Work-Based Learning through Life Based Learning in Vocational Education to Reduce Unemployment Rates in the Industry 4.0 Era

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The social problem that is in the spotlight for experts in vocational education at this time is the large number of unemployed people who come from graduates of vocational education (SMK) in Indonesia. The challenges faced by Indonesia are also increasing, namely with the increasing demands of companies or industries on the quality of human resources. The job market requires multi-skilled graduates forged by the education system. Therefore, quality improvement is needed, both in terms of education, skills, and the ability to compete in the job market. Following up on this phenomenon, a real government effort is needed to overcome unemployment, namely through a work-based approach through life-based learning. The work-based approach through life-based learning in education has a positive impact on students in improving achievement, motivation, and ultimately has an impact on reducing the unemployment rate.

**Keywords:** work-based approach, life-based learning, unemployment
1. Introduction

The existence of the AEC (Asean Economic Community) raises free foreign workers in and out of the ASEAN region. The Ministry of Manpower and Transmigration noted that the number of Foreign Workers in 2018 reached 126,000 people, an increase of 69.85 percent compared to the end of 2016 of 74,183 people (Gumelar, 2018). The increasingly fierce competition and limited conditions of employment will have a negative impact on the opportunities for the absorption of graduates into the world of work.

The Carina study (2015) shows that the absorption of Vocational High School (VHS) students in building engineering expertise study programs in six construction service companies is relatively low, at only 23.14%. The research of Mutaqin, Kuswana & Sriyono (2015) shows that the absorption of state VHS graduates in the automotive industry in Bandung City is relatively low, which is less than 50%. While the Head of the East Java Provincial Education Office said that the absorption of VHS graduates up to 2017 was 64.7% (Hasanah, 2017). This condition is not in line with the targets set by the Ministry of Education and Culture (Kemendikbud) which states that as many as 75% of VHS graduates are expected to work immediately (Apriliyadi, 2018). The low level of absorption of vocational students in the business world / industrial world as explained above will have an impact on the unemployment rate of VHS graduates in Indonesia increasing from year to year.

Identification of factors that are quite influential is partly because the quantity of vocational schools in Indonesia reaches 12,659 VHSs (Ministry of Education and Culture, 2016). This amount is not in line with the quality of the learning process and the quality of the output produced. In addition, the cause of the high contribution of vocational high school education (VHS) to the number of unemployed people in Indonesia is because of the gap between schools and industry, which means that the competencies possessed by graduates are not appropriate (miss match) with the demands of the world of work. The competencies in question, especially the soft skills competencies possessed by VHS graduates are classified as low. Given that vocational learning is emphasised on hard skills competencies. This is made clear by Hanafi (2012: 108), that the industry complains that many vocational graduates do not have appropriate skills, especially employability to be able to survive and survive in various work
situations and conditions. This reality was emphasised at the regional working meetings of private tertiary institutions leaders who stated that the development of hard skills reached 90%, while soft skills were at only 10% (Sudjimat, 2011). At present soft skills is a top priority in the world of work (Syafiq and Fikawati, 2007).

The above phenomenon illustrates that vocational education, in this case, VHS is still not optimal in creating graduates. While the challenges faced by Indonesia are increasing, namely with the increasing demands of the business/industry. The job market requires multi-skilled graduates forged by the educational unit and system, both in secondary education and higher education.

In other contexts, Indonesia is also predicted to experience a demographic bonus in the years 2030-2040, namely that the population with a more productive age compared to the non-productive population. The population of productive age is estimated to reach 64% of the total population of Indonesia which is estimated at 297 million. Therefore, the number of people with a productive age must be followed by quality improvement, both in terms of education, skills, and the ability to compete in the job market. Following up on the above phenomena, a real government effort is needed to overcome unemployment, namely through renewal of education in vocational schools with a work-based approach through life-based learning.

2. Factors Causing Unemployment of VHS Graduates

The social problem that is in the spotlight for experts in vocational education at this time is the large number of unemployed people who come from graduates of VHS in Indonesia. This condition is again a reflection material to review the readiness of VHS graduates in the businesses and industries, both from hard skills and soft skills possessed. Work readiness is a situation related to the maturity level of a person to compete in the world of work (Harja & Ali, 2013).

These conditions can be influenced by at least three things, namely aspects of knowledge, aspects of practical skills and aspects of the competitor's attitude/mentality/competitiveness of VHS graduates. Aspects of knowledge and skills (hard skills) can affect mentality (soft skills)
of graduates to compete in the world of work. Likewise, on the contrary, a strong mentality not balanced with adequate aspects of knowledge and skills will impact competition in finding work becomes tighter. This shows that aspects of knowledge, skills, and attitudes/mentality are very important to be developed in order to reduce the unemployment rate of VHS graduates.

3. Work-Based Approach Models Through Life-Based Learning

The work-based approach model is the Contextual teaching learning (CTL) approach, where the workplace (business/industry) provides a set of structured learning experiences, so that students can learn based on live work learning (life-based learning). A number of work training learning series (course works) are utilised and prepared for students to prepare for work continuity. In industry, the ability to develop internal and external partnerships becomes the main competency for effective innovation in the world of education (Sudjaswin in Siswanto, 2009: 304).

The quality of educational outcomes both in terms of processes and products is strongly influenced by the learning approach used in conducting education. The theories of work-based learning, life-based learning, experiential learning, and context teaching have become very relevant in the implementation of education. It is necessary to develop a program or model for administering education with various theories to improve the quality of learning outcomes that ultimately affect and quality of graduates.

Work-based learning is more than learning experience or familiar with experiential learning, which consists of adding layers of simulation experience to conceptual knowledge, in work based learning, theories can be obtained in activities coupled with practice, theories are built on practical activities because in practice able to produce theory (Raelin, 2008: 64).

Work-based learning uses many different technologies, but what stands out is the dissemination of action projects, learning teams, and other individual experiences, such as guidance, that allow and encourage learning dialogue. There are three important elements in the work-based learning process, namely: (1) Work-based learning views learning as something acquired in the midst of action and dedication as a task in our own hands, (2) Work-based learning sees the
creation and utilisation science as a joint activity, where learning becomes the activity or work of everyone, and (3) Users of work-based learning demonstrate a learning as a learning talent, which frees them to ask or ask the main assumptions of practice (Raelin, 2008: 2).

The focus of attention in the application of the curriculum is on maximizing the success of students when moving from the school environment to the business world. The opportunity to succeed is because of the Company Based School (CBS) where CBS is a more realistic approach to preparing students to understand the operations of a company; CBS is based on three learning approaches, namely school-based learning, work-based learning and meaningful activities in the world of work (Reksoatmodjo, 2010: 254).

Some of the above definitions explain that work-based learning through life-based learning is a form of learning through the workplace that is a form of work experience or work shadowing in a certain time. Work-based learning according to Gray (2001) is learning at the college level that comes from learning for work (e.g. work placements), learning at work (for example in house training programs), and learning through work. Life-based learning allows more people to be present in learning and in the workplace (Staron, Jasinski, and Weatherley, 2006).

4. Conclusion
The social problem that is in the spotlight for experts in vocational education at this time is the large number of unemployed people who graduate from vocational education in Indonesia. The challenges faced by Indonesia are also increasing, namely with the increasing demands of companies or industries. The job market requires multi-skilled graduates forged by the education system. Therefore, quality improvement is needed, both in terms of education, skills, and the ability to compete in the job market. Following up on this phenomenon, a real government effort is needed to overcome unemployment, namely through a work-based approach through life-based learning. Work-based approaches through life-based learning in education have a positive influence on achievement, motivation and continuation of education.
5. **Suggestions**

A work-based approach through life-based learning has considerable benefits. So it is expected that the managers of vocational education can carry out work-based approaches through life-based learning as habituation and work culture for students so that after graduating have reliable knowledge and skills to be able to compete in the world of work and/or create jobs for themselves and for others.
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