

The Role of Vocational Education Towards a Golden Indonesia 2045: Policies and Implementation?

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Abstract

The main factor for the success of development in a country is the availability of quality human resources (HR). Various developed countries in the world show how the strength of human resources has proven to be the driving force of the nation's economy. In 2015, it was recorded that Indonesia had 55 million skilled workers (ADB, 2015). This is a challenge for the education and training sector. This challenge is tried to be answered by the education sector by presenting an educational concept where practical elements in the learning process are carried out more than theoretical elements. Education that prioritizes the application of science rather than the academic side is what is then known as vocational education. Vocational education plays a crucial role in preparing the young generation who are competent and ready to face future challenges. This article discusses the Role of Vocational Education towards a Golden Indonesia 2045.

Keywords: Vocational, Indonesia Gold

INTRODUCTION

Many studies on Vocational Education have been carried out, with various focuses, ranging from studies on the Vocational Education Curriculum (Wardina et al., 2019), the Role of Vocational Education (Slamet PH., 2009), Challenges of Vocational Education (Fajar & Hartanto, 2019), Work Based Learning on Vocational Education (Siswanto, 2013), Educational Integration (Nugroho, 2022), to Blended Learning (Nirmala & Dodik, 2020).

The various studies above show that the problem of Vocational Education can no longer be called a simple problem. Article 31 paragraph (1) of the 1945 Constitution after the amendment reads "Every citizen has the right to education". The stipulation in the 1945 Constitution emphasizes the government's obligation to provide the widest possible access for all people to get education. The Constitution amendment to the Constitution 1945 mandates that the government has an obligation to allocate education costs of 20% of the State Budget and 20% of the Regional Budget in addition to teachers' salaries so that the quality and equitable distribution of education can be further improved.

The main factor for the success of development in a country is the availability of quality human resources (HR). The effort to improve human resources is based on efforts to develop the education sector to realize superior and quality human resources (HR) in welcoming Golden Indonesia in 2045. Therefore, education is one of the most important aspects in the development of a country, including Indonesia.

Various developed countries in the world show how the strength of human resources has proven to be the driving force of the nation's economy. Singapore as one of the small countries in ASEAN with limited natural resources but proves with the quality of its human resources (APK for secondary education 107% and APK for higher education 72%) to become one of the developed countries in the world (ranked 2nd out of 144 countries, Global Competitiveness Index (GCI)) with a per capita income of US\$ 49,261 (2011), far above Indonesia which only reached US\$ 3,509.

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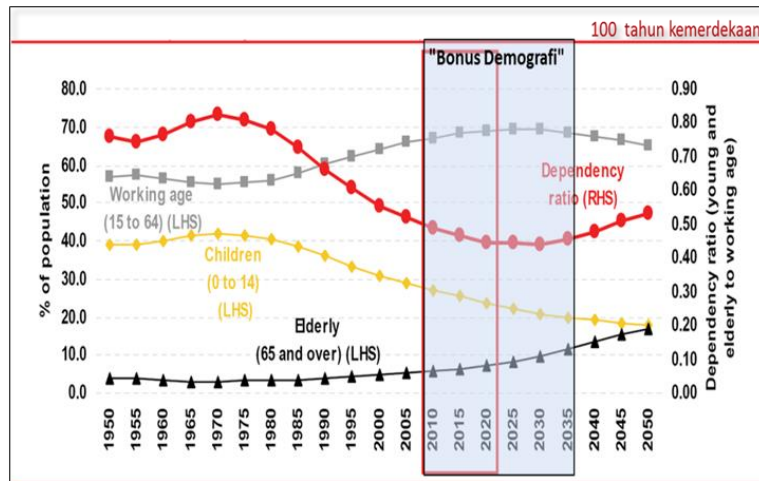


Figure 1.1. Indonesia's Human Resource Capital.

(Source: Coordinating Minister for the Economy, 2024)

As a country with great potential, Indonesia has the opportunity to become a country with a developed economy. In addition to natural resources, of course, the wealth asset of the Indonesia nation is the number of people who can be the basic capital for increasing economic productivity. The population of Indonesia in 2035 is projected to reach 305.6 million people, an increase of 28.6% from 237.6 million people in 2010. Of the 237.6 million people in 2010, the productive age population was 66.5 percent. This proportion continues to increase to 68.1% from 2028 to 2031. The increase in the number of productive age population has led to a decrease in the dependency ratio from 50.5% in 2010 to 47.3% in the 2028-2035 period. The Dependency Ratio is the number of unproductive age population borne by 100 productive age residents. The demographic phenomenon in Indonesia has brought Indonesia into the era of "demographic bonus" from 2010 to 2035 (Figure 1.1).

This condition has the opportunity to increase productivity which of course will also have an impact on the higher level of community welfare. Three sectors that are very strategic in supporting the use of the "demographic bonus" are the Education Sector, the Health Sector, and the Employment Sector. However, if the development of the three sectors is not managed properly and correctly, instead of getting a demographic bonus, on the contrary, Indonesia will face a "demographic disaster" (Demographic Disaster), among other things, due to the high unemployment rate due to the unavailability of graduates or the availability of graduates but incompetent or irrelevant to employment.

In 2015, it was recorded that Indonesia had 55 million skilled workers (ADB, 2015). Based on estimates in the Master Plan for the Acceleration and Improvement of Economic Growth in Indonesia (MP3EI), of this number, 113 million skilled workers will still be needed until 2030 with an average increase of 3.2 million per year. This is a challenge for the education and training sector. This challenge is tried to be answered by the education sector by presenting an educational concept where practical elements in the learning process are carried out more than theoretical elements. Education that prioritizes the application of science rather than the academic side is what is then known as vocational education.

Vocational education has developed very rapidly in the last decade, as evidenced by the increase in the number of new students in the vocational field by 158% from 2001 to 2010. This is because the government focuses on the growth of this component of the education sector as a key strategy for economic growth. In 2013 where there were 1.9 million prospective applicants competing for 1.5 million seats in vocational education institutions. This shows the increasing public interest in vocational education. They hope that by completing their studies in vocational education, it will be easier to get a job because they are considered to have special skills or expertise needed by the world of work. Thus, vocational education must be able to keep up with the development of the business world and industry.

DISCUSSION

Indonesia is projected to receive a demographic bonus which becomes *the window of opportunity* as a developed country (Ray in Nur Sutikno, 2020). The demographic bonus is an explosion in the number of people in a country that will have an impact on the population in economic development. Through this opportunity, the government must have a role as *an agent of development* through the development of the quality of Human Resources. For this reason, Indonesia's supreme leader, President Joko Widodo, responded to the demographic bonus phenomenon by taking steps, namely setting a vision of the 4 pillars of Golden Indonesia 2045, namely:

1. Development of human resources and mastery of science and technology;
2. Sustainable economic development;
3. Equitable development;
4. Strengthening national resilience and governance.

Golden Indonesia is not just a vision of government periodization, but Golden Indonesia is the hope of the nation from all people who want Indonesia to be a developed and sovereign country (Ma'rifah in Aulia et al., 2022). To realize Golden Indonesia 2045, four main factors must be met in successfully utilizing the demographic bonus phenomenon, namely; 1) quality of education; (2) quality of health; (3) availability of jobs; (4) and the consistency of the *Child Birth Ratio* (CDR) figures. (Sutikno, 2020)

The golden generation of Indonesia 2045 is the generation 100 years after Indonesia's independence. Looking at the demographic bonus, the generation is filled with young generations who have broad insights, creative and virtuous souls. Therefore, education is an important means to prepare this golden generation, especially in terms of character. The character built must be holistic and comprehensive and rooted in the value of Pancasila as the nation's identity. The cultivation of this character is important because education not only transfers knowledge, but also values. Education is closely related to Indonesia's golden generation because education is the key to presenting reliable human resources and can change one's attitude and increase one's knowledge (Darman, 2017). The direction of the golden generation of 2045 is to bring Indonesia to become a more advanced country.

Indonesia Golden 2045 aspires for Indonesia to become a developed, prosperous, and highly competitive country in the global arena. To achieve this ambitious vision, the development of Human Resources (HR) is the main key. Vocational education plays a crucial role in preparing the young generation who are competent and ready to face future challenges.

Education, including vocational education, has an important role in the development of the whole human being and the development of Indonesia society as a whole. Human development must be carried out in its entirety, which includes the development of thinking, quality, physical power, and mastery of science, technology, art and sports. In addition, human development is also expected to produce human beings who are able and able to play an active role in building Indonesia society as a whole. The success or failure of the role of vocational education can be measured from the balance of these two goals, namely the development of the whole human being and the development of Indonesia society as a whole. In more detail, the goals of vocational education include four main dimensions, namely:

1. Developing basic human qualities which include the quality of thinking, quality, and physical power;
2. Developing instrumental qualities/functional qualities, namely mastery of science, technology, art, and sports;
3. strengthening the identity of the Indonesia nation; and (4) maintaining the survival and development of the world.

(Slamet PH, 2009).

Gap between Job Market Needs and Education Curriculum, one of the main challenges in vocational education in Indonesia is the gap between job market needs and vocational education curriculum. This gap is caused by several factors, including:

1. Rapid changes in technology and industry: Rapid technological and industrial developments have caused the needs of the job market to change rapidly. Educational curricula are often unable to keep up with these changes quickly enough.
2. Lack of industry involvement in curriculum development: Industry is often not involved in the development of educational curricula. This causes the educational curriculum to be not sufficiently relevant to the needs of the industry.
3. Limited resources in educational institutions: Educational institutions in Indonesia often have limited resources, such as infrastructure, teaching staff, and information and communication technology. This makes it difficult for them to develop a curriculum that suits the needs of the job market.

To realize *Academic Excellence* there are several things that must be developed in Vocational Education, including *link and match* : curriculum is prepared together (*Training* and Certification Materials in Industry are officially included in the campus curriculum), Lecturers and Guest Instructors (Practitioners routinely teach on campus per semester in each Study Program), Internship Program (structured and managed well together between industry and campus), Strong and official commitment (Industry and the world of work absorb graduates if they meet all requirements), Lecturer and Instructor Training (The industry introduces the necessary industrial technology and work processes to Lecturers/Lecturers), Competency Certification, Equipment Assistance (Industry provides laboratory equipment assistance to the campus), *Joint Research* (Applied research of lecturers derived from real cases in the Industry).

The competencies that will be produced are, of course, *hard skills*, *soft skills* that are balanced and wrapped in *attitude*, positive character, honesty, and integrity that must be ensured in the curriculum. The curriculum is the main thing that must be deepened, more adaptive, and in accordance with market needs. A curriculum that ensures that soft skills must be strong, a curriculum that ensures the creation of character, integrity, *attitude*, enthusiasm, and honesty in graduates. Curriculum that implements *project-based learning* or *case method learning* or *case based learning*. Lecturers must be developed not only as teachers, but also as mentors, coaches, facilitators, or as friends. *Leadership* must be improved, develop D4 *Fast Track*, the 4th year *full* plus 1 year abroad, then you will graduate as an applied S2 from abroad. Graduates must produce Applied Research Results to produce real products. With superior and competent human resources, the industry will benefit, the industry will get one reality very easily, the best human resources, high standards that will create productivity, and will reward competent vocational graduates with good careers, it will all come back to input, input will be the main key, if the process is good, then the output is good, it is impossible for the input not to be the best, Input is a new vocational student.

Universities must strengthen Vocational Higher education focuses on *Bachelor* (Applied Bachelor). For Applied Bachelors, one requirement for graduation from Applied Bachelors can be designed, hold diplomas and transcripts in the right hand, certificates of competence, good English (Toefl) to communicate with the outside world. The left hand holds the product or the result of applied research, this will be a complete proof that graduates are competent, and it must be designed together with *pentabelix* synergy and collaboration and *vocational education revitalization*.

To realize the nation's ideals, namely towards the golden generation of 2045, of course, requires support from various parties. In this case, the field of vocational education has a significant impact on how Indonesia's golden generation can be realized. Education is the process of nurturing and empowering human beings to become independent individuals and be able to improve their own lives and the lives of others. The process of culture and empowerment is carried out throughout life (*long life learner*), where this mechanism requires the role of teachers who exemplify and are able to build willpower, and increase students' potential and creativity (Khairat, 2017). According to a study (Iriawan, 2017), the country's golden generation in 2045 will be able to provide benefits or delays for a country depending on how well the education sector prepares them. Future generations will want 21st century education, which requires them to have literacy, capable, and high moral competence. The education in question is education that develops rather than forms, which provides opportunities for every student to develop in accordance with their potential to compete with the global community without losing their cultural authenticity. Future generations will be intelligent, superior, valuable, and competitive that will

allow them to survive in any environment, anywhere. The transformation of education in the 21st century in realizing superior human resources towards the golden generation of 2045, requires several skills that need to be mastered by students as described by the Partnership for 21st Century Learning (P21) in (Wijaya et al., 2016).

CONCLUSION

An educational concept where the practical element in the learning process is carried out more than the theoretical element. Education that prioritizes the application of science rather than the academic side is what is then known as vocational education. Indonesia Golden 2045 aspires for Indonesia to become a developed, prosperous, and highly competitive country in the global arena. To achieve this ambitious vision, the development of Human Resources (HR) is the main key. Vocational education plays a crucial role in preparing the young generation who are competent and ready to face future challenges. Education, including vocational education, has an important role in the development of the whole human being and the development of Indonesia society as a whole.

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