ECONOMIC ANNALS-XXI
ISSN 1728-6239 (Online)
ISSN 1728-6220 (Print)
https://doi.org/10.21003/ea
http://ea21journal.world

Volume 197 Issue (5-6)'2022

Citation information: Hardiyanto, W., Hatimah, I., Wahyudin, U., Saepudin, A., & Nurajizah (2022). Strategies to improve entrepreneurship skills of youth considering the business and industry effects. Economic Annals-XXI, 197(5-6), 17-23. doi: https://doi.org/10.21003/ea.V197-03

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Strategies to improve entrepreneurship skills of youth considering the business and industry effects

Abstract
Education-industry collaboration is a win-win learning and business strategy. Collaborative methods used include entrepreneurial internships and educational factory learning. The purpose of this study was to measure the effectiveness of the school-business partnership model through training and work-based learning. This type of research is structured as descriptive quantitative research. This is a data collection method using a questionnaire-style survey tool distributed to respondents with a total sample of 110 students. The findings show that, as educational institutions, schools should be able to produce graduates with skills that meet the needs of business and industry. Schools must be able to make their curricula viable, sustainable and industry relevant. The data results show that there is a positive and significant influence on improving entrepreneurship skills through entrepreneurship internship and teaching factory learning.

Keywords: Entrepreneurship Skills; Business; Industry; Education Factory
JEL Classification: M10; M11; Q13; Q17
Acknowledgements and Funding: The authors received no direct funding for this research.
Contribution: The authors contributed equally to this work.
Data Availability Statement: All data will be available upon request.
DOI: https://doi.org/10.21003/ea.V197-03

1. Introduction

The colleges did now no longer permit graduates to paintings in step with their abilities. Indonesian economic system in a innovative community-primarily based totally economic system that will increase neighborhood capability and is revolutionary calls for the help of the training area through entrepreneurship abilities and classes as an attempt to assume unemployment to create their personal jobs (Nugraheni, 2021). Education is the most strategic sector for national development. Human quality improvement can only be achieved through education. Through education, new generations acquire knowledge, skills and competencies (Hermann & Bossle, 2020). The most appropriate education to meet the challenges of globalization is a business- or industry-oriented education that emphasizes learning approaches and is based on good educational management (Sukoco et al., 2019).

Competency-based education is expected to produce graduates who are responsive to industry demands and global challenges (Minggu et al., 2020). In this case, schools need to be able to offer students with both soft and hard skills the right curriculum to meet the challenges of the Industry 4.0 era. The curriculum in question should better adapt students to the world of industry and business (entrepreneurship). Nurmaliza et al. (2018) argues that a college or technical school is one of the formal educational institutions that teach entrepreneurship in a structured way. On the other hand, Mahendra et al. (2017) stated that the main objective of teaching entrepreneurship education in formal schools in Indonesia is to enhance the entrepreneurial spirit of students. Responding to industry phenomena and facing a range of challenges requires sustainable synergies through school-work partnerships that offer graduates the opportunity to apply the skills they have learned in school.

Several studies have proposed a school partnership model with industry, Amir et al. (2019) provide the right partnership model to improve entrepreneurial competence through the on job training program. They suggest different school partnership models with business and industry that can be implemented to enhance entrepreneurial learning. Corporate training and education model. Wijaya (2013) explains the types of apprenticeships: master apprenticeship 74%, mentor apprenticeship 65%, cognitive apprenticeship 78%, sandwich 94%. Sandwich internships were the type of internship most preferred by respondents. If the learning process focuses on the application of the theory given to the trainee in the classroom and then in the field under the supervision/guidance of her supporting staff.

Based on this phenomenon and various evaluations of previous research, the authors are motivated to analyze suitable industry-university partnership models to enhance students' entrepreneurial skills in global competition such as Entrepreneurship Internship and Teaching Factory learning. This research attempts to bridge the existing gap by developing ideas and theories that can contribute to the development of a strategic partnership model between education and industry on an ongoing basis.

2. Theoretical Background

2.1. Entrepreneurship Internships

Industrial Progress is now applying the concept of Bring Industry to School. This jargon doesn't mean bringing machine tools into schools, but what they contain: bringing attitudes, bringing projects, and bringing the best learning. Entrepreneurship education can connect educational institutions with business and industry and uses work-based methods of learning. Nurhikmawati et al. (2019) describe entrepreneurial internships as a strategic initiative to learn about companies. Murtadho et al. (2018) states that entrepreneurship education is both formal and informal in the form of internships in companies and services to enable students to learn directly from the global economy and practice entrepreneurial practices through exhibitions and marketing. They argue that it can be achieved with an educational model to enable research, markets as a source of inspiration to create market opportunities.

2.2. Entrepreneur Skill

Kurniati (2017) argues that entrepreneurship is a field with a unique purpose, the ability to create something new and different. From the perspective of Hidayat et al. (2018), entrepreneurial learning is the process of helping people with the concepts and skills to identify business opportunities with broad understanding, confidence and ability to act. Entrepreneurship is the spirit,

attitudes, behavior and skills of a person in running a business or business that results in efforts to find, create and implement new ways of working, technologies and products, provide services and higher profits by increasing efficiencies to produce better products (Rusdiana, 2018).

Through both formal and non-formal education, students can reach their full potential through entrepreneurship education, a vehicle for developing life skills. Purwaningsih and Muin (2021) argue that instilling an entrepreneurial spirit from an early age makes people more confident, independent and creative, and more productive as they grow.

3. Variables Relationship and Hypotheses Development

3.1. Entrepreneurship Internships and Entrepreneur Skill

The partnership model with entrepreneurship apprenticeship is expected to be one of the steps to resolve the high unemployment rate in Indonesia. With partnership programs that are increasingly aligned, we can create better human resources. In addition, the increasingly competitive global competition means that an increase in entrepreneurial skills is needed in order to survive.

The results of the research conducted by Ashri et al. (2018) show that the industrial engineering internship experience and the learning outcomes of digital imaging images are simultaneously and significantly related to the entrepreneurial interest of students. According to Nachammai et al. (2020), entrepreneurship and Internship are always related. The most popular activity to promote entrepreneurship is the Entrepreneurship Internship Program.

The internship experience influences the professional development and success of business students and helps them to earn sufficient financial income in their first job. Students also learn the skills necessary for professional success. Based on some of the opinions mentioned above, the authors conclude into one hypothesis as follows:

H1: Entrepreneurship Internships have a positive influence on Entrepreneur Skill.

3.2. Teaching Factory Learning and Entrepreneur Skill

Teaching Factory learning is used to support learning. The learning process in schools requires high-level qualifications associated with entrepreneurial groups. The production unit has a student entrepreneur group. Another benefit of implementing Teaching Factory Learning is that it can win local and national competitions. The Teaching Factory model synergizes with entrepreneurship education. This method is used to transfer knowledge between industry and school students. This knowledge has direct implications that are useful for students to gain work experience while learning entrepreneurship (Mavrikios et al., 2018).

TEFA learning is one of the learning approaches that are in accordance with the demands of current and future competencies for educational institutions and industry (Rentzos et al., 2015). The use of the teaching factory learning model is intended so that students of the school skills program have an entrepreneurial spirit, and are able to work in the industry according to their expertise. The teaching factory model is a model with industry-relevant learning concepts (products and services) to qualify entrepreneurial interests and adapt them to work in industry.

The TEFA (Teaching Factory) program approach is a blend of CBT (Competency Based Training) learning approaches, where training is based on the work done by students in the workplace and puts emphasis on what a person can do as a result of training (output) not the quantity of the amount of training (Prianto et al., 2021). The development of the TEFA management model is more directed to the management process in classrooms and practice rooms based on procedures and standards of work in the industrial world. Based on some of these expert opinions, it can be synthesized into the following hypotheses:

H2: Teaching Factory Learning has a positive relationship with Entrepreneur Skill.

H3: Entrepreneurship Internships and Teaching Factory Learning simultaneously have a positive and significant effect on Entrepreneur Skill.

A Framework model of our research including three hypotheses is shown in Figure 1.

4. Data Analysis and Discussion

Our research includes a collection of questionnaires which has been finalized by August-October 2022 in the educational institutions in the West Java Province of Indonesia, with a total sample of 110 respondents (students). Determination of the research sample using purposive

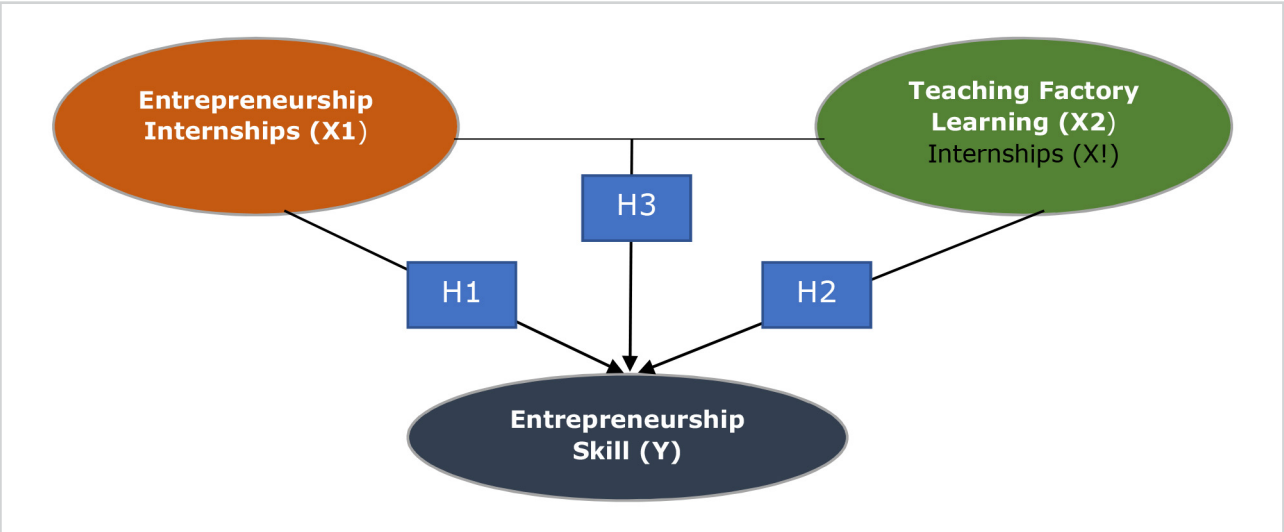

Figure 1:
Framework Model
Source: Constructed by researchers (2022)

sampling, with the respondent's criteria are school students in grades 10-13 who are conducting entrepreneurship education using the Teaching Factory Learning and Entrepreneurship Internship methods.

This study uses descriptive and statistical analysis to assess the impact of teaching factory and apprenticeship programs on students' growth and entrepreneurial skills. The descriptive method of this study consisted of an analysis of the percentage and frequency of the demographic characteristics (Table 1) of the participants and a measure of the average tendency of the participants' responses, while the statistical method included tests of normality and reliability. This is a scaling analysis including; The reliability of the questionnaire was tested using Cronbach's alpha. The Likert scale is used to measure the weight of the value of each question and statement on the questionnaire; 1 means strongly disagree, 2 means disagree, 3 means neutral, 4 means agree, and 5 means strongly agree.

Table 1:
Demographic profile of respondent N = 110

Demographic Variable	Frequency	Percentage
Public Senior High	20	18
Private Senior High	18	16
Public Vocational	45	41
Private Vocational	27	25
Manufacturing	53	48
Construction	33	30
Information Technology	24	22
Natural Science	17	18
Social Science	10	1
Machinary	31	29
Electrical	21	23
Automotive	31	29
First Level	23	21
Second Level	62	56
Third Level	25	23
Male	87	79
Female	23	21

Source: Data obtained by the researchers (2022)

The demographics of respondents related to the types of schools participating in the partnership program with industry are the majority followed by Public vocational schools (SMKN) as many as 45 respondents (41%), followed by Private vocational schools (SMK Swasta) as many as 27 respondents (25%), Public Senior High School (SMAN) as many as 20 respondents (18%), Private Senior High School (SMA/MA private) as many as 18 respondents (16%). The results of the data illustrate that Vocational schools (SMK) place the most students in partnership programs

with industry. Currently, the Directorate General (Directorate General) of Vocational Education Kemendikbud Research and Technology through the Directorate of Partnership and Alignment of Business and Industry (Dit. Mitras DUDI) continues to pioneer work to improve the partnership ecosystem between vocational education units and the business and industrial world. One of the ways to strengthen this partnership is through the signing of a cooperation agreement document (PKS) simultaneously between the Directorate General of Vocational Education with several business and industrial worlds.

For the type of industry that is a priority for partnership, which is dominated by manufacturing and engineering as many as 53 respondents (48%), followed by the Construction and Property industry as many as 33 respondents (30%), students who take part in internships and teaching factories in the information technology industry sector as many as 24 respondents (24%), this shows that the link and match-based curriculum in schools is in accordance with current industry needs. Especially in the manufacturing and engineering industry, it opens up greater opportunities for students to do internships and factory teaching as a manifestation of corporate social responsibility (CSR).

Students who took part in the internship program and factory teaching, the majority came from the Machinery and Automotive study program, namely 61 respondents (58%), then, students majored in Electrical as many as 21 respondents (23%), and majoring in Natural science (IPA) as many as 17 respondents. (18%), and followed by students majoring in Social science as many as 10 respondents (1%).

Entrepreneurship internship programs and factory teaching are usually carried out for grade 2 students, because they are given the freedom to study independently by participating in industrial learning directly for 1 full semester. From the table, it can be seen that most of those who did internships and factory teaching came from grade 2 as many as 62 respondents (56%), grade 1 students only 23 respondents (21%), followed by grade 3 students as many as 25 respondents (23%). This partnership program is attended by the majority of male students as many as 87 respondents (79%), and female students as many as 23 respondents (21%).

Table 2 indicates the measurement of the research instrument in the form of a questionnaire which is an indicator of an acceptable variable or construct. A questionnaire is said to be reliable if a person's answer to the statement is consistent or stable over time. The method used to test the reliability of the questionnaire in this study was to measure reliability with the Cronbach's alpha statistical test. Based on the table above, the variables of Entrepreneurship Internships, Teaching Factory, and Entrepreneurship Skill are declared reliable. It can be concluded from the value of the Entrepreneurship Internships variable (X1) of 0.678, the Teaching Factory variable (X2) 0.647, and the Entrepreneurship Skill (Y) variable 0.665, all of which are in the range of 0.61-0.80 which means reliable.

Based on Table 3, it can be seen in the regression equation as well as the variable coefficients of Entrepreneurship Internships and Teaching Factory Learning. The partial regression model can be interpreted that the constant value is 1.755. This means that if there are no Entrepreneurship Internships and Teaching Factory Learning variables, the Entrepreneurship Skill is 1.755. Based on the table, it can be seen that the regression coefficient for Entrepreneurship Internships is 2.802. Therefore, the result of the t-count statistical test is greater than the t-table value (2.802 > 1.670), then the hypothesis is accepted at a significance level of 0.05. This means that the Entrepreneurship

Table 2:
Reliability of Variables

Variable	Cornbach	Alpha	Description
Entrepreneurship Internships (X1)	0.678	0.61 – 0.80	Reliable
Teaching Factory Learning (X2)	0.647	0.61 – 0.08	Reliable
Entrepreneurship Skill (Y)	0.665	0.61 – 0.08	Reliable

Source: Compiled by the authors

Table 3:
Correlation Test

Model	Unstandardized		Standardized	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.574	3.746		1.755	0.084
Entrepreneurship Internships	0.305	0.109	0.292	2.802	0.007
Teaching Factory Learning	0.447	0.100	0.468	4.493	0.000

Source: Compiled by the authors

Internship variable has a significant influence on Entrepreneurship Skill. Then it can be seen that the regression coefficient of the Teaching Factory Learning variable is 4.493. Therefore the results of the statistical test t count greater than the value of t table (4.493 > 1.670), then the hypothesis is accepted at a significance level of 0.05. This means that Teaching Factory Learning has a significant influence on Entrepreneurship Skill.

From Table 4, the result of statistical calculation of the value of Fcount = 16.027 is that Ftable is 3.14, so Fcount (16.027) > Ftable (3.14) Sig.F value is 0.000, so H1 is accepted and H0 is rejected. In other words, Entrepreneurial Internships and Teaching Factory Learning influence entrepreneurial skills simultaneously. This is an opportunity for youth's future career. On the other hand, the success of the program to improve students' entrepreneurial skills must be well planned by educational institutions so that the student's learning process with industry runs well and obtains the greatest benefit. Constraints as expressed by Dhani et al. (2021), such as time management, teacher competence, student motivation, fund-raising should be an important concern in the success of entrepreneurship internship programs and teaching factory learning. Evaluation from a planning, development and implementation perspective is required to produce employable graduates.

Table 4:
Simultaneous Test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	58.955	5	29.477	16.027	.000[a]
	Residual	114.030	105	1.839		
	Total	172.985	110			

Notes:
a. Predictors: (Constant), ENTREPRENEURSHIP INTERNSHIP, TEACHING FACTORY LEARNING
b. Dependant Variable: ENTREPRENEURSHIP SKILL.

Source: Compiled by the authors

5. Conclusion

In fact, these two programs represent the first step towards improving the adaptability of young human potential in industry. In addition, there are many values that the new generation of industry can possess, such as the ability to learn and keep learning, so-called Learning to Learn. Of course, to realize the spirit of lifelong learning, we need an ecosystem to support it. This partnership and coordination program should therefore have the full support of stakeholders. The partnerships built aim to achieve harmony so that the learning process is relevant to the needs of the world of work today and in the future. Achieving harmony through stronger partnerships will create school staff that can enhance industrial competitiveness. Hence, both general and vocational schools are now closely linked and also contribute to the economy of the country. Steps to strengthen relationships are a necessity that must be taken to further replicate the practice of collaboration and of course improve the quality of collaboration to make it deeper, more inclusive and more sustainable. Real project-based learning from improve the skills of trainers/teachers/lecturers, educational staff and students through internships and training courses; conducting fieldwork practices; conducting competence certifications according to industry standards and needs; Providing business trainers/teachers/guest lecturers in vocational training units; promoting applied research in support of entrepreneurial education, training factories; Obligations for industries that employ VET graduates, as well as promoting additional subsidies.

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Received 20.03.2022
Received in revised form 22.04.2022
Accepted 26.04.2022
Available online 22.06.2022
Updated version of the paper as of 15.11.2022