Vocational education as the answer of challenges for global competition

R Nurmalasari¹, B Oktaviastuti², and E Sutadji³

¹Postgraduate, State University of Malang, Malang, Indonesia
²Postgraduate, State University of Malang, Malang, Indonesia
³Mechanical Engineering Department, State University of Malang, Malang, Indonesia

E-mail: riananurmalasari28@gmail.com

Abstract. ASEAN Economic Community (AEC) was one of the opportunities and challenges for Indonesia in facing globalization era. The important thing on AEC was the quality of human resources. Qualified human resources were expected to produce skilled workers who were ready to compete with workers from other ASEAN countries. Vocational and training education was an appropriate alternative to improve Indonesia's human resources. Vocational education was required to improve the competence of Indonesia's young generation who will enter the workforce in line with technological developments and changes in the labor market. Vocational education was expected to answer the challenges of global competition. This was because vocational education has advantages such as intensive skill, skilled labor, ability to face the era of globalization, and vocational education has benefits for many parties.

1. Introduction

ASEAN Economic Community (AEC) is one of the opportunities and challenges for Indonesia in facing globalization era. Based on the study of ASEAN Productivity Organization [1], Indonesia is an emerging country which is now one of the ASEAN economic strengths. Where the average economic growth of Indonesia is 6.3% compared to Malaysia 5.4%, Thailand 5%, Singapore 1.2%, Philippines 6.6% and Vietnam 5.7%. Economic growth is closely related to skilled labor. Skilled labor is produced from superior quality human resources and ready to compete. This is a challenge for the Indonesian people to be able to produce qualified human resources that can print their own job or become a skilled workforce.

One way that can be taken to prepare qualified human resources is through formal education consisting of general education and vocational education from various levels [2]. In line [3] stated that vocational and training education is an appropriate alternative implemented to improve the human resources of Indonesia. Vocational education is required to improve the competence of Indonesia's young generation who will enter the workforce in line with technological developments and changes in the labor market. This is in line with the definition of vocational education proposed by [4] namely vocational education as an organized educational program directly related to the preparation of individuals entering the workforce. Through good vocational education Indonesia is expected to be able to prepare and print quality human resources. With such an Indonesian human resources are expected to be ready and able to compete with human resources from other countries, especially ASEAN countries on the AEC.
2. Theory And Discussion

2.1 The Role of Vocational Education in Preparing Human Resources

Vocational education as an educational institution that aims to prepare graduates enter the work world has a strategic role in preparing human resources, especially middle-level workers. The field experience as well as the projection data of development planning shows that in view of the prospect of economic viability and feasibility vocational education is still a good investment in preparing middle-level skilled workers [5]. The result of cost benefit analysis by [6] shows that overall investment in senior high school both high school and vocational high school (SMK) is profitable. Also found that investment in vocational high school (SMK) especially SMK Technology is the most profitable investment. However, according to [7] in the journey as the global era and the rapid development of science and technology, vocational education is faced with various problems concerning the quality of graduates produced. From the business world there are complaints that graduates who enter the workforce have not had a good job readiness [8].

Various efforts have been made by vocational secondary education in this case vocational high school (SMK), in order to produce graduates who really needed by the world of work as a form of accountability to the community. As [9] stated that vocational education is held on the assumption that two kinds of needs must be met: the needs of society and individual needs. Efforts to improve the quality of human resources that have been undertaken by vocational education by applying industry work practices, link and match, dual system education, competency-based education, Broad-based Education, and Life Skill Education which all aim to improve the quality of graduates in accordance with real needs in the field work. The achievement of the above educational goals depends largely on the quality of input and a number of variables in the educational process.

2.2 Challenges of the Future of Vocational Education in the Era of Globalization

Educational institutions face serious challenges to be able to follow at the same time be on the front of global change. The compass report (20/4/2009) explains how colleges in Singapore have long ago sent a special team to observe and negotiate with outstanding students in Indonesia with the lure of adequate facilities and prospective futures to continue study and work there. Future potential assets are abandoned by the our nation and exploited by foreigners for their benefit. Furthermore, countries like Thailand have taught Indonesian lessons in education [10]. This is a hard slap for the Indonesian nation.

This is where the urgency of the educational institutions to address the challenges of the world at high speed, describe it in detail, prepare measurable and systematic steps, and strive to realize the big dream as a country that is science and technology literate. [11] capture the challenges of educational institutions in two categories, namely external and internal challenges. External challenges include rapidly changing times while internal challenges include government policies that are still not progressive, both the Old Order, the New Order, and the Reform Order.

Furthermore, in detail, the challenge of vocational education in Indonesia, which includes challenges related to education systems and educational personnel. In relation to the challenge of the education system Shrode and Voich [12] explain that the system contains the meaning of interrelated parts, functioning and working independently and collectively in a complex circle of unity to achieve the overall goal in synergy. [13] states that education is implemented to improve human potential through the learning process that is in it. But in reality, in the process of education, according to Sudarminta [14] there are big problems faced by Indonesia's education today which is the low quality of education, the inadequate learning system, and the moral crisis that hit the society. In addition, our
learning model is still analogous to the banking concept of the teacher is still a deposit of various
information [15]. In more detail the challenge of vocational education lies in the curriculum used, the
low quantity of graduates of vocational education absorbed by the world of work, the establishment of
vocational education schools that pay little attention to the potential and local wisdom, lack of educators,
inadequate infrastructure, and lack of cooperation with relevant institutions [16]. The unemployment
rate of vocational high school (SMK) graduates is still high, as stated by Slamet [17] stating that 52%
of vocational graduates are not absorbed by the world of work. The quality of human resources is still
the main problem [18]. This will result in the low competitiveness of Indonesian human resources in the
international arena.

Given the many challenges that must be faced and resolved by vocational education to produce
qualified human resources, it is appropriate that all components of the nation support. Good cooperation
between several parties is expected to improve the quality of human resources through vocational
education.

2.3 Vocational Education Opportunities Based on Owned Excellence
Opportunities possessed by vocational education are reflected in the advantages possessed by the
vocational education itself. Some of the benefits of vocational education are:

2.3.1. Skill. The Indonesian state based on the results of the ASEAN Productivity Organization study is
in the second group with Malaysia, Iran and Thailand as a country with intensive skills [19]. Intensive
skills are characteristic of a country that has a focus on the adaptation of imported technology with some
improvements. In accordance with the characteristics of the Indonesian State on intensive skills, the
implementation of the strengthening of vocational education, especially vocational education through
vocational high school (SMK), and short post junior high school training are more appropriate than
broadening general education [20].

2.3.2. Skilled Workers. The industrial superiority of a nation is largely determined by the quality of
skilled personnel directly involved in the production process. Vocational education is education aimed
at producing skilled labor at the middle level with skill set. The reasons for the importance of skilled
labor are: (1) Skilled labor plays an important role in determining the level of quality and cost of
production; (2) Skilled labor is urgently needed to support the growth of a country's industrialization;
(3) Skilled labor is a factor of excellence in the face of global competition; (4) The application of
technology to act as a factor of excellence depends on the skilled workforce who is capable and capable
of applying it; (5) People with skills have high chances to work and are productive.

2.3.3. Ability to Deal with AEC in the Globalization Era. Certainly, the global economic field is
changing. Human Resources is the key to the ability to win free market competition. The problems faced
by the current state of Indonesia is the quality of human resources is still relatively low, the
unemployment rate is still high. Therefore vocational education and training is an alternative that can
be implemented in order to respond to Global challenges facing Free Trade Marketing. This is because
vocational education evolves following the varied development of economic demands of each country
[21]. Vocational education is designed to develop the skills, understanding, work attitude, and
appreciation needed by workers in understanding the work and making progress in meaningful and
productive work [22].
2.3.4. *Vocational Education for Individuals, the World of Work, and Society.* Vocational education if implemented well will contribute greatly to the achievement of the goals of a nation. Vocational education does not merely educate and train existing skills, but also serves as a driver of change. Vocational education has three main benefits, namely: (1) for learners as self-improvement, increasing job opportunities, increasing entrepreneurship opportunities, increasing income, preparing for further education, preparation of community, nation, state, adaptation to environmental change; (2) for the world of work can obtain high-quality workforce, ease business costs, help promote and develop business; (3) for the community to improve the welfare of the community, increase national productivity, increase state income, reduce unemployment.

3. **Conclusion**

Preparing high quality human resources and having the advantage is the capital to face AEC in the era of globalization. After seeing the importance of qualified human resources, vocational education has multi-function which if implemented well will contribute greatly to the achievement of the goals of a nation. Vocational education not only educates and trains existing skills, but also as a driver of change.

4. **References**

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