

# Industrial Internship and Entrepreneurship Competencies on Vocational High School Students

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**Abstract.** The purpose of the research is to explore the influence of internship and vocational skill to student's entrepreneurship competencies. The research used ex post facto approach. Population in this research is all students of Vocational High School in Bandung, Indonesia. The sample of 40 respondents was determined by proportional random sampling technique. The data were collected by instrument questionnaire and test. Data analysis used descriptive statistics and multiple linear regression. The results show that almost half students have a low the competencies of an entrepreneur. The hypothesis testing shows many the influence of factory teaching has a positive and significant effect on the competencies of an entrepreneur. Similarly, vocational skills have positive influence and significant on the competencies of an entrepreneur. Respectively, the influence of factory teaching and vocational skills expertise collectively have the effect on the competencies of an entrepreneur. Therefore, the influence of factory teaching and vocational skills are effective to student's entrepreneurship cap competencies.

## 1. Introduction

Increasing on the ratio number of Vocational High School, resulted an increase of the number of Vocational High School which is closely significant will resulted on of labor force/employee. Unless the number of Vocational High School graduate workforce is not accompanied by inadequate competences with the needs of the world of the work, the growth of unemployment vocational high school graduates will be greater than high school graduates, junior and college[1] Where in the fact as if a vocational education institution produces some unemployed graduates are unemployed then unit one, ladder or a type of the education can be said irrelevant to the needs for society and national development. With many educated unemployed, vocational the education can also be said to be unable to encourage the growing of the national economy growth may even be a constraint in the growth [2]

According to data of the number of unemployed vocational high school graduates compared with the school and college is the largest of 9.84%. While the level of elementary, junior high, senior high school, diploma and college are respectively getting percentage for elementary school 3.44%, junior 5.76%, 7.22% diploma graduate, 6.22 % [3].

Some Solutions for these problem are how to create a graduates of Vocational High School who have the entrepreneurship competencies that be straight forward readiness for being an entrepreneurship. Some of the encouraging reasons to choose an entrepreneur such as are (1) the solution for graduates oneself and for others aspect because it requires employees on the business to be



run well. (2) Reducing unemployment is expected to be increased, and the last one is robe a be to be beneficial (3) can be beneficial in improving welfare [4].

In this case the role of the school is very important to stimulate a competencies and a courage to have entrepreneur [5]. To start a courage is the main begin a prime competency to be had by someone to enter the business world. Not only skill of entrepreneurship but also the courage without cap competencies often forces us into a failure [6].

Vocational High School generally aims to prepare some students to work in a particular field [7]. Therefore, Vocational School is one that plays a role to the students to provide entrepreneurship skills and some skills [8]. Learning outcomes provide by vocational High School, it is wished that students could become an entrepreneurship to minimize the number of unemployed [9]. Model of learning can improve the quality student competence so as to provide the provision of entrepreneurship competencies named teaching factory learning model [10].

So to have the entrepreneurship competencies of vocational high school students after applying teaching factory and vocational skill is essential to have some researchers.

In this research examines the factors that influences the competencies of having an entrepreneur in order that know how far of the influence of teaching factory teaches and vocational skill on the competencies of an entrepreneur for students. By knowing the factors of the competencies of be entrepreneur are expected entrepreneurs in Indonesia can develop in to increasing development and also can reduce the number of unemployed students. Therefore, the authors are interested to raise lift an entrepreneurship theme entitled: The competencies of Entrepreneurship students of Vocational High School at Learning Implementation of Teaching Factory Learning.

## 2. Research Methods

This research uses ex-post facto research method. Place of Research conducted at Vocational High School in Bandung on student of Motorcycle Engineering skill package. The time of the research was conducted on May 2 to 10, 2017. The population in the study were all students of Motorcycle Engineering skill package. The sample of this research is 40 students using proportional random sampling technique. Data were collected by instrument questionnaire and test. Data analysis used descriptive statistics and multiple linear regression.

## 3. Results and Discussion

### 3.1. Data description

The result of calculation through descriptive statistic competencies of having be entrepreneur, role of teaching factory teaching and skill of student of Vocational High School in Bandung competence expertise Technique and Business of Motorcycles presented in Table 1.

**Table 1.** Distribution of Frequency and Percentage of Entrepreneurship Capacity (Y), Teaching Factory Teaching Role (X1), and Vocational Skill (X2) Student of Vocational High School Competence of Motorcycle Engineering skill package in Bandung.

| No            | Category  | Y                 |      | X <sub>1</sub>    |      | X <sub>2</sub>    |      |
|---------------|-----------|-------------------|------|-------------------|------|-------------------|------|
|               |           | Frek<br>(student) | %    | Frek<br>(student) | %    | Frek<br>(student) | %    |
| 1             | Very low  | 3                 | 7.50 | 2                 | 5.00 | 4                 | 10.0 |
| 2             | Low       | 12                | 30.0 | 12                | 30.0 | 9                 | 22.5 |
| 3             | Medium    | 13                | 32.5 | 8                 | 20.0 | 13                | 32.5 |
| 4             | High      | 9                 | 22.5 | 13                | 32.5 | 10                | 25.0 |
| 5             | Very high | 3                 | 7.50 | 5                 | 12.5 | 4                 | 20.0 |
| <b>Jumlah</b> |           | 40                | 100  | 40                | 100  | 40                | 100  |

Based on Table 1, it shows the highest percentage of competencies from entrepreneur (Y) and the role of teaching factory (X1) of 32.5% is in medium category with 13 students. While the highest percentage of vocational skill (X2) is also 32.5% with the number of students 13 students, but in the

high category. To strengthen the data there is the influence of the role of teaching factory teach and vocational skills to the competencies of students to become a vocational high school student, then the data is analyzed by hypothesis testing. Hypothetical test was performed by multiple linear regression test. Hypothesis test results are presented in Table 2.

**Table 2.** Partial Hypothesis Test Results with Linear Regression Test (t test).

| Model |                  | Coefficients <sup>a</sup>   |            |                           | T     | Sig. | Conclusion          |
|-------|------------------|-----------------------------|------------|---------------------------|-------|------|---------------------|
|       |                  | Unstandardized Coefficients |            | Standardized Coefficients |       |      |                     |
|       |                  | B                           | Std. Error | Beta                      |       |      |                     |
| 1     | (Constant)t      | 1.710                       | 3.848      |                           | .444  | .659 |                     |
|       | Teaching_Factory | .532                        | .098       | .533                      | 5.455 | .000 | Hypothesis Accepted |
|       | Vocational Skill | .435                        | .094       | .450                      | 4.607 | .000 | Hypothesis Accepted |

a. Dependent Variable: Entrepreneurship

Based on Table 2, the value of learning factory teaching coefficient and vocational skill coefficient value are positive values of 0.532 and 0.435. While the significance value (sig t) for variable of teaching factory teaching variable and practice skills equal to 0.000 is smaller than the significance level of 0.05 ( $p < 0.05$ ). Research hypothesis:

H1: the role of teaching factory learning has a positive and significant impact on competencies having entrepreneur.

H2: the role of vocational skills has a positive and significant impact on competencies having entrepreneur.

H3: the role of teaching factory teaching and vocational skills are jointly influential

Positive and significant to the competencies of student having entrepreneur. Hypothesis decision is to accept hypothesis H1 and H2, which mean of role of teaching factory teaching and vocational skill have positive and significant influence to competencies of having entrepreneur at student of Vocational High School in Bandung Competence of Motorcycle Engineering Skill in Bandung.

The value of teaching factory coefficient in Table 3, positive value of 0.532 has a meaning, if the value of teaching factory teaching roles increases one point then the value of the competencies to having entrepreneur will increase by 0.532 with the assumption that vocational skills remain. The same thing in the value of the coefficient of vocational skills is positive value of 0.435 also means, if the value of the role of vocational skills increased one point then the value of competencies to have entrepreneur will increase by 0.435 assuming that teaching of teaching factory remains.

In order to see the role of teaching factory teaching and the role of vocational skills affect simultaneously on students 'competencies to perform the students' achievement that is based on hypothesis analysis F. The result of hypothesis testing (H3) is presented in Table 3.

**Table 3.** Simultaneous Hypothesis Test Results with Linear Regression Test (F test).

| Model |            | ANOVA <sup>b</sup> |    |             |        | Sig.              | Conclusion          |
|-------|------------|--------------------|----|-------------|--------|-------------------|---------------------|
|       |            | Sum of Squares     | Df | Mean Square | F      |                   |                     |
| 1     | Regression | 10887.619          | 2  | 5443.810    | 96.063 | .000 <sup>a</sup> | Hypothesis Accepted |
|       | Residual   | 2096.756           | 37 | 56.669      |        |                   |                     |
|       | Total      | 12984.375          | 39 |             |        |                   |                     |

a. Predictors: (Constant), Vocational Skill, Teaching\_Factory

b. Dependent Variable: Entrepreneurship

Based on Table 3, the value of F is 96.063 with significance value (sif.F) of 0.000 ( $p < 0.05$ ). Therefore, it can be concluded that the hypothesis is accepted, meaning the role of teaching factory and the role of vocational skills has an effect simultaneously on the competencies of students' entrepreneurship competency Vocational High School in Bandung Competence of Motorcycle.

Engineering Skill in Bandung. Meanwhile, to see the large percentage of contribution of teaching factory learning and vocational skills to the competencies of be entrepreneur can be seen in Table 4.

**Table 4.** Summary of Multiple Regression Analysis.

| Model Summary |                   |          |                   |                            |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1             | .916 <sup>a</sup> | .839     | .830              | 7.528                      |

a. Predictors: (Constant), Vocational Skill, Teaching\_Factory

Based on table 4 looks big Adjusted R Square value of 0.830. This suggests that the variable role of teaching and vocational skills contributes effectively to 83% of the variables of the competencies to have entrepreneur. While the rest (27%) competencies be entrepreneur influenced by factors other than the role of factory teaching and vocational skills.

#### 4. Conclusion

Based on the results of temporary observations, it can be concluded:

- There is a positive influence between the implementation of teaching factory teach on the competencies of the entrepreneur Vocational High School in Bandung Technical Competence Motorcycle Engineering skill package.
- There is a positive influence between the skills of practice to the competencies to have entrepreneur Vocational High School in Bandung Expertise Engineering Competence Motorcycle Engineering skill package.

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