

# Improving the quality of vocational education through work-based learning in the era of the ASEAN Economic Community

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## Abstract

In this AEC time, competition can be a benchmark of the significance of progressing the quality of human assets in Indonesia. To respond to current market conditions, it is necessary to have a fast response. The aim is that educational institutions can face the changing global market threat. Education in SMKs must be able to develop and be able to innovate to follow up on opportunities and challenges in the global market. The right solution to this problem is the work-based learning model approach. There are three approaches to learning: first, the practice of fieldwork is a form of development that can be done by vocational education institutions to improve skills not found in the learning process at school and carried out together with the Business World or Industrial World (BW/IW). Second, the industrial class, which is currently widely applied in vocational schools because it is one of the programs considered to be able to bridge the competency gap that exists in schools with BW/IW so that schools can continue to follow the times that can produce skilled workers in the industry. Third, the teaching factory is work-based learning in vocational schools whose output is production/service that alludes to the benchmarks and methods that apply within the industry and are carried out in an atmosphere like that that exists within the industry. Through learning opportunities in practical settings, work-based learning will have an impact on participants and serve as a model for improving the standard of instruction at vocational institutions.

**Keywords:** quality of education; work-based learning; ASEAN economic community

## Abstrak

Di masa MEA ini persaingan dapat menjadi tolak ukur betapa pentingnya kemajuan kualitas aset manusia di Indonesia. Untuk menyikapi kondisi pasar saat ini, diperlukan respon yang cepat. Tujuannya agar lembaga pendidikan dapat menghadapi ancaman pasar global yang terus berubah. Pendidikan di SMK harus mampu berkembang dan mampu berinovasi untuk menindaklanjuti peluang dan tantangan di pasar global. Solusi yang tepat untuk mengatasi permasalahan tersebut adalah dengan pendekatan model pembelajaran berbasis kerja. Pendekatan pembelajarannya ada tiga, yaitu: pertama, praktek kerja lapangan merupakan suatu bentuk pengembangan yang dapat dilakukan oleh lembaga pendidikan vokasi dalam meningkatkan keterampilan yang tidak terdapat pada proses pembelajaran di sekolah dan dilakukan bersama dengan Dunia Usaha atau Dunia Industri. (BW/IW). Kedua, kelas industri yang saat ini banyak diterapkan di SMK karena merupakan salah satu program yang dianggap mampu menjembatani kesenjangan kompetensi yang ada di sekolah dengan BW/IW, sehingga sekolah dapat terus mengikuti perkembangan zaman. menghasilkan tenaga kerja terampil di industri tersebut. Ketiga, teaching factory, teaching factory merupakan pembelajaran berbasis kerja di SMK yang outputnya berupa produksi/jasa yang mengacu pada tolok ukur dan metode yang berlaku di industri dan dilaksanakan dalam suasana seperti yang ada di industri. Melalui kesempatan pembelajaran dalam suasana praktis, pembelajaran berbasis kerja akan berdampak pada peserta dan berfungsi sebagai model untuk meningkatkan standar pengajaran di lembaga kejuruan.

**Kata kunci:** kualitas pendidikan; pembelajaran berbasis kerja; komunitas ekonomi ASEAN

## 1. Introduction

With the creation of the ASEAN Economic Community (AEC) in 2015, we now confront international competition. The AEC's implementation may have a beneficial effect. One of them is the unrestricted movement of skilled labor and capital among ASEAN member nations. Each side of the coin, however, needs to be considered separately, and the negative repercussions of applying MEA must also be appropriately controlled. According to a study from the Central Statistics Agency (CSA), the Open Unemployment Rate (OUR) was 5.83 percent as of February 2022 of the total working-age population of 208 million people, which is an illustration of one of the detrimental effects of the implementation of the MEA, while the Open Unemployment Rate Vocational school education (VHS) is still the highest among other levels of education, namely 10.38% or  $\pm 1.2$  million people <sup>1</sup>. A significant issue is the low retention of recent vocational graduates <sup>2</sup>. Numerous strategies are required to increase human resources in Indonesia since doing so will help the country meet its development goals and lower its still high unemployment rate. Kemdikbud's Rejuvenation of Vocational Education (2016) A country's people are its greatest source of economic advantage; thus, over the next 15 years until 2030, a substantial revival of vocational education is needed to provide an additional 58 million employees with 21st-century skills <sup>3</sup>. One of the things the industry needs is reliable human resources that can be qualified to face the challenges <sup>4</sup>. Of all the resources available to the industry, human resources have direct contact with change and influence the development of success for the industry <sup>5</sup>. Human factors, such as cognitive, perceptual, psychosocial, and physical workplace characteristics, influence how well people operate in the production system <sup>6</sup>. Therefore, instead of eliminating the human factor from industrial areas, the corporation must verify that production personnel are capable of handling and operating the new manufacturing equipment <sup>7</sup>. Consequently, a suitable and adaptable teaching and learning process is one approach to increasing the quality of human resources, and education must continually be enhanced if the prediction of world ranking 7 is to be realized.

Work-based learning is an approach to education that makes use of the workplace to provide work experiences that support students' academic, social, intellectual, and professional growth in addition to learning activities <sup>8</sup>. One of the most well-known and widely used programs for work-based learning in Indonesian education is the internship program. One way to bridge the gap between new learning issues and quickly shifting industrial demands is through the work-based learning approach.

Work-based learning is a learning program implemented by VHS, and one that is always used in work-based learning is fieldwork practice. Work practice is a systematic and synchronous skill learning program obtained through training in schools and managing tasks in the workplace to reach a particular degree of professionalism by carefully organizing professional talent training and education. Fieldwork practice learning aims to develop the character and work ethic needed in the business world and industry, such as discipline, integrity, responsibility, leadership, and cooperation. Fieldwork practice allows students to develop latent skills and abilities, and also provides students with industrial experience, which is used as the capital when graduating and looking for work.

### 1.1. Vocational Education in the ASEAN Economic Community

The Southeast Asian market is a large and promising market with an area of around 4.5 million square kilometers and many people reaching 600 million <sup>9</sup>. Indonesia's involvement in the AEC has made rapid developments in the economic, business, commercial, and industrial sectors. But if we want to see deeper, every change, of course, brings good and bad impacts <sup>10</sup>. Regarding some of the difficulties Indonesia should encounter in preparation for the 2015 AEC. First, the disguised unemployment rate is still high. Second, the number of entrepreneurs is small. Third, workers in Indonesia are dominated by uneducated workers. Fourth, there is a rising number of educated employees without jobs. The disparity in worker productivity across economic sectors comes in fifth. Sixth, most jobs are in the unorganized sector. Among the 10 ASEAN members, Indonesia has the highest unemployment rate, ranking seventh overall. Eighth, the demand for minimum wages for workers, contract workers, and social security for employees, and ninth, the problem of Indonesian employees, which is still a lot going on abroad <sup>11</sup>.

To address these challenges, there needs to be an encouragement that can be a reference before students are released into the real world. The skills that VHS graduates must have must be in line with the original purpose of vocational education, which was to prepare students to work as professionals in various fields of expertise as needed. The competence standard for VHS graduates is to master the knowledge of the vocational skills they have and have an entrepreneurial skill mindset, both to meet the demands of the workforce and to continue their higher education in accordance with their vocational training <sup>12</sup>. This was also encouraged by the implementation of independent learning by the Indonesian government, one of which said that the National exam this year would be the last and would be changed to a minimum competency assessment and character survey. Still, news from the latest government said the National exam this year would be eliminated because there was an epidemic. Covid-19. Therefore, immediate action is needed that includes all elements of learning in schools. These facilities and infrastructure include character building, appropriate curriculum, technology-based media and learning materials, online, entrepreneurship, evaluation, study room, dormitory, teacher, management, and culture in schools. School culture is the scope of character education that must be maintained and fertilized because good skills and knowledge cannot support one's success without being accompanied by a good attitude. A person's attitude will be reflected through the speech, polite speech will make its appeal <sup>13</sup>.

## **1.2. Model Work-Based Learning**

A program or experience in education that gives students the chance to broaden and deepen their knowledge, consider career possibilities, and showcase their abilities is known as work-based learning <sup>14</sup>. For the learning experience in the workplace to have a significant impact on students, various learning opportunities must be included in the student's educational path toward completion of secondary school. Work-based learning refers to the formation of students who can work professionally later. Students are in the form of being individuals who have good attitudes and qualities such as honesty, integrity, responsibility, and courtesy. Students' work-related experience can enhance their academic, professional, and social growth in addition to their classroom studies <sup>15</sup>.

Work-based learning aims to develop students' professionalism in the workplace and provide them with the opportunity to focus on their growth and take the next step toward a successful career. Career exploration opportunities offer a more focused experience where

students take an active role in identifying their long-term aspirations by pursuing their selected jobs.<sup>16</sup> Students can create their preparation plans for their desired jobs after they have a better grasp of the workplace. Career preparation and training experiences give students the chance to learn on the job while demonstrating improvement in their academic and professional/technical abilities through practical application to a specific career or business. Consequently, the approach of work-based learning is quite suitable to be used not only to increase work experience, but it can also to foster significant student entrepreneurial insights<sup>17</sup>.

Work-based learning aims to develop work competencies that are strengthened by work training experience. Work-based learning methods allow students to extend their work preparation outside the classroom<sup>18</sup>. When students have specific career goals, they can often prepare themselves better by being at work. Often, schools find that they are unable to continue to update the practice site with sophisticated equipment, such as the industry-industry outside. Schools can build partnerships with local industries to collaborate on training specifically designed for certain students. Both the school and industry must assume responsibility for helping students achieve the competencies needed; the school provides relevant technical instruction in the classroom, and on-the-job training is provided on the job site/industry.

Work-based learning in Vocational Schools has the first 3 models, Field Work Practices, namely learning designed to influence students in terms of thinking patterns, attitudes, skills, and behaviors that lead to strong, skilled ability to enter the business world. or the industrial world today. Fieldwork activities as an application of the theory that has been taught by teachers in schools can also provide experience to students and can foster interest in entrepreneurship<sup>19</sup>. Second is the industrial class. An industrial class is an activity that aims so that students can follow learning through real activities in the industry; in this case, schools are required to bring in industries that want to provide education in schools, and the follow-up is usually on recruitment of workers<sup>20</sup>. The existence of industrial class cooperation will provide financial benefits that are cost-effective, and students will get jobs more quickly after graduation<sup>21</sup>. Third, the teaching factory concept is a learning model that brings an industrial learning atmosphere to a learning atmosphere through effective collaboration between vocational high schools and the corporate or industrial world in the classroom<sup>22</sup>. The process of implementing the teaching factory program is the integration of business concepts and professional education through their field competencies<sup>23</sup>. The fundamental difference between the three models above is the place and process; in short, most fieldwork practices are done outside of school, although fieldwork practices can also be done in schools, such as teaching factories. For industrial classes conducted in schools most students who graduate, have good grades, and rank in the top 5 will be directly employed in industry-class industrial partners. The teaching factory that distinguishes the two previous lessons is to provide a product/service that partner companies standardize.

The benefits of work-based learning are very diverse; for instance, by applying learning outcomes, students may comprehend how the industry functions by applying what they have learned in school to the actual world of work and how to solve a problem related to work in real terms, understand the interests and abilities that exist within oneself and can acquire new competencies that cannot be found in school. The work-based learning experience that is applied also promises to build on students' experiences, motivate them to excel both in their courses and complete their degree programs, and help students switch to the workforce after

graduation<sup>24</sup>. The benefit for schools is that they can make mutually beneficial ties such as the recruitment of competent students whose esteem can benefit the students themselves. Then the benefit for the industry is that it can get additional workers, and if the industry recruits new workers, it can directly take from the brightly qualified students who are in place; this means it can also reduce the training costs that will be incurred for new workers. Work-based learning models, in addition to a closer examination of educational theories and perspectives, can provide tools for analyzing and developing approaches to training<sup>25</sup>.

## 2. Methods

The idea behind this study methodology is to use data libraries and literacy techniques to raise the standard of vocational training and education through approaches that emphasize work-based learning. A concept paper proposes a novel theoretical angle, describes a novel, inventive procedure or approach, explores a specialist subject, conveys the author's viewpoint on a specialist subject, or contrasts earlier publications of an article. This document offers a response or reply.

## 3. Results and Discussion

The overview above illustrates the challenges and opportunities associated with the implementation of the ASEAN Economic Community (AEC) in 2015, with a primary focus on the vocational education system in Indonesia. The Central Statistics Agency (CSA) revealed that the Open Unemployment Rate (OUR) in Indonesia was 5.83 percent in February 2022, indicating the potential negative impact of the AEC on employment. Furthermore, the unemployment rate for vocational school education (VHS) graduates was exceptionally high at 10.38%.

To address these challenges, the government initiated the Rejuvenation of Vocational Education in 2016, aiming to provide 58 million employees with 21st-century skills by 2030. One crucial approach involves work-based learning, leveraging the workplace to enhance students' academic, social, intellectual, and professional growth. The vocational education system in Indonesia has implemented work-based learning through fieldwork practices, industrial classes, and the teaching factory concept.

In this discussion, several conclusions and critical discussions can be drawn. Firstly, the impact of the AEC on the unemployment rate demands a careful response from the government to align vocational education with the needs of the job market. Indonesia's involvement in the AEC has increased international competition, which may lead to a mismatch between graduates and job demands.

Secondly, the government's commitment to the rejuvenation of vocational education is a positive step towards aligning graduates with the evolving needs of the job market. The focus on 21st-century skills reflects a recognition of the evolution of modern industry needs.

Thirdly, work-based learning is identified as a crucial solution to bridge the gap between education and industry demands. By implementing fieldwork practices, industrial classes, and the teaching factory concept, students can develop the professional and entrepreneurial skills required in the workforce.

Fourthly, the challenges faced by Indonesia in preparing for the AEC, such as the high disguised unemployment rate, a shortage of entrepreneurs, and the dominance of uneducated workers, indicate the need for a comprehensive strategy to address these issues. Vocational

education must be able to produce graduates who are professionally ready and possess entrepreneurial skills.

To achieve these outcomes, the government needs to ensure that work-based learning models are continually strengthened and adapted to the dynamics of the job market. Collaboration between vocational schools and industries can be the key to success in creating a competitive workforce and reducing the unemployment rate. Thus, a holistic approach to vocational education, along with the implementation of work-based learning methods, will bring benefits to students, industries, and overall economic growth.

#### 4. Conclusion

In the era of the ASEAN Economic Community (AEC), intense competition among workers from ASEAN nations necessitates a swift response to market conditions. The education system, particularly in Vocational High Schools (VHS), must evolve and innovate to meet global market opportunities and challenges. The work-based learning model emerges as the most effective solution. This method connects classroom teachings to workplace skills, either through external placements or within the school itself, allowing students firsthand experience in real-world work environments. Three learning models are highlighted: Fieldwork practice enhances skills not covered in school, Industrial class bridges competency gaps between schools and industries, and Teaching factory produces industry-standard results through work-based learning in vocational schools. Work-based learning aids in developing students' social, academic, and self-skills, preparing them for productive societal living and fostering healthy work habits and professional skills. The benefits extend to students, schools, industries, and society at large.

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