

## Contribution of Entrepreneurship Pedagogy Learning Model with Production-Based Learning Approach to Entrepreneurs Learning Outcomes in Vocational Higher Education

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### Abstract:

The purpose of this study is to describe and test the contribution of entrepreneurship learning pedagogy models with a production-based learning approach to entrepreneurial learning outcomes. This study uses quantitative methods with descriptive correlational. The population was all students who participated in the 2300 people general entrepreneurship courses in higher education, and a sample of 423 students were selected using proportional stratified random sampling. This research tool is a test of entrepreneurial learning outcomes that have been measured for validity and reliability. Data were analyzed using descriptive statistics, and simple regression. The findings of the study show that there is a contribution to the entrepreneurship learning pedagogy model with a production-based learning approach to entrepreneurial learning outcomes in vocational higher education.

**Keywords:** learning models, entrepreneurship pedagogy, production-based learning, entrepreneurial learning outcomes

### 1. Introduction

Nowadays the problem of employment in Indonesia was confronted with the discrepancy between employment opportunities and labor supply. This difference has led to the tight competition in obtaining jobs. Even college graduates, not easy to compete in getting the job. During the period of 2008-2009 then, there have been additions to the work force as much as 2.26 million people, up from 111.48 million people become 113.74 million. Increasing the supply of labor as much as this does not entirely absorbed by the job market, so as to make the unemployment rate reached 8.14% or 9.26 million. From 9.26 million people unemployed this undergraduate, diploma and who are unemployed about 1,260,000 people and 1,424.000 people [1]. Meanwhile, the perpetrators of the small and medium enterprises (SMEs) as a young entrepreneur have not been fully able to absorb the workforce significantly. From the existing data, the number of solicitors in Indonesia belongs to the still very small, that is new about 0.18% of the total population.

Whereas in America has reached 11%, Singapore 7%, Korea and Japan in the top 5%, European countries the average above 4%, and India

almost 2% [1]. Refer to the above conditions, then an effort expedite the growth of new ventures is becoming very important, especially in responding to the ever increasing labour supply over the years. One of the efforts accelerate the growth of new ventures is making breakthroughs through changes in patterns of view (mindset) of college graduates from the status as job seekers become the creators of the work. To realize this effort, actually the College has provided supply through entrepreneurship courses. However, in practice it still greater aspects of the theory. Even so, this could've been a capital base that is very good. Furthermore, the material added by the entrepreneurial charge technology skills, i.e. the ability to innovate through the application of technology. Technology based entrepreneurship education, or known as the technopreneurship, is an attempt to synergize between theory and practice from the various fields of competence with regard to technology and industry.

Therefore, technology entrepreneurship education (technopreneurship) could serve as a learning process business. Technopreneurship education into the future, it's possible to be developed at universities in Indonesia. But in a related development, the College still before the

issues have not been good policies as well as the readiness of college (teachers and education Infrastructure). This article will expose the technopreneurship development conditions and formulate the technopreneurship development model in College Numerous attempts to do so that the functions of the Commissioner of education as a means for the preparation of the workforce can be realized. Among the efforts to improve the quality of education and learning change the mindset of related student employment or livelihood. The majority of educational institutions in Indonesia currently only produce graduates with a mindset of job seekers and not job creators. So the most important thing to do is to change the mindset of students regarding employment or subsistence immediately to reduce unemployment in Indonesia. In addition to providing the applied skills, vocational education should also be able to give students the ability to create jobs as workers. In addition, vocational students must have an interest in entrepreneurship. For this, the renewal of learning model that keeps students interested in entrepreneurship, creative and innovative.

Nearly all colleges have courses in entrepreneurship, however, not all of the college graduates capable of entrepreneurship. In addition, graduates from College who finished just rely on diplomas and their respective areas of competence to look for work, but also do not get a decent job. If this condition is allowed to continue then the College will contribute educated unemployment. Based on data that is owned by the Central Bureau of statistics about the open unemployment rate of college graduates starting from February 2016 as much as 7.02 million or 5.5 per cent, August 2016 as much as 7.03 million people or 5.61 percent, and was last at February 2017 as much as 6.68 million people or 5.33 percent, the figures showed a drop in unemployment despite very little educated, but intellectual unemployment of graduates of higher education is very worrying.

Based on statistics in February 2018, in Indonesia there is 9.5 per cent (688,660 persons) of the total unemployed college alumni which is no exception of graduate students in education. They have a diploma or three strata one alias styled scholar. Of that amount, the number of unemployed, 495,143 people, is a graduate of the University who holds a Bachelor's degree. Educated unemployment it (good and certified by a diploma or stratum 1) increased compared to the year 2013 with the percentage of unemployed college graduates of 8.36 percent (619,288 persons) and by 2012 amounted to

8.79 percent (645,866 people). This data depicts the still weak college graduates in employment market competition, this one caused the learning process that occurs during this time is still oriented to the target value.

The learning model into the main part of a learning process so it is important to do the study back in the form of a needs analysis. If viewed from the high unemployment of graduates of higher education students in higher education was no exception, of course indicate weak learning process going on. No exception on entrepreneurial learning model, then the very need for needs analysis. The direction of entrepreneurial learning needs analysis makes it possible to integrate the study of entrepreneurship in higher education, in teaching and learning entrepreneurship so that learners can master the material with entrepreneurship the concept of learning by doing through production-based learning approach and the tech. Needs analysis is the initial stage, which is very important in looking at the needs of a learning model that will be designed especially technopreneurship scientific learning model. So the purpose of this paper is to explore and explain the needs analysis of technopreneurship scientific learning model in higher education Commissioner.

## **2. Literature Review**

### **Overview of Entrepreneurship Learning in higher education**

In the achievement of the results of the study in the education of students, certainly students experiencing learning process and learning. Learning is the process by which an individual do to get the new behavior changes as a result of an individual experience it in its interaction with its environment. Meanwhile, learning can be defined as a process that contains the process of learning and change itself resulting from efforts in undergoing the process [2], [17]. Furthermore, the learning is behavior change through activities, practice, and experience. From the opinions of the experts above, it can be concluded that learning is a process experienced by an individual that keeps him from a State of not knowing to knowing and it involves individual psychological elements.

In a simple learning entrepreneurship is meant is how science transfer process and a change in attitude and mindset of entrepreneurship. Entrepreneurial learning becomes important because the attention is closely connected with the theory of entrepreneurship, teaching strategies and how to teach entrepreneurship. Teaching Entrepreneurship

is the process of facilitating individual concepts and skills to be able to identify business opportunities and have the insight, confidence and has the ability to act [3]. Teaching Entrepreneurship aims to inspire students, evoking emotions, and a change of mindset [4].

In addition, research on the theory of entrepreneurship is in fact already many of them experts examined the decision-making theory helps us to understand why some of the entrepreneurs are able to see the opportunities that benefit economically while others do not. These theories are very helpful nature face the problems of students in field related to problems of entrepreneurship. An effective way to teach entrepreneurship requires a combination of theory and application. Entrepreneurship education is defined as the delivery of knowledge entrepreneurship to students in terms of concepts, skills, and behaviours, continued to become entrepreneur [5].

### **Overview Of The Production-Based Learning**

The model is a conceptual framework that are arranged in a logical and systematic sequence as a guide in the conduct of an activity. It can also model meant a conceptual structure that has been successfully developed in a field and can be applied, particularly to guide the research and thinking in other areas, usually in fields that have not been so developed. [6] the mention of the model as an object or concept that is used to present something, something real and then converted into a form that is more comprehensive. Among the most widely used models is the models of Physics (physical models), computer models, and mathematical models. All models have a "if-then", and the models bound once on the theory. Understanding the above, contains three principal components in the so-called models, namely: 1) framework or abstraction or conceptual representasi, 2) irregular or structured and integrated, and 3 guidelines) is used for thinking and working. The third component is one unified whole which must be owned by a model, including models of learning.

[6] revealed that, "Models of teaching is an overall plan, or pattern for helping student to learn specific kinds of knowledge, attitudes or skill". The translation; the learning model is a pattern or plans prepared to help learners learn in a more specific range of knowledge, skills or attitudes. The learning model is a planning or a pattern that is used as a guide in planning the learning in the classroom or learning tutorials and learning device for determining such as books, film, tape, recorder

computer, curriculum, and more.

The model of production-based learning is a process of education skill or skill that is designed and implemented based on standard procedures and working real (real job) to produce goods or services that fit the demands of the market or consumers. Production-based learning emphasizes learning, where students can do the activities of production or services that meet the standards of World business/industrial world and society. [7] States: "production-based learning model is defined as the procedures or steps that need to be performed by the educator to facilitate learners to actively learn, participate and interact Conference, with a competency-orientation to produce a product either goods or services required ". Production-based learning model is defined as a procedure or steps that need to be done by educators to facilitate learners to actively learn, participate and interact, with competence-orientation to produce a product either goods or services required.

Production-based learning model is a model of learning that provide opportunities for learners to develop the skills and abilities to think and work together. On the process of learning with this production-based learning model learners required can be active as it brings up an important question related to the product to be created. Production-based learning model is composed of nine steps or syntax are: 1) the analysis of the curriculum and student characteristics; 2) identification and analysis of products; 3) makes an important question about the product; 4) Mapping the question; 5) needs analysis tools and ingredients of the product to be made; 6) manufacture of Schedule execution of the manufacture of the product; 7) the process of making a product; 8) Evaluation at regular intervals and 9) make the Business Plan [8], [10], [11], [12], [13], [14], [15], [16]. Through this model at higher education students can apply the learning process on particular subjects of entrepreneurship.

### **3. Research Methods**

This research uses descriptive type korelasional quantitative methods.

#### **Populations and Samples**

Research on the population of this research are the students who follow courses of entrepreneurship in higher education as much as 2300 people, the sample numbered 423 people, chosen by proportional stratified random sampling technique

#### **Research Instrument**

The main data-collecting instrument that was used in this research in the form of study documentation on the results of a study of entrepreneurship learning. A questionnaire developed by researchers with the Likert scale model. The questionnaire consists of a number of statements that are formulated in the form of a question or statement with five choices of answers in the form of frequency and scale of attitude scales are tailored to the purpose of the question or statement, namely: 1) Attitude Scale: strongly agree, agree (SS) (S), less agreed (KS), disagree (TS) and strongly disagree (STS); 2) Frequency Scale: always (SL), often (SR), sometimes (KD), rare (JR.), and never (TP). The use of scale and attitude will be adapted to the needs for each of the variables of the study. In accordance with the nature of the questionnaire, then the weight of grain the statement/question is positive given the score of 5, 4, 3, 2. And 1. While the grain the statement/question is negative given the weights 1, 2, 3, 4, and 5.

**Data Collection**

Data collection is done in higher education with the following procedure:

- a. Prepare a questionnaire model learning pedagogy of entrepreneurship with the production-based learning approach.
- b. Provide a description of the instrument and how to fill it.
- c. Share instruments and invited students to fill it.
- d. Collecting of instrument complies with planning.

**Data Analysis Techniques**

Data were analyzed with descriptive statistics and regression, simple. Data analysis using SPSS program-assisted version of 22.00.

**4. Results and Discussion**

Before undertaking the process of data analysis, need to do a test of normality, and linearity, where the results are as follows.

**Table 1. Normality Test**

No.	Variable	Sig.(p)	Sig. alpha	Information
1	Entrepreneurship Learning Outcomes (Y)	0.281	0.05	Normal
2	Learning model of entrepreneurship pedagogy with a production-based learning approach (X)	0.231		Normal

Normality testing is done using the Kolmogorov-Smirnov method. If Asymp. Sig. or P-value > from 0.05 (significance level), then the data comes from a population that is normally distributed. The results of the Asymp value data normality test. Sig. pedagogy learning model of entrepreneurship with a production-based learning approach of 0.231, and entrepreneurial learning outcomes of 0.281. Means that the two research variables are normally distributed.

**Table 2. Linearity Test**

Variable	F	Level Significance	Conclusion
X Y	9.686	0.009	Linier

Based on the data above, it was found that the relationship between entrepreneurship pedagogy learning model and production-based learning approach with entrepreneurial learning outcomes was linear.

Furthermore, the results of the hypothesis test can be seen in the following table.

**Table 3. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.630 <sup>a</sup>	0.380	0.249	14,409

a. Predictors: (Constant), X

Table 3, is a table to examine the effect of entrepreneurship pedagogy learning model with a production-based learning approach to entrepreneurial learning outcomes. In the first model, the influence of entrepreneurship pedagogy learning model with a production-based learning approach to entrepreneurial learning outcomes. The R-Square value is the level of variation of the dependent variable, which can be predicted by the independent variables.

Data analysis results revealed that the entrepreneurship pedagogy learning model with a production-based learning approach was able to 38% about entrepreneurial learning outcomes (R2 = 0.380).

**Table 4. Results of the testing of X to Y**

ANOVA <sup>a</sup>						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	1067.127	1	1067.127	17.638	.000 <sup>a</sup>
	Residual	13068.071	422	60.500		
	Total	14135.197	423			

a. Dependent Variable: Y  
b. Predictors: (Constant), X

Table 4 shows the effect of entrepreneurship pedagogy learning model with a production-based

learning approach to entrepreneurship learning outcomes. The F-value is calculated as the Mean Square Regression (1067.127) divided by the Mean Square Residual (60.500), yielding  $F=17.638$ . From this results in the table is statistically significant (Sig = 0.000).

## 5. Discussion

Regression test results show that the entrepreneurship pedagogy learning model with a production-based learning approach contributes 38% to entrepreneurial learning outcomes. Significance also shows that the entrepreneurship pedagogy learning model with a production-based learning approach contributes to entrepreneurial learning outcomes. The activeness of students doing activities to find problems, needs analysis, and analysis of learning, is predicted to be able to improve entrepreneurial learning outcomes. entrepreneurship pedagogy learning model with a production-based learning approach helps students organize or monitor cognitive, thought ideas that are planned, intentional, goal-directed, and future-oriented mental processing that can be used to complete learning tasks that will lead to learning outcomes [9]. In addition, the entrepreneurship pedagogy learning model with a production-based learning approach can be used as a method in achieving a goal of learning [10]. The entrepreneurship pedagogy learning model with a production-based learning approach is a procedure that helps students to understand and find problems and find solutions to these problems.

Based on the previous explanation, it can be concluded that the entrepreneurship pedagogy learning model with production-based learning approach in vocational higher education is able to predict whether or not student entrepreneurship learning outcomes are good. Students in getting to know, understand various materials using a scientific approach, that information can come from anywhere, at any time, does not depend on unidirectional information from the lecturer. Therefore, the learning conditions that are expected to be created are directed to encourage students to find out from various sources through observation, and not just be told.

## 6. Conclusions and Suggestions

Based on the findings and discussion of the results of the study, it can be concluded that, the entrepreneurship pedagogy learning model with a production-based learning approach contributes significantly to the results of entrepreneurial

learning. That is, the learning model of entrepreneurship pedagogy with a production-based learning approach has a significance to entrepreneurial learning outcomes.

Furthermore, based on the results of this research activity it is recommended to lecturers, students and vocational higher education to be able to use the entrepreneurship pedagogy learning model with a production-based learning approach. In addition, researchers can become references and further research development.

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