as a solution or innovation from vocational education, Eighth, the commitment of graduate uptake by the world of work but not mandatory but a strong commitment to absorb vocational graduates who have links and matches. For the 'i' point is an addition that can be filled various things potential cooperation programs with the world of work, for example including scholarships or service ties, then donations in the form of funding or provision of equipment, and / or forms of vocational education collaboration with other worlds of work.

METHOD

The method used is the study of literature by tracing, studying, and collecting from various books and scientific articles related to the paradigm of vocational education. As for the method of collecting data by looking for the sources of vocational school problems fundamentally as well as the perspectives of government, society, the business world and the industrial world and its relationship to the theories used in solving the problem.

DISCUSSION AND RESULT

Based on The Vision of Indonesia 2045 and RPJMN 2020-2024, the Government of Indonesia is currently working hard to realize a superior, cultured, and mastery Indonesia, so that with quality human resources (HR), the Indonesian economy is expected to grow forward and sustainable, development is more equitable and inclusive, and Indonesia can become an increasingly sustainable country. Democratic, strong, and clean. Vision Indonesia 2045 becomes an important guideline on the direction of Indonesia's development towards Indonesia Gold, which is 100 years of Indonesia Merdeka, carried out with four main pillars, one of which is human resource development and the Ministry of Education and Culture is one of the Ministries that carry the mandate (Bappenas, 2020).

Indonesia's development 2020-2024 is aimed at forming quality and competitive human resources, namely healthy and intelligent human resources, adaptive, innovative, skilled, and characterful. To achieve these goals, human development policies are directed at population control and strengthening population governance, fulfillment of basic services and social protection, improving the quality of children, women and youth, poverty alleviation, and increasing productivity and competitiveness of the labor force.

Based on the Global Human Capital Index by the World Economic Forum (WEF) 2017, Indonesia's HR ranking is ranked 65th out of 130 countries, lagging behind Malaysia (ranked 33rd), Thailand (ranked 40th), and Vietnam (ranked 64th). Although Indonesia's labor productivity has increased, from 81.9 million rupiah/person in 2017 to 84.07 million rupiah/person in 2018, Indonesia's labor productivity still lags behind that of Singapore and Malaysia. In addition, Indonesia's GDP growth of 4.9 percent in 2017, only 0.6 percent was sourced from Total Factor Productivity (TFP). The remaining 2.8 percent of economic growth comes from capital capital and 1.5 percent from human capital.

Related to the above data, this means that the needs of a skilled, creative, innovative and adaptive workforce have not been able to be met optimally. Low quality of labor that has not responded to the development of job market needs is one of the reasons why Indonesia's productivity and competitiveness are still lagging behind. Currently the proportion of workers in the medium and high fields of expertise in Indonesia is only about 40.60 percent (Sakernas August, 2019), lower than other ASEAN countries. Meanwhile, workers are still dominated by junior high school graduates and below (57.54 percent or 72.79 million people), while the Open Unemployment Rate (TPT) of high and high school graduates reached 8.01 percent. Reliable labor is not yet available and industry involvement

is low, causing a mismatch between the provision of educational services, including vocational education and training, and the needs of the job market.

Study programs developed at the level of higher education also have not fully answered the potential and needs of the job market. Today, active students and college graduates are largely dominated by humanities social studies programs.

Meanwhile, the number of students and graduates in the field of science and engineering is still limited. On the vocational education and training track, the improvement of service quality has not been fully supported by adequate and quality learning and practice facilities and infrastructure, adequacy of qualified productive educators, the adequacy of internships and work practices, and the limitations of competency certification capacity. In addition, learning has also not encouraged the mastery of soft-skills that support employment, such as foreign language mastery, as well as critical thinking skills, analysis, innovation, leadership, negotiation, and teamwork.

With regard to the above, the structure of the Indonesian population is characterized by a high proportion of the population of productive age. In 2018, the productive age population in Indonesia reached 68.6 percent or 181.3 million people with a low youth and old age dependency rate, which is 45.7. This change in population structure will open up opportunities for Indonesia to get a demographic dividend that will encourage high economic growth and lead Indonesia to become an upper middle income country. This demographic bonus will be obtained with the main prerequisites for the availability of quality and competitive human resources (HR) and an increasing skilled workforce that supports the development of industry 4.0.

Aside from the demographic bonus that must be utilized as much as possible, in the era of digitalization and in the face of the industrial revolution era, Indonesia has a challenge to revitalize vocational education that is quite large. In terms of innovation readiness to face the digital revolution as shown by the Network Readiness Index, Indonesia is ranked 73 out of 139 countries. Equal countries have better preparedness, such as Malaysia (ranked 31st), Turkey (48th), China (59th), Thailand (62nd).

Indonesia has an advantage in price, but is far behind in infrastructure and benefit by the community. Indonesia's readiness to adopt and explore digital technologies that are able to drive transformation in government, business models and people's lifestyles is also lacking. This is indicated by the World Digital Competitiveness Ranking data in 2019 where Indonesia is ranked 56th out of 63 countries. How to adapt, education and training, technology ecosystem and information technology integration are issues that need to be addressed so that Indonesia can take advantage of digital technology advances for economic growth and quality of life improvement.

Other challenges faced by Indonesia related to the development of human resources, especially for vocational and business competition, among others, in the era of digitalization have an impact on changing work patterns and potentially eliminating jobs that are simple and repetitive. On the other hand, the pattern of trading and provision of online-based services as well as the use of cashless payments make many conventional business models no longer relevant. This condition requires a comprehensive policy and pattern of

adaptation in the utilization of digital transformation for sustainability and equitable economic growth, as well as improvements in the quality of social and environmental life.

To overcome these challenges, it requires improving the quality of human resources in order to revitalize vocational education. Ministry of Education policy in vocational education focuses on 1) vocational development in the field of machinery and construction; 2) The creative economy; 3) Hospitality; 4) Nursing services and need support from various parties through vocational cooperation with ministries / institutions, training institutions, the business world and the industrial world.

DISCUSSION

Educational philosophy is known for four terms: metaphysics, epistemology, axiology, and logic. The thoughts of the philosophers above are strongly related to the term philosophy. Metaphysics addresses the real realm. In education, metaphysics deals primarily with concepts of reality reflected in subjects, practical activities and skills in the curriculum. Epistemology discusses knowledge and what is known/ understood (knowing), which means it is strongly related to methods in the teaching and learning process. Axiology deals with values related to morals (ethics) as well as beauty and art (aesthetics). Logic is concerned with the ability to answer and explain correctly.

If associated with the above terms, vocational education is a learning process that prepares learners to enter the field after completing their studies. This means, in the implementation of vocational education, the vocational education curriculum (in the sense of metafiction) is arranged according to the reality needed to work, methods in the teaching and learning process (in the epistemological sense) are also adapted to conditions such as work, and have the value of results (in the sense of axiology) that are expected in accordance with the demands of the job market.

Some of the basic principles of the program in vocational education according to Miller (1985), among others a) vocational education curriculum is a derivative of the needs in the world of work, b) the type of worker is the basis / basis of the development of vocational education curriculum, c) innovation is part of vocational education, and d) through vocational education, learners are prepared for the beginning of entering the workforce. As for the basic principles of the process in vocational education according to Miller, namely: a) the participation of the community (the world of work) is a decisive part in compiling vocational education programs, b) articulation and coordination are a major part in vocational education, and c) assessment (evaluation) is carried out continuously.

In line with what has been conveyed by Miller, Guided by Article 15 of Law No. 20 of 2003 on Sisdiknas states vocational education is a higher education that prepares learners to have jobs with certain applied skills maximum equivalent to undergraduate programs. Vocational education is the implementation of formal education pathways held in higher education, such as: polytechnics, diploma programs, or the like.

The era of openness and free competition is characterized by the fading of barriers between countries including the establishment of various regional market opening agreements in various regional coverage measures from a group of neighboring countries, one continent, and across continents such as AA, AFTA, and APEC. In that era, the type of

work a person changes rapidly according to the needs of the job market and the provision of an increasingly globalized workforce as well as increasingly sophisticated knowledge and technology. Work that was originally done manually by relying on human power has been replaced by machines and information technology. Some of the jobs that exist today will slowly disappear in the next 10 years. Estimated at 35%

Basic skills in the workforce will change by 2020, and nearly 2 billion workers are at risk of losing their jobs. Therefore, education and training should be done by providing many skills choices that are in accordance with the interests of learners and the development of job market needs so as to enable life-long learning. In order for learners to be able to compete in future careers and become development assets, education including formal and non-formal vocational education should be managed in the context of lifelong education. Vocational education and training at the level of secondary and higher education need to equip graduates with a variety of more general skills, namely life and career skills, proficiency in learning and innovation, and the ability to utilize information, media, and technology. Life and career skills have components, namely (1) flexibility and adaptability, (2) have initiative and can manage themselves, (3) social and intercultural interaction, (4) productivity and accountability to manage projects and produce products, and (5) leadership and responsibility. Furthermore, proficiency in learning and innovation (learning and innovation skills) has components (1) critical thinking and problem solving, (2) skills to communicate and collaborate, and (3) creativity and innovation. Meanwhile, information media and technology skills have components (1) information literacy, (2) media literacy, and (3) ICT literacy. This kind of debriefing of proficiency is packed with the term XXI Century Skills (21st Century Skills).

Vocational education is an important part of the national education system which certainly has a strategic position to realize a qualified workforce with the active involvement of DUDI. Vocational education must be able to awaken awareness of business actors and the industrial world to take on greater responsibility, and must be developed in order to fill industry jobs with a profile of graduates who have high skills and knowledge (know how), so as to improve productive processes and can make improvements and product development in the industrial world. The old paradigm that puts the industry at the end that accepts graduates must be changed so that the industry can play a role since the planning of the required graduate competencies, participate in curriculum alignment, strengthen mapping of skills needs, build HR competencies through productive educative processes, application of industry standard learning systems, strengthening job skills training and entrepreneurship in schools, madrassas and pesantren, apprenticeship, strengthening of competency standards, institutional strengthening and certification implementation capacity, and absorption of graduates.

The paradigm of vocational education before revitalization, vocational education emphasizes more on the learning process either in vocational / course / training which then learners must take a competency test organized by the Competency Certification Agency for Course Institutions, or for vocational using professional certification bodies (LSP) which are under the responsibility of the National Agency for Professional Seritification (BNSP), which leads to a student has succeeded in obtaining certificate of competence. Only a small

percentage of educational units know the needs of the industry and respond to the market needs for the competencies needed.

Currently, the Ministry of Education through the Directorate General of Vocational Education is and will continue to revitalize and transform vocational education to better link and match with the business world and the industrial world. Kemendikbudristek also continues to strive to provide policy support for the business world and the industrial world to synergize in the implementation of vocational education, this is as part of the implementation of merdeka belajar policy, especially in the field of vocational education development.

Kemendikbudristek also always follows up on the direction of the President of the Republic of Indonesia to improve learning from industry actors and practitioners who will currently continue to be refined policy support in order to facilitate the industry can enter as much as possible into vocational education units and support the implementation of learning in vocational education. Including intensely the Directorate General of Vocational Education seeks to oversee the implementation of the Presidential Instruction on the revitalization of SMK in order to improve the quality and competitiveness of Indonesian human resources by continuing to maintain a pattern of coordination between Ministries, institutions, and local governments in vocational revitalization programs towards 5000 smk revitalization. The government's work plan this year takes the theme of economic recovery and social reform, this plan is then detailed and on the aspect of enhancing quality and competitive human resources has become a concern of the Ministry of Education and Technology in preparing programs and policies. Some of the things that have become the focus of the Directorate General of Vocational Education are improving the quality of vocational education teaching and learning, then equitable access and facilities and the quality of human resources both from educators, education personnel, including learners. Next is to ensure the quality of vocational education in order to have conformity with current developments and demand from the world of work. This is solely to create competent vocational graduates who have strong soft skills, qualified hard skills, pancasila character, have integrity, global competitiveness, and socio-techno entrepreneurial spirit. Taut suai education and the world of work as a type of education that focuses on the mastery of certain applied skills, vocational must be able to invite the world of work to enter into the implementation of vocational education. Kemendikbudristek integrates vocational education and the world of work through the concept of link and match 8 + i, which is not only focused on the ceremonial signing of a mere MOU but focuses on the implementation of the implementation of link and match cooperation or link suai with the world of work concretely and thoroughly. The concept of link and match 8 + i should be viewed as a reference and spirit in presenting innovation and vocational development programs. In detail the concept of link and match 8 + i is: First, with the alignment of the curriculum, namely the curriculum of vocational education units from the beginning arranged together with the world of work that we used to analogize with cooking together. Second, continued with real project-based learning from industry or from the world of work called Project Based Learning. Third, present and increase the number of teachers, practitioners, or experts from industry and the world of work to teach in vocational up to 50 hours per

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CONCLUSION

In particular, the Directorate General of Vocational Education also developed a teaching factory program to continue to encourage SMK to have products in accordance with industry quality standards that are present from production-based learning accompanied by mentoring or mentoring from industry partners in a sustainably scalable and encouraged to be scaled up and diversified products. The goal is for teachers and students as product production and marketing actors to be able to understand the market and world standards of work with guidance from their industry partners. Kemendikbudristek also conducts a policy of developing the spectrum of expertise, namely simplification of the spectrum of expertise, which is briefly aimed at adjusting the learning paradigm based on input and study manuscripts compiled by academics and representatives from the world of work in this case through rumah VOKASI. This is in order to create a new learning ecosystem in vocational schools that can be developed flexibly and adaptively to the development of the world so as to create an updated vocational learning plan to the challenges of the current era.

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