

The Effect of Experiential Learning Models on Entrepreneurship Interest on Optical Technology for Students of Akademi Refraksi Optisi Padang

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Abstract: The purpose of the entrepreneurship education is not only to overcome learning materials by facing the available facts in the form of information on the subject matter, but the most important purpose is to be able to achieve the entrepreneurship educational goals that can provide the long term of impression of a learning experience for students. Therefore, the application of Experiential Learning Model in Entrepreneurship education is to solve the students' problems to open an optical business after completing their degree at the Akademi Refraksi Optisi Padang. This study is to observe the experimental implementation using pre-test post-test control group design. The results show that the analysis of pre-test post-test variation within the group (Q0) with p value = 0,010 which states that there are real significant differences in the value. In (Q1) with p value = 0,000 with the sense that there are real significant differences at the 95% level. A comparative analysis for students' interest in opening a business in the optical in the control and experimental group shows the p value = 0,000 that there are variation in the results for both groups. The experimental group learnt by using Experiential Learning Model has shown that there is the eagerness for students to highly open the optic business.

Keywords: Experiential Learning; Entrepreneurship Interests; Akademi Refraksi Optisi

1. Introduction

It has been known that the National Education in Indonesia is aimed to educate the nation and to fully develop Indonesian citizen based on Pancasila and the 1945 Constitution. The National Education is expected to produce well-educated person with faith, pious, good character, knowledgeable, skilled, and responsive personality. Therefore, in order to achieve the objective of Indonesian national education it is mandatory to arrange the standard known as Government Regulation No. 19 of 2005 on National Education Standards in the case that the implementation of the Indonesian education must follow the standard aforementioned above so as to be used as a basis for planning, implementing and supervising the implementation of education in order to achieve a good quality education.

The important of the national education standards implementation is obligatory to anticipate of the low quality of graduates of all levels of education, in order to face competition in the free market era, especially in the ASEAN countries, such as AFTA, AFLA and APEC. At the moment, the problem of unemployment in Indonesia becomes the issue to discredit the education's institution because of the high unemployment rate is greater than educated graduates. The statistics does not move from the Vocational Education graduates and university graduates have become the highest unemployment contributor in Indonesia. Based on the Central Statistics Agency (BPS) data in 2015, the Open Unemployment Rate (TPT) in Indonesia in August 2015 reaches the amount of 7.56 million of people. This figure is equivalent to 6.18% of the total of 122.4 million-labour forces in Indonesia. It

has increased compared to TPT February 2015 amounted to 5.81% and TPT in August 2014 with the amount of 5.94%. At least, 600 thousand openly unemployed are university graduates either diploma or undergraduate (BPS web site, 2016). The data also shows that the unemployment as the result of university graduation is still relatively high compared to the work force in Indonesia. This indicates that the employment of college graduates tends to be slowed to produce the unemployment coming from universities.

Related to the aforementioned problems, there have been a lot of efforts to anticipate these significant problems of well-educated unemployment. One of the efforts is implementing the entrepreneurship skills for students. The purpose of entrepreneurship education is that students do not rely on working with other people after completing his education, but rather than accelerating their self to utilize existing resources to open their own businesses. Therefore, they can even hire others with their own business based on capabilities or competencies acquired during their education.

One effort that can be done through education is to implement a learning model that is beneficial to improve students' ability in entrepreneurship. By fostering students' interest in entrepreneurship, students are expected to change their intention form not to become the entrepreneurs to become the entrepreneurs after graduation. The emergence of this interest will influence the actions and the encouragement in the entrepreneurship. The learning model implementation must follow the objectives of entrepreneurship learning. Its orientation is not only to overcome materials by facing the facts presented in the form of subject information, but also the most important thing is to achieve the entrepreneurship educational goals that can provide a learning experience giving long-term impression for students. Therefore, implementing the Experiential Learning Model in Entrepreneurship education is aimed to overcome the students' interest in opening a business. Preman (2015) states that entrepreneurship education has the potential to enable learners to gain skills and create their own jobs and as stated by Naude '(2014) that the role of entrepreneurship education in the development process is to give attention and policies in improving the appearance of entrepreneurs from the graduates.

Akademi Refraksi Optisi is a vocational education institution specializing in eye health and glasses. The institution has a high opportunity to produce graduates who are able to solve the public healthiness in glasses and eye health. However, our result as the teachers on the entrepreneurship course, the students are still reluctant in entrepreneurship. Besides, there is a students' tendency to work with others although they know that the opportunity to open the optical business is very high. Several arguments have been stated by students as the reasons for not being able to open the business such as funding problems, risk in the business, tendency to serve the community, the desire to be a Civil Servant and the error fear in serving the community for the inexperienced. Based on the issues raised by the students, it is a good opportunity to implement a learning model that corresponds to the issue of not achieving the goal of learning by applying of experiential model on the Entrepreneurship course to increase the students' interest in entrepreneurship in the field of Optical for Akademi Refraksi Optisi Padang students.

2. Related Works

2.1. Entrepreneurship

Entrepreneurship is a translation of the entrepreneur in the discussion of English dictionary that was originally known as the self-employed, which means to stand on his own strength. Irmawita (2003: 45), stated that the ability to develop entrepreneurship is largely determined by the skill of the business manager. It is by meant to the addition to the funding and work motivation that the level of education and experience influence the business development. It reinforces the opinion of Surya Dharma (2009: 102), that the entrepreneurial development of the school is a new trend that supports the development of an education at various levels of education. Entrepreneurship education is the target of a change in behavior from unwilling learners has the desire to become self-employed entrepreneurs.

According to Zimmerer (2008: 36), Entrepreneurship is the result of a disciplined and systematic implementation process of creativity and innovation to meet the requirements and opportunities in the market. Suryana (2003: 2)supports this idea by claiming that entrepreneurship is a creative ability and

innovation in creating something new and added value to be marketed through the process of managing resources in new and different ways. Therefore, entrepreneurial learning approach can improve the ability of students in entrepreneurship. It is known that the developed countries have developed Entrepreneurship educational programs at their universities such as the United Kingdom (Kirby, 2004) and India with dynamic entrepreneurship in the Social Studies Program TISS (Kummitha, 2014). Furthermore, (Hayter, 2015) uses "context-rich problem" with a short duration realistic scenario to give students the motivation that makes sense in solving the problem. Entrepreneurial learning conducted by Alexandros Kakouris (2014) finds a link between the study literatures and links it to the real world. Jansen (2015) states that education, stimulation, and incubation encourage entrepreneurial ability for learners. Vilcova, (2015) stated that Romania's entrepreneurship education directs learners to understand the problems of everyday life, according to research studies from entrepreneurship experts in education context aforementioned above. It can be said that by bringing students to experiencing their everyday life, students can create a concept of Entrepreneurship in tangible form, as a stimulus for them to understand and realize the real life. The experiences have made learners to gain the memorable knowledge in their reflection.

2.2. Interest

Poerwadarminta (2003: 11) states that the interest is a concern, a joy (fellow of feeling) to an activity. Hence, the interest is a tendency that arises from careful attention continuously, and accompanied with a sense of fun. Meanwhile, according to Walgito (1997: 31) "The interest is a situation where a person has the attention of an object along with a desire to learn and prove the object further". Djaali (2009: 121) says that the interest is "more taste and flavour on a subject to a matter or activity, without asking by someone. The interest is basically the acceptance of a relationship between oneself to something outside of their self. From the opinions above, it can be concluded that the interest is the attention to certain objects that include a feeling of like or dislike, interested or not interested, pleasure or displeasure that can affect the decision-making in planning for the future. Interest is a very important factor that exists within every human being. Interest by Witherington (1992: 135) is defined as a person's consciousness that an object, a person, a problem or a situation contains nothing to do with him. Therefore, knowledge or information about a person or an object definitely must exist prior to the interest of the person or object. The emergence of interest to someone does not happen that way, but someone will be interested if he feels a need and trying to fulfill their desires. The cause of interest according to Sardiman (2004: 76): "The interest does not arise suddenly / spontaneous, but rather arise from participation, experience and habit. So, it is clear that the question will always be of interest with regard to the needs or desires. Therefore, the most important thing is how to create certain conditions meanwhile another affects it. The emergence of interest is the experience. Someone's experiences on something will bring up the perception of the desire and inclination to do something based on knowledge of the experiences.

2.3. Experiential Learning Model

Experiential Learning Theory (ELT), which became the basis of the experiential learning models, developed by David Kolb in the early 1980s. This model emphasizes to a holistic model of learning in the learning process. In experiential learning, the experience has a central role in the learning process. The emphasis is what distinguishes ELT from other learning theories. The term "experiential learning" is to distinguish between cognitive learning theory that tends to emphasize cognitive more than affective, and behavioural learning theories that eliminates the role of subjective experience in the learning process (Kolb, 1984). This theory defines learning as a process whereby knowledge is created through the transformation of experience. Knowledge is the result of a fusion between understanding and transforming experience (Kolb, 1984). Experiential learning can also be defined as the act to achieve something based on the experience that is continuously changing to improve the effectiveness of learning outcomes itself. The purpose of this model is to influence students with three ways, which are: a. Changing the cognitive structure of students b. Changing the attitudes of students c. Expanding the existing skills of students. These elements are interrelated each other and affect the whole, cannot be separated because if one element is missing, the two other elements will not be effective (Johnson & Johnson, 1991). Experiential learning emphasizes to the student's strong desire

to be succeed in learning. Motivation is based also on the objectives and methods of learning are selected. The motivation to succeed can increase the students' responsibility to their behaviour and they will be able to control the behaviour. Experiential learning model provides opportunities for students to decide their focus experience, skills that they want to develop, and how they make the concept based on their experiences. Learning through experiences (experiential learning) refers to the process of learning that involves students directly to the issue or the material that are being studied. Based on the concept of learning through experience, all life activities experienced by the individual is a learning tool that can create a science. Thus, the model of experiential learning is learning as a process of constructing knowledge through the transformation of experience. This model refers to the process of learning that involves students directly in issue or the material that are being studied. Thus, these models use new experiences and students reactions to their experience in order to build understanding, knowledge transfer, skills and attitudes.

3. Material & Methodology

3.1. Research Methods

This research is conducted using a quantitative approach through the implementation of quasi-manifold (pseudo) experiments with non-equivalent control group design. The subjects in this study consist of two groups of classes known as control group (Q1) and experiment group (Q2).

3.2. Samples

This study has been done on two groups of students selected using the same characteristics that join at the same academic year 2014/2015 on the Entrepreneurship course. The samples are coming from 19 students for the control group and 20 students for the experiment group.

3.3. Procedures

The procedures are following the steps as follows (1) Performing the pre-test for each class at the beginning of the semester by filling the questionnaire using Likertscale to 23 point statements regarding the interest in entrepreneurship with indicators corresponded to theoretical study and entrepreneurs in opening an Opticalbusiness, the questionnaire has been analysed for its validity and reliability, (2) the treatment group is taught by implementingthe following experiential learning Model : the learning process is started from concrete experiences that are faced by students, the experience is then reflected individually through the initial description of experience in glasses industries owned by students. In the reflection process,students are asked to understand the phenomenon during the tests. This reflection becomes the basis for the conceptualization process or understanding the principles process that underlie the experiences and the possibility of its application in the context of other situation (new situation). Furthermore, the steps are followed by implementing the process to students to apply the experience to serve customers directly by searching people who need the glasses services such as at schools, prayer groups and other organizations. Students consisting of 4 groups implement direct service to society by motivating and guidance from lecturers. Students may earn direct income from the sale of spectacles that they have done. In the learning process, studentsobserve the real conditionthen reflected the experiences by reviewing the previous steps. The reflected experiencesare rearranged to form new definitions, new knowledge as instructions to create new experiences or behaviours that are known as discovery process (finding out). Students then conceptualize and implement the previous experiences to serve the community. In the implementation process, the students apply previous experience in managing the situation that is known as the application process (taking action). (3) The control group is still taught using conventional method with lectures, individual and group assignments and discussions. (4) At the end of the semester, the post-test is performed.

3.4. Data Analysis

Data analysis is performed to describe the data of each group by revealing the Central Tendency data and formulas for making the Percentage Level of the Respondent Achievement. Furthermore, to

The Effect of Experiential Learning Models on Entrepreneurship Interest on Optical Technology for Students of Akademi Refraksi Optisi Padang measure the influence of PCL methods by Identifying Potential Areas uses the Statistical Analysis test (t), where the test of assumption of normality classic and data homogeneity is performed previously.

4. Results and Discussion

4.1. Result

Based on data analysis result, it can be explained that the description of the results of each group is shown in Table 1 below:

Table 1. Description of current research results Pre-test

| Group | N | mean | Median | SD | Sum | Min-Max |
|----------------|----|-------|--------|-------|------|---------|
| Control (Q0) | 20 | 68.35 | 67.00 | 6,201 | 1367 | 60-82 |
| Treatment (Q1) | 19 | 66.05 | 65.00 | 7509 | 1255 | 55-84 |

Table 1 shows that students interest to open a business in Optical (Entrepreneurship) in the control group (Q 0) and experimental (Q 1) has a relatively the same average (Q 0) = 68.35, and (Q 1) = 66.05. Based on the percentage of respondents, it is known that the level of achievement (Q 0) is 57.43% and the percentage of (Q 1) is 59.43%. Both values are low in the interest in the entrepreneurship.

Table 2. Description of current research results Post-test

| Group | N | mean | Median | SD | Sum | Min-Max |
|----------------|----|-------|--------|-------|------|---------|
| Control (Q0) | 20 | 72.25 | 70.00 | 6,920 | 1445 | 63-87 |
| Treatment (Q1) | 19 | 81.79 | 80.00 | 5473 | 1554 | 74-92 |

Table 2 presents that the students interest in the control group (Q0) and experimental group (Q1) have different values which are (Q0) = 72.25, and (Q1) = 81.79. Based on the value of respondents' achievement, it is known that (Q0) is 62.82% (low category), (Q1) is 71.12% (middle category). The variation in entrepreneurship interest before and after treatment can be explained as in table 3.

Table 3. Differences results for pre-test and post-test

| Group. | mean | 95% (CI) | t hits | t tab | P value |
|-----------------|-------|--------------------|--------|-------|---------|
| Control (Q0) | | | | | |
| Before | 68.35 | (-6736) - (-1064) | 2878 | 2092 | 0010 |
| After | 72.25 | | | | |
| Difference | 3.90 | | | | |
| Experiment (Q1) | | | | | |
| Before | 66.05 | (-19 538) - 11,935 | 8697 | 2101 | 0000 |
| After | 81.79 | | | | |
| Difference | 15.74 | | | | |

Data analysis shows that student interest in entrepreneurship in the control group has a difference average of about 3.90. Based on test (t), it is known that score t calculation > t table. It means that there are real differences in entrepreneurship interest between pre-test and post-test, with the p value = 0,010 which states that there is a significant difference at 95%. In the experiment group, it can be seen that the average difference is about 15.74. Based on test (t), it is known that t calculation > t table. It means that there are differences in entrepreneurship's interest between pre-test and post-test with p value is 0,000. The variation is significant at the 95%. Comparative analysis for students interest in entrepreneurship in the control group and the experiment showed the p value = 0,000 with the sense that there important results at both groups. The experimental group taught using experiential learning model has on average a higher interest in entrepreneurship.

4.2. Discussion

Based on research's results, it can be argued that the given pre-test for students to study the Entrepreneurship course shows the average interests in entrepreneurship is 68.35 for the control group and 66.05 for the experiment group (both in low category). Two groups have the same characteristics in the entrepreneurship interest. To anticipate the problem of low interest, the experiential learning model is proposed. The objective of this model is to increase students' understanding in entrepreneurship using their real experiences by reflecting on their previous experiences in entrepreneurship. Hence, it can increase student's interest in entrepreneurship in Optical business particularly to open a business related to their skills and competencies.

The learning process in experiential learning is an activity to formulate an action, test, assess the results and obtain the feedback that reflects, transforms and defines an action based on the principles that must be followed and understood. The principles are based on the Kurt Lewin theory stating that effective experiential learning will influence students thinking ability, attitudes, perceptions, and behaviour. A student must develop a concept whether the performed Entrepreneurship activities have a good effect to themselves or how to conduct Entrepreneurship and how to realize to be an entrepreneur.

By implementing experiential learning model, researchers notice that student believes to the obtained knowledge found by itself, increase its own activity to make decision and independent. Based on experiment results provided by students, the learning approach that relies on inquires and discovery can increase student' interest to entrepreneur so as to commit itself to implement the invention on the future as an entrepreneur. Experiential learning is more than just providing information to change the cognitive, affective and behaviour. Teaching students to change does not mean that they are willing to change. Experiential learning is a learning process that adds students' interest in learning, especially to make the desired changes. Changes in behaviour are useless if the cognitive, affective, and behavioural have not changed. New skills can be practiced. However, without eagerness to change or study continuously, the skills will fade or disappear. Experiential learning through learning in entrepreneurship activities, researchers believe that students' objectives will increase in opening the optical business. As a result, the researchers conclude that the implementation of experiential learning methods can be beneficial to increase interest in entrepreneurship.

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