

# THE FAILURE OF ENTREPRENEURSHIP EDUCATION OF VOCATIONAL HIGH SCHOOL STUDENTS AND COLLEGE STUDENTS: PERSPECTIVE OF EVALUATION INSTRUMENT OF LEARNING RESULTS

Agung Winarno, Universitas Negeri Malang  
Wening Patmi Rahayu, Universitas Negeri Malang  
Trisetia Wijijayanti, Universitas Negeri Malang  
Yuli Agustina, Universitas Negeri Malang

## ABSTRACT

*In order to access the level of business and entrepreneurial literacy as a result of one's training and learning process, the tool of evaluation needs to be developed to measure the level of success for learning process that has been carried out as well as the input for the next lesson plan. Aim of this research are making an innovative business and entrepreneurial functional literacy evaluation instrument model is carried out by designing and developing a model, so that it can determine the criteria and priorities for the success of the learning process and business and entrepreneurial functional literature training, especially in secondary and higher education. This research is a developmental research which uses a combination of Four D Model and R2D2 Development Models. Moreover, the final sample of this research was students of the State Vocational High School, student of two state universities and students of three different private universities. This research obtained the results which said that the evaluation was carried out in the subjects at school or the entrepreneurship course was not yet able to measure whether students already had basic competence as entrepreneurs or not. The evaluation provided by subject matter or the entrepreneurship courses only focuses on the level of understanding and has no instrument to evaluate the change of attitude. Limitation of this research are the level of education in question is secondary education, namely vocational students and higher education are undergraduate students, Functional Measurement of Business and Entrepreneurship in this research consists of marketing, production, finance, human resources, operations and entrepreneurial spirit, respondents in this research were vocational school students and university students who had taken entrepreneurship courses.*

**Keywords:** Business, Entrepreneurship, Vocational Secondary Education, Higher Education, and Learning Evaluation.

## INTRODUCTION

Entrepreneurship education has been promoted as the main way to improve the performance of developed countries in Europe and North America and in fast-developing countries, such as Brazil, China and India. At the higher level, entrepreneurship and more effective innovation are considered as the key engine of economic growth (Holcombe, 2006; Sternberg and Wennekers, 2005). As an “early adopter” of entrepreneurial education, the US remains a “market leader” with many universities that have 20 or 30 years of experience sending

such programs (McKeown et al., 2006). The need for business and entrepreneurial education sustainability has increased along with the rapid changes and globalization of the market. In this case, the education through business and entrepreneurship learning related to the knowledge about the entrepreneurial spirit, marketing, production, operations, finance and Human Resources (HR), are expected to make people who literate to the business and entrepreneurship. Therefore, business and entrepreneurial literacy in question are the ability to use knowledge, identify problems, and draw the evidence-based conclusions, in order to understand and make the decision about business and entrepreneurship, and do the economic change for the life of each individual.

Having good business and entrepreneurial literacy will give success to someone in term of establishing and running a business. At present, the world of business and entrepreneurship is not an unusual thing for some Indonesian people, even so, there are still many Indonesians who are being unfamiliar with the topic. However, education, training, and professional development are crucial to develop the business skills of an entrepreneur and the economic improvement.

The evaluation held by the Organization for Economic Operation and Development (OECD) through Working Party on SMEs and Entrepreneurship (WPSMEE) faces the substantial difficulties in the process of trying to measure the educational success rate on the finished programs. These substantial difficulties are the variety of training and learning programs starting from the different objects, different period of time, habit, and the resulting output. Many programs of business and entrepreneurial literacy that have been conducted abroad, can slightly push the economy on the lowest level to be able to rise and prosper itself. USAID holds the programs in Nepal, the poorest country in South Asia, based on the deficit situation, the problems regarding foods, as well as the occurrence of large earthquakes. These programs provide knowledge to the public about starting, running, and developing business, by the aim of the emergence of small and medium scale home industries ([www.usaid.gov](http://www.usaid.gov)).

Moreover, the more intensive business literacy is in the form of scheduled training which is done systematically while giving the positive influence toward one business organization or company. According to Calderon et al. (2013), the business literacy training significantly increases profits within the company. The appeared income is a combination of the amount of income, the low cost, the increased customer service, and the use of good accounting methods. More importantly, the knowledge gained will not fade despite being hindered by some pressure and intervention. Likewise with research of Fernandes (2015), based on the sample of some SMEMs in Portugal there is a positive correlation between the level of financial literacy and business operating performance. The business literacy aims to provide not only business knowledge in general to the public, but also an understanding of general knowledge, skills, entrepreneurship and access to finance.

By the continuous improvement in business and entrepreneurial literacy of the community, it is expected that tough businesses will emerge and survive so that it can protect the local, regional or national economy. Most of the entrepreneurial spirits embodied in a Small and Medium-Sized Micro business (SMEM) which is predicted to be the savior of the country's economic condition, are apparently still "*blind*" about what the business knowledge and entrepreneurship themselves. Furthermore, the group of SMEM which constitutes 90 percent of the number of business actors in Indonesia generally does not have the ability to understand the knowledge and skills related to manage its resources in achieving prosperity. On the other hand, SMEMs have an exact role in order to drive the economic growth where the 60 percent of the economy and 97 percent of employment are contributed by the sector.

Awareness of entrepreneurship and business literacy must be instilled early and the secondary education (SMK) and higher education (i.e. undergraduate level) are ones of the right issues in order to introduce the literacy. According to Researcher, knowledge of entrepreneurship and business literacy is very effective when introduced as early as possible towards the students of secondary education by considering the abilities and characteristics of the students concerned. Furthermore, about 43 percent of the students who were sampled had taken lessons or courses on economics or business, yet the knowledge gained was not official from school but from other sources that were not elaborated. Several previous studies (Xiao et al., 2007; Mandell, 2008) concluded that the best way to improve behavior in adulthood is to teach good behavior since the early stage, including business behavior.

The recent studies have tried to fill gaps in entrepreneurship education research, for examples are by studying the changes in value, attitudes and intentions of learners in terms of desire and the possibility of starting a business (Pihkala and Miettinen, 2004; Peterman and Kennedy; 2003; Fayolle et al., 2005; Volery and Mueller, 2006), by looking at the role of metacognition in training, self-learning and self-regulation skills (Hainey and Shepherd, 2006; Bryant, 2006; Ramocki, 2007), and by suggesting the need for different learning environments that will require teaching-oriented action, support experiential learning, problem solving, project-based, creative approaches and involve peer evaluation that is close to how entrepreneurs are living and learning (Jones and English, 2004; Löbner, 2006; Lengnick-Hall and Sanders, 1997; Pittaway and Cope, 2007; Collins et al., 2006; Brătianu and Nistoreanu, 2008). At the same time, there is a debate about how far entrepreneurship can be taught, and if so, how. On the one hand, if one accepts that key entrepreneurial attributes are based on personality traits (Stewart et al., 1999), education and training may not have a fundamental impact because they rarely change a person's basic personality. On the other hand, if one accepts that entrepreneurial awareness and skills are largely gained through experience (Neck et al., 1999); hence education and training may have a significant impact on decision making and other key aspects of entrepreneurship (et Bryant, 2006; Tăchiciu al., 2010).

On the basis of thought and description above that there have been many trainings or learning that provide unlimited knowledge to the community, but there is no innovation in the functional literacy evaluation instrument model that measures whether all the training and learning that has been done is effective, appropriate and truly become strong basic knowledge for these participants. To be able to access the level of business and entrepreneurial literacy as a result of the training and learning process participants need to develop business and entrepreneurial literacy test tools so that the learning and training carried out can be right on the material and target. So we need an innovation of business and entrepreneurial functional evaluation instrument models that synergize between vocational high schools (SMKs) and universities to be able to print generations that are truly ready to have knowledge through business literacy and entrepreneurship that can be applied later in the lives of graduates.

## **RESEARCH METHODS**

This research is a developmental research which uses a combination of Four D Model (Thiagarajan et al., 1974) and R2D2 Development Models (Willis, 2000), namely:

## Define

1. **Preliminary study:** Preliminary study was carried out to obtain preliminary information about needs, field condition, and feasibility of learning media development. The preliminary study was intended to collaborate the subject teachers with the course lecturers. Then, the result was used to design and develop the products.
2. **Focus on determination**
  - a. The determination of developed product, the product was in the form of Innovation Model for Business and Entrepreneurial Functional Literacy Evaluation Instruments. Then, the product was packaged as an innovation model that could cover the market needs about knowledge, in this case was about being literate (functional) of business and entrepreneurial functional synergy with vocational high schools in the field of entrepreneurship and higher education as a continuation of the advanced level of education.
  - b. Participatory team formation, the team consisted of: (a) students, (b) college students, (c) teachers, and (d) lecturers relevant to their respective fields of study.

## Design

The process of determining product design is carried out collaboratively with the students, college students, teachers, and lecturers. On the other hand, the product development is conducted through: (1) practitioner test, (2) relevant expert testing to the field of study, (3) field trials on small scale (1 Vocational High School and 1 Preferred College), and (4) large-scale field trials (representing Research Samples).

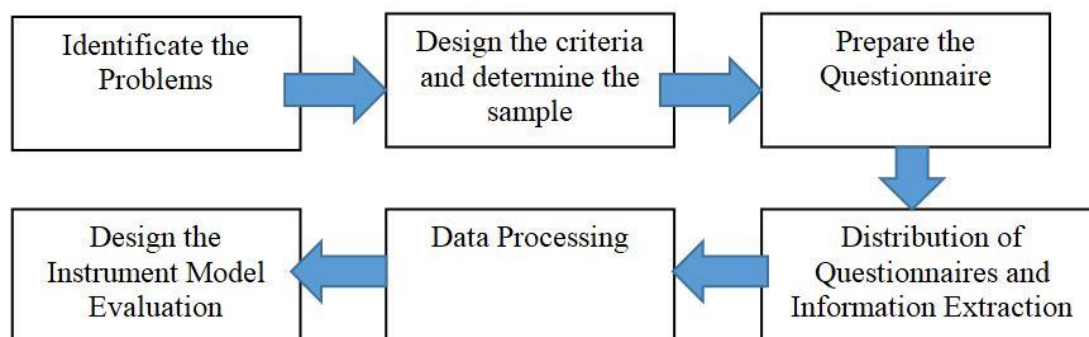
The population in this research was all Vocational High School (SMK) students and undergraduate students in East Java Province. Then, the sample determination is carried out in stages by following several basic criteria, namely:

1. The sample of this research would be taken by the representatives from several regions, namely: Malang, Blitar, Madura, Jember, Probolinggo, and Sidoarjo.
2. They were the Vocational High School students on the 11st and 12nd grade; the chosen undergraduate students were who have taken the entrepreneurship course.
3. The instruments development and dissemination would be carried out after getting the deemed perfect results.

According to the above provisions, the obtained sample for the research came from 5 Secondary Education or Vocational High Schools (SMK) and the other five came from Higher Education. The sample of Vocational High School consisted of SMKN 1 Malang, SMKN 1 Blitar, SMKN 1 Probolinggo, SMKN 6 Jember and SMKN 1 Bangkalan. Whereas, the sample of Higher Education came from the State University of Malang, Trunojoyo University of Madura, Balitar Islamic University, Jember University, and Nadhatul Ulama University Sidoarjo. Furthermore, the data collection techniques applied here were: documentation, questionnaires, and interviews. Then, this research applied the descriptive analysis technique, both quantitative (carried out by doing several calculations from the results of questionnaires and interviews) and qualitative (carried out in the form of documentation activities, questionnaires and interviews) as the data analysis technique.

Furthermore, the stage of this research included: Field Survey; Exploring the information related to the goals of business and entrepreneurship learning at the level of secondary education and college; Identifying problems related to the implementation of the functional business and entrepreneurial instruments development at the level of secondary education and college;

Management of Survey Result; Extracting information, results of identifying the problems, and Discussing findings; Instrument making which supported the research problems.



**FIGURE 1**  
**STAGES OF THE RESEARCH**

## FINDINGS

Findings were found in the early stages of Define in the R2D2 development model to analyze the renewal needs of the research sample. In this Define stage, it is known that the real condition of secondary education and higher education will be functional business and entrepreneurship and researchers can determine the flow of students and college students' needs for entrepreneurship and business functional literacy (literacy).

### 1. Students:

**Validity and reliability:** Validity indicates the extent to which a measuring device is to measure the validity of an instrument item; it can be seen by comparing the probability of the results of Pearson's Product-Moment correlation with a significance level of 5% with its critical value. If the probability of the correlation results is less than 0.05 (5%) then it is declared valid and otherwise is declared invalid (Table 1).

| <b>Question</b> | <b>r-count</b> | <b>significance</b> | <b>Information</b> |
|-----------------|----------------|---------------------|--------------------|
| item 1          | 0.211          | 0.001               | Valid              |
| item 2          | 0.254          | 0.000               | Valid              |
| item 3          | 0.179          | 0.005               | Valid              |
| item 4          | 0.221          | 0.000               | Valid              |
| item 5          | 0.236          | 0.000               | Valid              |
| item 6          | 0.335          | 0.000               | Valid              |
| item 7          | 0.341          | 0.000               | Valid              |
| item 8          | 0.338          | 0.000               | Valid              |
| item 9          | 0.325          | 0.000               | Valid              |
| item 10         | 0.188          | 0.003               | Valid              |

|         |       |       |       |
|---------|-------|-------|-------|
| item 11 | 0.344 | 0.000 | Valid |
| item 12 | 0.257 | 0.000 | Valid |
| item 13 | 0.314 | 0.000 | Valid |
| item 14 | 0.364 | 0.000 | Valid |
| item 15 | 0.28  | 0.000 | Valid |
| item 16 | 0.325 | 0.000 | Valid |
| item 17 | 0.288 | 0.000 | Valid |
| item 18 | 0.314 | 0.000 | Valid |
| item 19 | 0.26  | 0.000 | Valid |
| item 20 | 0.351 | 0.000 | Valid |
| item 21 | 0.244 | 0.000 | Valid |
| item 22 | 0.205 | 0.000 | Valid |
| item 23 | 0.323 | 0.000 | Valid |
| item 24 | 0.269 | 0.000 | Valid |
| item 25 | 0.262 | 0.000 | Valid |
| item 26 | 0.391 | 0.000 | Valid |
| item 27 | 0.253 | 0.000 | Valid |
| item 28 | 0.417 | 0.000 | Valid |
| item 29 | 0.259 | 0.000 | Valid |
| item 30 | 0.32  | 0.000 | Valid |

Source: Processed Data, 2018.

The results of the validity test indicate that all the items in question are used to view the psi ( $\Psi$ ), students towards the evaluation of entrepreneurship education have a significance value below  $\alpha=0.05$  (5%), so it is stated that all questions used to assess students' perceptions of the evaluation of entrepreneurial education are valid. Reliability testing is then done after it is ascertained that all question items are valid. Reliability is an index that shows the extent to which a measuring device can be trusted or reliable. Reliability testing is done by looking at the value of Cronbach's alpha calculation results, if Cronbach's alpha is smaller than 0.6, it is declared to be unreliable and *vice versa* is declared reliable. The results of reliability testing for all variables are shown in Table 2 below.

| Variable   | Alpha Coefficient | Description |
|--|-------------------|-------------|
| Students' perceptions of the evaluation of entrepreneurial education | 0.694             | Reliability |

Source: Processed Data, 2018.

In accordance with the Table 2, the variables within the questionnaire possess the bigger coefficient value of Cronbach alpha by 0.6 so that the question instrument applied in this research is said to be reliable or dependable.

**Descriptive analysis:** The descriptive analysis in this study was used to describe students' perceptions of the evaluation of entrepreneurial education, in the descriptive analysis outlined the frequency and percentage of respondents in each questionnaire answer category. The

results of the descriptive analysis on the answers of students' respondents who have taken entrepreneurship subjects are presented in Table 3 below.

| Questions | SS |      | S   |      | AS  |      | TS  |      | STS |      | Average |
|-----------|----|------|-----|------|-----|------|-----|------|-----|------|---------|
|           | f  | %    | f   | %    | f   | %    | f   | %    | f   | %    |         |
| item 1    | 8  | 3.2  | 75  | 30.2 | 124 | 50   | 37  | 14.9 | 4   | 1.6  | 2.8     |
| item 2    | 15 | 6    | 88  | 35.5 | 73  | 29.4 | 56  | 22.6 | 16  | 6.5  | 2.9     |
| item 3    | 40 | 16.1 | 74  | 29.8 | 97  | 39.1 | 34  | 13.7 | 3   | 1.2  | 2.5     |
| item 4    | 22 | 8.9  | 97  | 39.1 | 112 | 45.2 | 13  | 5.2  | 4   | 1.6  | 2.5     |
| item 5    | 13 | 5.2  | 78  | 31.5 | 80  | 32.3 | 69  | 27.8 | 8   | 3.2  | 2.9     |
| item 6    | 17 | 6.9  | 56  | 22.6 | 134 | 54   | 32  | 12.9 | 8   | 3.2  | 2.9     |
| item 7    | 31 | 12.5 | 80  | 32.3 | 86  | 34.7 | 45  | 18.1 | 6   | 2.4  | 2.7     |
| item 8    | 83 | 33.5 | 127 | 51.2 | 27  | 10.9 | 6   | 2.4  | 5   | 2    | 1.9     |
| item 9    | 23 | 9.3  | 114 | 46   | 88  | 35.5 | 22  | 8.9  | 1   | 0.4  | 2.5     |
| item 10   | 53 | 21.4 | 92  | 37.1 | 88  | 35.5 | 10  | 4    | 5   | 2    | 2.3     |
| item 11   | 41 | 16.5 | 102 | 41.1 | 68  | 27.4 | 31  | 12.5 | 6   | 2.4  | 2.4     |
| item 12   | 41 | 16.5 | 108 | 43.5 | 57  | 23   | 31  | 12.5 | 11  | 4.4  | 2.4     |
| item 13   | 63 | 25.4 | 128 | 51.6 | 49  | 19.8 | 6   | 2.4  | 2   | 0.8  | 2       |
| item 14   | 14 | 5.6  | 87  | 35.1 | 87  | 35.1 | 47  | 19   | 13  | 5.2  | 2.8     |
| item 15   | 47 | 19   | 81  | 32.7 | 90  | 36.3 | 23  | 9.3  | 7   | 2.8  | 2.4     |
| item 16   | 9  | 3.6  | 48  | 19.4 | 93  | 37.5 | 85  | 34.3 | 13  | 5.2  | 3.2     |
| item 17   | 33 | 13.3 | 97  | 39.1 | 76  | 30.6 | 26  | 10.5 | 16  | 6.5  | 2.6     |
| item 18   | 19 | 7.7  | 48  | 19.4 | 95  | 38.3 | 76  | 30.6 | 10  | 4    | 3       |
| item 19   | 19 | 7.7  | 64  | 25.8 | 124 | 50   | 36  | 14.5 | 5   | 2    | 2.8     |
| item 20   | 22 | 8.9  | 72  | 29   | 102 | 41.1 | 49  | 19.8 | 3   | 1.2  | 2.8     |
| item 21   | 13 | 5.2  | 29  | 11.7 | 75  | 30.2 | 107 | 43.1 | 24  | 9.7  | 3.4     |
| item 22   | 14 | 5.6  | 22  | 8.9  | 62  | 25   | 110 | 44.4 | 40  | 16.1 | 3.6     |
| item 23   | 49 | 19.8 | 73  | 29.4 | 108 | 43.5 | 14  | 5.6  | 4   | 1.6  | 2.4     |
| item 24   | 56 | 22.6 | 131 | 52.8 | 48  | 19.4 | 11  | 4.4  | 2   | 0.8  | 2.1     |
| item 25   | 20 | 8.1  | 82  | 33.1 | 73  | 29.4 | 58  | 23.4 | 15  | 6    | 2.9     |
| item 26   | 21 | 8.5  | 106 | 42.7 | 91  | 36.7 | 25  | 10.1 | 5   | 2    | 2.5     |
| item 27   | 57 | 23   | 114 | 46   | 57  | 23   | 17  | 6.9  | 3   | 1.2  | 2.2     |
| item 28   | 5  | 2    | 58  | 23.4 | 118 | 47.6 | 60  | 24.2 | 7   | 2.8  | 3       |
| item 29   | 68 | 27.4 | 127 | 51.2 | 35  | 14.1 | 17  | 6.9  | 1   | 0.4  | 2       |
| item 30   | 39 | 15.7 | 106 | 42.7 | 75  | 30.2 | 20  | 8.1  | 8   | 3.2  | 2.4     |

Source: Processed Data, 2018.

## 2. College Students:

**Validity and reliability:** Validity indicates the extent of the measuring device to measure the validity of an instrument item; the measurement is gained by comparing probability of the results of Pearson's Product Moment correlation with a significance level of 5% with a critical value. If the probability of correlation results is less than 0.05 (5%) then declared valid and *vice versa* is declared invalid (Table 4).

| <b>Questions</b> | <b>r-count</b> | <b>significance</b> | <b>description</b> |
|------------------|----------------|---------------------|--------------------|
| item 1           | 0.311          | 0.000               | Valid              |
| item 2           | 0.278          | 0.000               | Valid              |
| item 3           | 0.384          | 0.000               | Valid              |
| item 4           | 0.633          | 0.000               | Valid              |
| item 5           | 0.295          | 0.000               | Valid              |
| item 6           | 0.587          | 0.000               | Valid              |
| item 7           | 0.457          | 0.000               | Valid              |
| item 8           | 0.615          | 0.000               | Valid              |
| item 9           | 0.550          | 0.000               | Valid              |
| item 10          | 0.570          | 0.000               | Valid              |
| item 11          | 0.577          | 0.000               | Valid              |
| item 12          | 0.614          | 0.000               | Valid              |
| item 13          | 0.614          | 0.000               | Valid              |
| item 14          | 0.489          | 0.000               | Valid              |
| item 15          | 0.493          | 0.000               | Valid              |
| item 16          | 0.267          | 0.000               | Valid              |
| item 17          | 0.437          | 0.000               | Valid              |
| item 18          | 0.317          | 0.000               | Valid              |
| item 19          | 0.319          | 0.000               | Valid              |
| item 20          | 0.480          | 0.000               | Valid              |
| item 21          | 0.318          | 0.000               | Valid              |
| item 22          | 0.411          | 0.000               | Valid              |
| item 23          | 0.517          | 0.000               | Valid              |
| item 24          | 0.636          | 0.000               | Valid              |
| item 25          | 0.419          | 0.000               | Valid              |
| item 26          | 0.185          | 0.010               | Valid              |
| item 27          | 0.658          | 0.000               | Valid              |
| item 28          | 0.473          | 0.000               | Valid              |
| item 29          | 0.595          | 0.000               | Valid              |
| item 30          | 0.577          | 0.000               | Valid              |

Source: Processed Data, 2018.



The results of the validity test show that all the questions used to see student perceptions of the evaluation of entrepreneurship education have a significance value below  $\alpha=0.05$  (5%), so it is stated that all question items used to assess student perceptions of the evaluation of entrepreneurial education are valid. Reliability testing is then done after it is ascertained that all question items are valid. Reliability is an index that shows the extent to which a measuring device can be trusted or reliable. Reliability testing is done by looking at the value of Cronbach's alpha calculation results, if Cronbach's alpha is smaller than 0.6, it is declared to be unreliable and *vice versa* is declared reliable. The results of reliability testing for all variables are shown in Table 5 below.

| Variable   | Alpha Coefficient | Description |
|--|-------------------|-------------|
| The perspective of college students toward entrepreneurship education evaluation | 0.859             | Reliable    |

Source: Processed Data, 2018.

Based on Table 5 it can be seen that the variables in the questionnaire have coefficient values Cronbach alpha greater than 0.6 so that the instrument questions used in this study were reliable or dependable.

**Descriptive analysis:** The descriptive analysis in this research was used to describe students' perceptions of the evaluation of entrepreneurial education, in a descriptive analysis outlined the frequency and percentage of respondents in each questionnaire answer category. The results of the descriptive analysis on the answers of entrepreneurial student respondents are presented in Table 6 below.

| Questions | SS |      | S  |      | AS |      | TS |      | STS |      | Average |
|-----------|----|------|----|------|----|------|----|------|-----|------|---------|
|           | f  | %    | f  | %    | f  | %    | f  | %    | f   | %    |         |
| item 1    | 12 | 6.1  | 53 | 27   | 71 | 36.2 | 40 | 20.4 | 20  | 10.2 | 3       |
| item 2    | 30 | 15.3 | 47 | 24   | 49 | 25   | 52 | 26.5 | 18  | 9.2  | 2.9     |
| item 3    | 16 | 8.2  | 55 | 28.1 | 51 | 26   | 50 | 25.5 | 24  | 12.2 | 3.1     |
| item 4    | 14 | 7.1  | 37 | 18.9 | 52 | 26.5 | 54 | 27.6 | 39  | 19.9 | 3.3     |
| item 5    | 22 | 11.2 | 43 | 21.9 | 53 | 27   | 58 | 29.6 | 20  | 10.2 | 3.1     |
| item 6    | 17 | 8.7  | 32 | 16.3 | 72 | 36.7 | 42 | 21.4 | 33  | 16.8 | 3.2     |
| item 7    | 15 | 7.7  | 39 | 19.9 | 50 | 25.5 | 52 | 26.5 | 40  | 20.4 | 3.3     |
| item 8    | 36 | 18.4 | 34 | 17.3 | 26 | 13.3 | 45 | 23   | 55  | 28.1 | 3.3     |
| item 9    | 8  | 4.1  | 38 | 19.4 | 65 | 33.2 | 54 | 27.6 | 31  | 15.8 | 3.3     |
| item 10   | 17 | 8.7  | 38 | 19.4 | 60 | 30.6 | 44 | 22.4 | 37  | 18.9 | 3.2     |
| item 11   | 16 | 8.2  | 31 | 15.8 | 58 | 29.6 | 59 | 30.1 | 32  | 16.3 | 3.3     |
| item 12   | 29 | 14.8 | 34 | 17.3 | 60 | 30.6 | 41 | 20.9 | 32  | 16.3 | 3.1     |
| item 13   | 17 | 8.7  | 40 | 20.4 | 44 | 22.4 | 56 | 28.6 | 39  | 19.9 | 3.3     |
| item 14   | 27 | 13.8 | 44 | 22.4 | 56 | 28.6 | 51 | 26   | 18  | 9.2  | 2.9     |

|         |    |      |    |      |    |      |    |      |    |      |     |
|---------|----|------|----|------|----|------|----|------|----|------|-----|
| item 15 | 19 | 9.7  | 42 | 21.4 | 69 | 35.2 | 50 | 25.5 | 16 | 8.2  | 3   |
| item 16 | 23 | 11.7 | 36 | 18.4 | 56 | 28.6 | 61 | 31.1 | 20 | 10.2 | 3.1 |
| item 17 | 26 | 13.3 | 42 | 21.4 | 62 | 31.6 | 43 | 21.9 | 23 | 11.7 | 3   |
| item 18 | 20 | 10.2 | 41 | 20.9 | 46 | 23.5 | 66 | 33.7 | 23 | 11.7 | 3.2 |
| item 19 | 17 | 8.7  | 25 | 12.8 | 78 | 39.8 | 53 | 27   | 23 | 11.7 | 3.2 |
| item 20 | 14 | 7.1  | 37 | 18.9 | 62 | 31.6 | 63 | 32.1 | 20 | 10.2 | 3.2 |
| item 21 | 28 | 14.3 | 47 | 24   | 47 | 24   | 52 | 26.5 | 22 | 11.2 | 3   |
| item 22 | 39 | 19.9 | 44 | 22.4 | 49 | 25   | 42 | 21.4 | 22 | 11.2 | 2.8 |
| item 23 | 19 | 9.7  | 31 | 15.8 | 54 | 27.5 | 54 | 27.6 | 38 | 19.4 | 3.3 |
| item 24 | 16 | 8.2  | 35 | 17.9 | 54 | 27.6 | 55 | 28.1 | 36 | 18.4 | 3.3 |
| item 25 | 9  | 4.6  | 33 | 16.8 | 60 | 30.6 | 54 | 27.6 | 40 | 20.4 | 3.4 |
| item 26 | 14 | 7.1  | 47 | 24   | 62 | 31.6 | 49 | 25   | 24 | 12.2 | 3.1 |
| item 27 | 30 | 15.3 | 30 | 15.3 | 31 | 15.8 | 45 | 23   | 60 | 30.6 | 3.4 |
| item 28 | 15 | 7.7  | 44 | 22.4 | 67 | 34.2 | 53 | 27   | 17 | 8.7  | 3.1 |
| item 29 | 23 | 11.7 | 33 | 16.8 | 38 | 19.4 | 51 | 26   | 51 | 26   | 3.4 |
| item 30 | 12 | 6.1  | 33 | 16.8 | 57 | 29.1 | 63 | 32.1 | 31 | 15.8 | 3.3 |

Source: Processed Data, 2018.

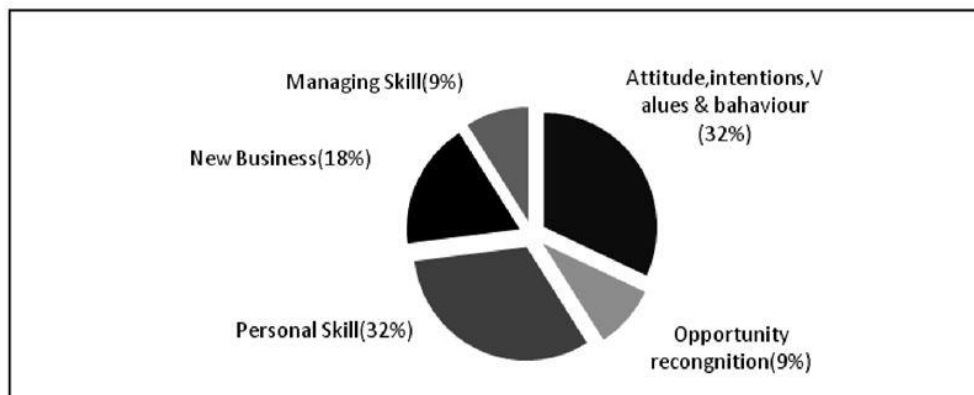
## Discussion

The results of the descriptive analysis in Tables 3 & 6 show that the students consisting of vocational and college students indicated a high frequency of almost-appropriate and inappropriate perception in some items which is a measurement of a student's entrepreneurial ability. Vocational students with almost-appropriate perception are on item 1, 3-8, 14-16, 18-20, 23 and 28, while students with the inappropriate perception are on item 21 and 22 (number 21 measures about financial instincts and commitments and number 22 measuring about accuracy in fulfilling tasks that require punctuality). College students with almost-appropriate perception are on item 1, 3, 6, 9, 10, 12, 14, 15, 17, 19, 22, 25, 26, and 28, while students with the inappropriate perception are on item 2, 4, 5, 7, 11, 13, 16, 18, 20, 21, 23, 24, 29, and 30 (number 2, 4, 5, 7, 11, 13, 16 are about some tasks to be carried out in the future, numbers 18 and 20 are about self-performance, number 21 about financial instincts and commitments, numbers 23 and 24 about communication in teams/team-works, and numbers 29 and 30 are about the ability to express opinions). This finding shows that the learning and evaluation process conducted by the teachers and lecturers of students conducted at the level of secondary and higher education have not been able to achieve the learning objectives, which is creating an entrepreneur, and the final evaluation is only based on theory that does not sharpen the ability of students to compete (traditional minded). Students cannot translate theoretical knowledge into practical business creation. The average entrepreneur teacher functions more as a teacher of "knowledge" rather than forming the soul of their students (Winarno, 2012).

The results of this study are in accordance with Harris et al. (2000) who argue that the approach to entrepreneurship education emphasizes the transfer of knowledge and information based on traditional university pedagogy. The Approach above can be considered appropriate for conventional MBA programs, but not consistent with the way entrepreneurs really learn (Gibb, 1993). Business pedagogy and traditional management was adopted by educators in the early stages of entrepreneurial education (Weinrauch, 1984; Gibb, 1993; Henderson and Robertson,

1999; Rae, 2003; Aronsson, 2004; Hytti and O'Gorman, 2004; Vinten and Alcock, 2004). This traditional approach is based on the idea that those who know can teach combined with students' ideas as an empty place where instructors pour their wisdom and that causes a "passive" educational paradigm that applies in most university settings today (Wright et al., 1994).

By reviewing the literature on conflicting sides of entrepreneurial thoughts, and a lack of general understanding of entrepreneurship has been found (Sexton and Bowman, 1984). Debate is seen in the application of terms such as entrepreneurship education *versus* corporate education (Hynes, 1996; Garavan and O'Cinneide, 1994a: 1994b). Also, a substitute for entrepreneurship education with entrepreneurial education (Jones and English, 2004. Garavan and O'Cinneide, 1994a: 1994b) argue that there are conceptual differences between entrepreneurship education and corporate education: the first relates to creating an independent attitude and the second is creating individuals who are looking for opportunities. But, for others, like Gibb (1993), the two terms are conceptually the same, but are contextually different. Gibb (1993) quoted as entrepreneurial education is a term that is mainly used in America and Canada, and corporate education in the UK and Ireland. Another interesting observation is in the research of Jones and English (2004) which continually replace entrepreneurship education with entrepreneurial education; and define it as "a process of providing individuals with the ability to recognize commercial opportunities and insights, self-esteem, knowledge and skills to act on them" (Jones and English, 2004). Despite the controversy above, most articles have alternately used these terms (entrepreneurship education, corporate education or even entrepreneurial education) such as Wai and Man (2007) and Hynes (1996) are quoted in their articles. By analyzing various definitions, some similarities can be traced. As quoted in Ahmad & Seymor (2006); Schumpeter (1934) and in Kirby (2004) characterized entrepreneurs as "innovators". Meanwhile, Researchers called entrepreneurs as wealth creators, challenge takers. Entrepreneurship education is the study of the sources of opportunities and discovery processes, where an individual strives for creativity, takes risks and turns their ideas into action (Jones and English, 2004). Some researchers have shown that entrepreneurial education is training for an uncertain future, which provides business creation capabilities (Kirby, 2004; Garavan and O'Cinneide, 1994a). But the focus of most of the literature reviewed on entrepreneurial education is: fostering the entrepreneurial attitudes, skills, managerial attributes (Co and Mitchell, 2006; Henry et al., 2005; Galloway et al., 2005; Hytti and O'Gorman, 2004; Kirby, 2004; Bechard and Toulouse, 1998; Gibb, 1993; Hills, 1988). Thus, it has been shown in Figure 1 that 32 percent of articles reviewed related to entrepreneurship education for some types of educational processes (or training) aimed to influence the individual attitudes, behaviors, values or intentions towards entrepreneurship either as a possible career or to increase appreciation for its role in society. A similarly strong observation (32 percent) of entrepreneurship education with the acquisition of personal skills in entrepreneurship, while others relate it to the formation of new businesses (18 percent), opportunity recognition (9 percent) and, managing existing small companies (9 percent). Thus, we can say that an entrepreneur refers to an individual who has the ability to turn ideas into actions. This includes creativity, innovation and risk taking, as well as the ability to plan and manage projects to achieve goals. Therefore, entrepreneurship education can be defined as the process of applying knowledge, attitudes, skills, and professional competencies. This is more than teaching students how to become independent business owners. It is about creating and maintaining a learning environment that promotes entrepreneurial traits and behaviors, such as being creative and independent thinkers, risk takers, assuming responsibility, and respecting diversity (Gautam, 2015) (Figure 2).



**FIGURE 2**  
**THE KEY POINTS OF THE ENTREPRENEURSHIP EDUCATION DEFINITION**

From the results of the descriptive analysis that has been found above, the data is then used for the second stage in the development model, which is the design stage or layout arrangement stage of the model that in accordance with all known information and needs. If it is adapted to the development model adopted in this study, then the R2D2 model is obtained in Table 7.

| NO | DIMENSION                     | MATERIAL (OUGHT TO)  | EVALUATION  |
|----|-------------------------------|--|---|
| 1  | <b>Entrepreneurial Spirit</b> | Motivation is given through the description of the entrepreneurial mindset, the long-term benefits of an entrepreneur.   | <ol style="list-style-type: none"> <li>1. Theory.</li> <li>2. Case analysis for risk measurement and decision making business plan.</li> <li>3. Scenario analysis.</li> <li>4. Field practice.</li> </ol> |
|    |                               | Engaging vocational students/college students in the world of entrepreneurship in order to create a learning experience that can support the growth of entrepreneurial idea. |   |
| 2  | <b>Operational</b>            | Providing practical support that is experienced in every delivery of entrepreneurship theory.  |   |
|    |                               | Providing small business capital that can be run by vocational students/college students for learning decision making.   |   |
|    |                               | Teaching students to be experienced in promotion, product collaboration to establish business partners.  |   |
|    |                               | Assisting the students in making a feasible <i>business plan</i> .   |   |
| 3  | <b>Marketing</b>              | Preparation of a business laboratory that focuses on the development of a product.   |   |
|    |                               | Conducting product sales trial.  |   |
| 4  | <b>Finance</b>                | Basic knowledge of small business financial statements.  |   |
|    |                               | Business assistance in small business financial statements.  |   |
|    |                               | Teaching students/college students about the   |   |

|   |                   |   |  |
|---|-------------------|---|--|
|   |                   | importance of business partners to support funding sources.   |  |
| 5 | <b>HR</b>         | Live sight of HR interaction' example.  |  |
|   |                   | Experience of learning the organizational structure that is intact and interrelated.                  |  |
|   |                   | Leadership training.  |  |
|   |                   | Analyzing the need for HR and its tasks in a business.  |  |
| 6 | <b>Production</b> | Placement of students/college students in small businesses as an entrepreneurial learning experience. |  |
|   |                   | Business assistance on business inventory management.   |  |

Shai (2009) and Enu (2012) comes with three components of the Education Entrepreneurship curriculum category that are considered comprehensive enough to complement the school system products with the skills and capacities needed from future life.

1. Personal development: One must build the self-confidence, motivating the improvement, strengthen the entrepreneurial mindset, fostering a desire to achieve and inspiring an action.
2. Business development: Technical, financial literacy and skills to engage in self-employment work and entrepreneurship that can lead to self-improvement. This will embrace the expected business and functional curriculum.
3. Development of entrepreneurial skills: One must provide skills training on social, networking, creative problem solving, opportunity lookup, interviews, presentations, group leadership, community cooperation, dealing with bureaucracy, local cultural norms and how they affect the business etc.

The learning model by providing motivational module that contains the business establishment with the character can improve attitudes related to the aspects of self-confidence and motivation for entrepreneurship (Winarno, 2016). Each entrepreneurial curriculum should contain the elements above as an integral element to provide students with valued skills and capacities that can make them quite independent and very productive in the community. entrepreneurial education at this level will be seen as an additional boost that is designed to reengineer the higher school curriculum as a whole for maximum national productivity.

## CONCLUSIONS AND SUGGESTIONS

### Conclusions

Evaluation in subjects or entrepreneurship courses has not been able to measure whether students already have basic competencies as entrepreneurs or not. Evaluations provided by teachers or lecturers are only based on theories that have been taught (theory-based).

### Suggestions

1. There is a development of business and entrepreneurship knowledge in secondary education and high-level education which is expanded as an increase in local economic potential in the tourism, agriculture and livestock sectors. The curriculum found in secondary education needs to be adjusted to the market needs so that the curriculum at the higher level can be aligned in producing outcomes that are in line with the goals and achievements of the curriculum.

2. It is expected that there will be a forum in business and entrepreneurship fields both in secondary and higher education in order to find the latest information and also be able to adapt and accommodate the needs of the development of the business and entrepreneurial world that requires similar vision with the curriculum in secondary and tertiary education.

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