

The Status and Challenges of Entrepreneurship Education in Vocational Higher Education Institutions in Indonesia

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Abstract

Vocational higher education is one of the types of Indonesian higher education. In practice, entrepreneurship has been considered the most important subject that should be taught in vocational higher institutions. Numerous studies have been conducted by discussing the topic of vocational education and entrepreneurship in Indonesia. However, limited studies have been conducted on implementing entrepreneurship education at the Indonesian vocational higher education level. This study aims to explain the status and challenges of entrepreneurship education in Indonesian vocational higher education institutions. The method used in the study was based on a descriptive qualitative method focusing on a contextual review of the literature. The review is enhanced by collecting data from articles, books, reports, and vocational higher education intuitions' websites. This study found that entrepreneurship education has been implemented in vocational higher education institutions, although some aspects still need improvements. Further, the development of entrepreneurship education in vocational higher education institutions in Indonesia is confronted by internal and external challenges. Lastly, the study's findings have significant implications for researchers, policymakers, and entrepreneurship educators.

Keywords: challenges; entrepreneurship education; institutions; status; vocational higher education

INTRODUCTION

Education is a basic need for individuals. It is defined as training given to individuals to meet professional criteria in a particular field (Sewell & Newman, 2014). According to Kumar & Ahmad (2008), education is a purposive, continuous,

conscious, and unconscious process carried out by individuals to meet individual and society expectations. It is often related to the success of the sustainable economic development of a country. Education also becomes one of the determinant factors in competing with other countries-

human resources. With the development of competitive human resources, many countries have designed their education system, including Indonesia.

The Indonesian education system has four levels of education. The first level is primary education (grades 1-6). The second and third levels are junior education (grades 7-9) and senior education (grades 10-12). The highest level is higher education. Specifically, Indonesian higher education comprises academic and vocational higher education. Academic higher education aims to understand theory in more detail. This form of higher education includes both self-governing public and private universities. However, vocational higher education focuses more on practices rather than theories in the learning process so that students master particular applied skills to work. In short, vocational higher education prepares young people and adults for working life (Clarke & Winch, 2012). This form of higher education is well known as state and private polytechnics.

The challenge of the education system in Indonesia is how the outcomes of higher and vocational education contribute to economic development. Particularly, graduates of higher education must be job creators rather than job seekers (Hartono, 2021). In the industrial era 4.0, entrepreneurship is a relevant course that can prepare young people and adults to contribute to Indonesian economic development. Much literature has shown a strong relationship between economic development and entrepreneurship.

Regarding this linkage, entrepreneurship courses must be implemented into the curriculum of both academic higher education and vocational education to shape students' entrepreneurial spirit and attitude. As such, they will be motivated to establish their venture in the future, which will help the Indonesian government grow the local economy by providing job vacancies to graduates of higher education institutions.

In Indonesia, many universities have offered entrepreneurship education programs in their institutions for senior graduates. For instance, those universities are Prasetiya Business School, Bina Nusantara University, Surya University, Amikom University, and Ciputra University (Aswan & Usman, 2020), Bandung Institute of Technology, Bengkulu University, State University of Malang, and The Institute of Technology and Business Nobel Makassar (Amalia & von Korflesch, 2021). These universities have the brand image as entrepreneurial universities to attract senior graduates' intention to pursue their higher education. However, none of the Indonesian vocational colleges has offered entrepreneurship education programs. Generally, entrepreneurship education at vocational colleges in Indonesia is given as an entrepreneurship course. This course is embedded within accounting and business administration.

Nevertheless, entrepreneurship education in vocational higher education has not significantly decreased Indonesian unemployment.

Based on the data of Central Bureau Statistics, the total of opened unemployment in Indonesia was approximately 8.75 million people in February 2021. In more detail, it was dominated by vocational school graduates and senior school graduates at 11,45 percent and 8.55 percent, respectively, followed by university graduates at 6,97 percent. Meanwhile, vocational and secondary schools appointed out about 6,61 percent and 5,87 percent, respectively, followed by primary school graduates at 3,13 percent. This indicates that entrepreneurship education has not been maximally implemented in vocational schools and colleges to shape students' entrepreneurial mindset. Studies by Ghina et al. (2017), and Walter & Block (2016) found that entrepreneurship education increased vocational students' intention to be entrepreneurs.

Apart from the phenomena above, numerous studies have been conducted in Indonesia discussing vocational education and entrepreneurship. However, empirical research on entrepreneurship education in the context of vocational higher education institutions has been quite limited. Very few studies focused on entrepreneurship education's current circumstances and challenges in Indonesian vocational higher institutions. For instance, the study by Aswan & Usman (2020) focused on entrepreneurship education in Indonesian higher education institutions. However, this study did not comprehensively discuss issues of current states and challenges of entrepreneurship

education in vocational higher education institutions. In addition, a study was carried out by Sunyoto & Setiyawan (2021), who focused on entrepreneurship in vocational schools. Yet, this study did not explain entrepreneurship education in vocational higher institutions. Hence, the purpose of this study is to discuss the status and challenges of entrepreneurship education in Indonesian vocational education institutions.

METHOD

This research adopts the philosophy of positivism with a deductive approach to operationalize entrepreneurship education in vocational higher education institutions. The research uses a qualitative research method, especially content analysis. Content analysis was conducted to collect secondary data from Indonesian or English articles/literature, books, reports, and vocational college websites. The objective of content analysis is to summarize information and organize it into meaningful components that suit the discussed topic (Bengtsson, 2016). The advantage of content analysis is as it can identify meanings, themes, and biases under a systematic examination and detailed interpretation of general concepts (Matlay et al., 2015). Berg (2004), stated that the elements of content analysis that can be considered, such as terms, semantic, characters, concepts, themes, items, and paragraphs. In this study, entrepreneurship education in vocational higher education

institutions is the theme. Vocational colleges are the unit analysis. The unit of observation consists of elements such as entrepreneurship course, entrepreneurship program, business incubators, entrepreneurship curriculum, apprenticeship activity, entrepreneurship educators, and entrepreneurial culture.

RESULT AND DISCUSSION

The findings are classified into the current situation of entrepreneurship education and challenges of entrepreneurship education in vocational higher education institutions in Indonesia

The Currents Situation of Entrepreneurship Education in Vocational Higher Education in Indonesia

Entrepreneurship Educator

Entrepreneurship educators are key actors in the learning process of entrepreneurship education who transfer entrepreneurial knowledge (Langston, 2020). Individuals must possess some criteria to be categorized as ideal and competent entrepreneurship educators. In his book, "Teaching Entrepreneurship at University: from the wrong building to the right philosophy," Hindle (2007) argued that entrepreneurship educators must have an experience as serial entrepreneurs. In addition, they must have a formal education in entrepreneurship, such as graduates either in the level master's or Ph.D. program.

However, the criteria suggested by Hindle (2007) do not fit the requirements of entrepreneurship

educators in Indonesian vocational colleges. Most educational backgrounds of entrepreneurship educators in vocational colleges comprise business administration, financial management, and marketing management (Aswan & Usman, 2020). None of the entrepreneurship educators who teach entrepreneurship in Indonesian vocational colleges has studied entrepreneurship with a master's degree at a reputable university. Moreover, entrepreneurship educators who teach entrepreneurship in vocational colleges do not have real business experience. Ironically, the recruitment of entrepreneurship educators was never conducted by vocational colleges because this is not fit with the need for two departments in vocational colleges, namely the department of business administration and accounting.

Entrepreneurship Curriculum

Vocational curricula are generally designed by involving stakeholders. Thus, entrepreneurship curriculum in vocational higher education institutions must be specifically designed based on the inputs of entrepreneurs. It must differ from the business curriculum. To date, vocational colleges in Indonesia have adopted an entrepreneurship curriculum based on "Through" Entrepreneurship. Teaching "Through" entrepreneurship is the learning process by acting as a real entrepreneur (Kyro, 2008). Moreover, current entrepreneurship course in Indonesian vocational colleges has discussed the characteristics of real

entrepreneurs, business opportunity identification, business plan, marketing, finance, and human resource. However, these contents contrast with those suggested by Blass (2018), who stated that the ideal contents of entrepreneurship courses comprise emotional intelligence, risk insights, survival strategies, competitive strategies, and resilience. Similarly, Noya & Setiyati (2015) argued that effective content of entrepreneurship courses must include idea identification, business function, legal plan, business plan, and business growth.

Apart from some suggested entrepreneurship courses from previous paragraphs, there is a suggestion that the entrepreneurship curriculum must be relevant to entrepreneurial learning in the industrial 4.0 era. Hidayat & Yunus (2019), stated that an entrepreneurship curriculum must be designed by embedding data literacy, technology literacy, and human literacy components in academic and vocational higher education.

Entrepreneurship as a Compulsory Subject

Entrepreneurship is a compulsory course with two or three credits (Triharyanto et al., 2019). It must be taught to vocational students in Indonesia. This means that vocational students must pass this subject as a requirement to obtain a degree in vocational education. After evaluating the social sciences curriculum on the Polytechnic's websites, entrepreneurship subject is

given in the third or the fourth semester for a 3-year diploma or 4-year diploma program.

Entrepreneurship Program

The entrepreneurship program is a department that focuses on entrepreneurship courses. None of the state or private Polytechnics offers an entrepreneurship program. This condition is confirmed as the author did not find the department of entrepreneurship on 43 states and 156 private Polytechnics websites. According to Aswan & Usman (2020), the majority of the program of entrepreneurship education in Indonesia is only offered by private and state universities. This data can be accessed on the website of PDDIKTI by typing entrepreneurship in Bahasa, namely <https://pddikti.kemdikbud.go.id/search/Kewirausahaan>. Additionally, most vocational higher education institutions generally offer management and business study, accounting, and business administration to senior graduates.

Entrepreneurship Competition Program for Students of Vocational Colleges

The Ministry of Education and Culture of the Republic of Indonesia always holds an entrepreneurship competition program for students of higher education institutions every year. This program is part of the student entrepreneurship program. In 2021, the Ministry of Education of Culture divided this program into two groups. The first group is targeted at students of academic higher education institutions, while

the second is for students of vocational higher education institutions. By dividing two groups of competition, students of vocational colleges can fairly compete in the entrepreneurship competition program. According to Wikan Sakarinto, the General Director of Vocational Education and Profession for 2020-2024, the objective of the entrepreneurship competition program is to encourage students to establish their businesses and help them to grow their businesses by providing mentorship program as well as facilitating them to acquire funding and legal document. In participating in the program of entrepreneurship completion, students of vocational colleges must write a business proposal based on a particular template. After the students send their business proposals, eligible business proposals will be published by the Directorate of Vocational Education and Profession. In turn, the business proposal will be fully funded.

Apprenticeship Implementation

In vocational colleges, students must conduct an apprenticeship program to obtain work experience. One of the apprenticeship programs that students can conduct is an entrepreneurship-based apprenticeship (Mulyadi et al., 2018). Unlike usual apprenticeships in medium and large industries, the place of entrepreneurship-based apprenticeship is in small industries. The advantage of having an apprenticeship in small industries is that students can learn entrepreneurship from the

entrepreneur in the early stage of business. During the period of entrepreneurship-based apprenticeship, students are expected to acquire knowledge or competencies, skills in the technical aspect of business and management, and communication skills. The duration of 3 months is a standard time for students to conduct entrepreneurship-based apprenticeships. Since the Merdeka Belajar policy, known as the freedom to learn, was formulated by the Ministry of Education and Culture of the Republic of Indonesia, the new duration of the entrepreneurship-based apprenticeship is 6 months. At the end of the apprenticeship program, the vocational students will be given a certificate that can be used to enroll in a job. This certificate equals 20 credits.

Business Incubator

Fukugawa (2013) defined a business incubator as an organization that provides facilities and business development, such as technology and management, for budding entrepreneurs within a specific period. It was first initiated and established by the cooperation ministry and universities in 1992. Based on the official data released by the ministry of education, culture, research, and technology, there are 9 business incubators owned by vocational colleges in Indonesia as stated by Aswan and Usman (2021) which can be seen in Table 1. Table 1 shows that the majority of Polytechnic, which has a business incubator, takes place on Java Island. Other polytechnics with business

incubators take place on Sumatra Island, Kalimantan Island, and Sulawesi Island.

Table 1. List of business incubators owned by vocational colleges in Indonesia

Polytechnic	Incubator Name
Surabaya Electronic Polytechnic State Polytechnic of Pontianak	PENS SKY Venture
Polytechnic of ATI Makassar	The Technology Business Incubator of State Polytechnic of Pontianak
State Polytechnic of Bengkalis	The Industry Technology of Business Incubator Incubie Tech
State Polytechnic of Kupang	The Business Incubator of Polytechnic of Kupang
Polytechnic of APP Jakarta	Inbizz
State of Polytechnic of Jember	The Center of Entrepreneurship and Business Incubator
State of Polytechnic of Bandung	The Business Incubator of State of Polytechnic of Bandung
Manufacture Polytechnic of Bandung	The Incubator Business of Polytechnic of Bandung

Source: [Aswan and Usman \(2021\)](#)

The Challenges of Entrepreneurship Education in Vocational Higher Education in Indonesia

According to the Dictionary of Meriam-Webster, challenges are as "stimulating task or problem". In this research, challenge refers to the problem that causes the late development of entrepreneurship education in vocational higher education. Internal and external challenges are identified by Indonesian vocational higher education institutions.

Internal Challenges

Internal challenges are obstacles found in the internal environment of vocational higher education institutions against the progress of entrepreneurship learning. Several factors are categorized as internal challenges, as explained as follows.

Inadequate Modern Facilities

Ideally, vocational higher institutions must have modern facilities to face the Industrial era 4.0. However, this expectation is not suitable for the actual condition in Indonesian vocational higher institutions. Many of them might not have modern entrepreneurship laboratories or workshop spaces to support the entrepreneurial learning process. Even some vocational higher education institutions do not have business incubators. Such conditions can hinder the entrepreneurial atmosphere experience for students and entrepreneurship educators. [Prianto et al. \(2019\)](#), argued that vocational higher institutions must own modern facilities to reach the learning goal.

Inadequate Modern Equipment

Modern equipment is highly needed to support entrepreneurial teaching and learning in vocational higher education. However, many vocational higher education institutions have obsolete equipment that supports entrepreneurial teaching and learning. Also, some do not have modern equipment to support entrepreneurial activity in the classroom. As a result, students are

only taught theoretical aspects of entrepreneurship.

Lack of Training for Entrepreneurship Educators

In vocational education, training for educators is a primary need. One of the educators who must acquire continuous training is entrepreneurship educators. It is because the training for entrepreneurship educators cannot be conducted in a short period (Ha & Yeo, 2016). To date, there is no specific entrepreneurship educators' training facilitated by the General Directorate of Vocational Education, specifically regarding how to teach entrepreneurship to students of vocational higher education in Indonesia. The only basic training that entrepreneurship educators joined was the training of basic instructional technique or applied approach, known as PEKERTI or AA training in Bahasa. Even training information about certification in entrepreneurship has never been exposed by the General Directorate of Vocational Education. Therefore, this factor might be one of the reasons why entrepreneurship education is not well implemented in vocational higher education.

Students' Mindset

Graduates of vocational education have different occupation aspirations after finishing their studies. Most of them will say that they want to work as staff in a reputable company, while others say they want to be civil servants in government institutions (Syam & Sudarmi, 2019). As such, vocational

graduates' occupation mindset still focuses on job seekers. Meanwhile, few graduates want to be job creators. Such a situation contradicts the argument of Blesia et al. (2021), who stated that entrepreneurship education could change vocational students' mindset from job seekers to job creators. Low job creation graduates will be a big challenge for the Ministry of Education and Culture to change vocational graduates' mindsets.

External Challenges

External challenges are obstacles found in the external environment of vocational higher education institutions against the progress of entrepreneurship development. It is usually hard to be controlled by vocational higher education institutions regarding the development of entrepreneurship education. Two external challenges are identified as external challenges as explained as follows.

Inadequate Financial Aid from The Government

Every year the General Directorate of Vocational Education gives competitive financial aid to vocational colleges. This financial aid is known as a matching fund. The amount of this fund is limited for several institutions eligible to earn this fund through a competition scheme. The fund does not aim to improve the entrepreneurship atmosphere in vocational colleges, but it is used to strengthen the collaboration between vocational higher institutions and industries. Therefore, the absence of

entrepreneurial financial aid in vocational higher institutions highly hinders entrepreneurship education best practices.

Entrepreneurship Culture

Indonesia is an archipelago country that has many islands. That means that it has lots of cultures. As such, entrepreneurship culture for individuals will differ from each other. Aswan & Usman (2020) argued that the degree to which individuals have entrepreneurial behaviors, such as risk-taking, independence, and innovative thoughts, will be determined by their cultural values. This condition might happen to students of vocational colleges. In particular, their culture will influence whether vocational students want to establish their businesses. If they come from tribes holding strong entrepreneurial mindsets, individuals will be motivated to be job creators after being vocational graduates.

CONCLUSION

In conclusion, to date, the implementation of entrepreneurship education in vocational higher education institutions in Indonesia has been conducted, although some aspects of entrepreneurship education need to be improved. Inevitably, the current development of entrepreneurship education in vocational higher education institutions in Indonesia has internal and external challenges. This study has implications for all kinds of practitioners. It can inform researchers regarding the general overview of the existing condition of

entrepreneurship education and its challenges in vocational higher education institutions. Also, the findings of the research can be considered by the policy makers at all levels to further improve the policies of entrepreneurship education in vocational higher education institutions. Finally, entrepreneurship educators can teach their students with the knowledge provided in this study.

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