# PROCEEDINGS

## 4th International Conference on Technical and Vocational Education and Training (TVET)

**Theme:**
**Technical and Vocational Education and Training for Sustainable Societies**

**Padang, November 9-11, 2017**
**at Hospitality Center**
**Universitas Negeri Padang**

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## 4th International Conference on Technical and Vocational Education and Training (TVET)

### Theme: Technical and Vocational Education and Training for Sustainable Societies

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# FOREWORD

Welcome for all respected scholars, researchers, post graduate studentsand especially Keynote Speakers to the 4 ICTVET. The theme of the conference focus on Technical and Vocational Education and Training for sustainable societies and consist of six subthemes. i.e Development of learning model on TVET, Workplace Learning and entrepreneurship, Innovationon applied engineering and information technology, Management and Leadership on TVET, Vocational and Technical Teaachers education, and Assessment and Evaluation on TVET.

Sustainable society shoul be followed by the improvement of various factors that have impacts to the quality of vocational and technical education and training, particularly to overcome the competitiveness of the world business. As we have already known the rapid change of technology as well as the change of demography, having a great effects to the life of peoples in this world, The competitiveness need a collaborativeness to survive the life of millions peoples who lost their jobs. Young peoples as aproductive generation have to be creative and innovative to face the competitiveness. So this prociding contents consist of various findings of research in the field of vocational and technical education as well as applied technology and mainly based on the subthemes of the conference.

Finally, we would like to thank a million for all participants of this conference and all parties who support the success of this conference. Hopefully the seminars and scientific work of this seminar can be a reference material for basic education and elementary school teacher education in Indonesia.

Padang, July 2, 2018

Tim Editor

**CONTENT PROSIDING ICTVET 2017 REPOSITORY UNP**

# THE READINESS OF STUDENT TO ENTREPRENEUR THROUGH INCORPORATION OF THE PILOT PROJECT PRACTICE

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**Abstract:** This paper used the experimental method to the design of the one group pretest-posttest design to determine the increase of student readiness to entrepreneurship in the program of dressmaking study at the State University of Padang. Treatment in the form of pilot projects for the practical course of Clothing Business Management to realize the real Clothing Business Management in the form of boutiques and true convection". Venture capital is given in the form of company stock to 40 students as respondents in the form of loans that must be restored after a business advantage. The results of the research showed that the student readiness to entrepreneurship has significantly increased after doing the experiment.

*Keywords: Student readiness to entrepreneurship, venture capital, company stock.*

## 1. INTRODUCTION

Indonesian student readiness for entrepreneurship is very important to know and improved. Therefore, the employment opportunities that are available today for the educated labor force of college graduates is extremely unbalanced with graduates produced so that there are a lot of educated unemployment everywhere.According to the Statistics Agency Central (BPS), in August 2014 recorded the number of unemployment in Indonesia 7.24 million people, in the same period of 2015 the number increased by 320 thousand or 4.42% higher than the prior period. Of the total unemployed, the highest number of educated unemployed have graduated from college, which is 13.94% (Level S1 Degree and Diploma), while graduates of vocational schools (SMK) is lower than that, which is 12.65%, graduate high school (SMA) 10.32% Junior secondary school (JSS) 6.22%, and 2.74% Primary School, the remaining approximately 54.13% are unemployed who are not in school (Rini, 2017). Given the gravity of unemployment that has graduated from college then it is proper for the college management seeks to know and improve the readiness of students to entrepreneurship, employment readiness for opening standalone or as a job creator, no longer oriented as job seekers

In the study program dressmaking in several universities in Indonesia, there is a course Clothing Business Management. The main purpose of the lecture is to foster entrepreneurship skills of students in the field of modest, convection, and boutiques. Applied Practical Model to this subject is "Build the fashion boutiques Business and convection on campus".

In 2015, at the State University of Padang, the practical subject is taught by as practicum courses related subjects as a pilot project by providing funds for students to make a real Business in the form of fashion boutiques business and convection on campus. Boutique showroom space for rent of the university management. Capital for the purchase of equipment room, such as furniture and installation wage, the complete electrical equipment and installation wage, mannequin and hanger purchase, purchase fashion items, and the cost of the overall company's opening ceremony event provided by the lecturer of the course concerned. Total capital is USD 150 million. Venture capital will serve as student debt related to the lecturers to be paid after the business began to walk and benefit. The main objective of the pilot project is to investigate and foster the readiness of entrepreneurship students through the self-management of business under the guidance and supervision of lecturers.

In fact, starting the entrepreneurship for students is not easy like lecturer suggests. Because, according to Wiratmo (1996: 22) entrepreneurs bear the heavy financial risk, psychologically and socially, especially in the cultural environment of people who think the entrepreneur profession as a less honorable employment low, dishonest, greedy, aggressive, expansive, full competition, the income is not fixed, and so on. Negative attitudes formed in the society to the profession of entrepreneurs byAlma(2000: 2) cause the parents are trying to drive their children to become civil servants after getting the title of bachelorhood. Therefore, entrepreneurship interest which has grown through entrepreneurship subjects and other business sectors have not managed to drive the growth of new businesses among the students.

The entrepreneurship interest that has been growing can weaken or even disappear if it is not strengthened and improved until transformed into a reliable entrepreneurial behavior. Influential factors in strengthening the interest and ability to initiate entrepreneurship by Alma (2000) (1) motivation, (2) knowledge, (3) skills, (4) work experience, (5)

cooperative group, (6) bear to the risk, and (7) the availability of capital in the form triggering factor the opening of new businesses. Indonesian students are generally come from poor families, the initial capital opening of new enterprises they cannot be provided. The entrepreneurship Interest has been built through entrepreneurship subjects and other business sectors eventually fade away.

There are various models of the entrepreneur's growth and new business units in Indonesia. According to research results of Lestari (2009) there are 18 growth models of a new business unit in Indonesia that he grouped into four models, namely: (1) Formal BusinessModel, (2) Non-Formal Business Model, (3) Informal model, and (4) Government Program Model (Figure 1).

Figure 1 shows that education, training, and mentoring programs including a non-business model of business units growth and new entrepreneurs. In practice, the college has introduced Student Creativity Program(PKM), a program of capital support the opening of a new venture for interested students in entrepreneurship, total funds up to Rp 10 million for each student group, while the Student Entrepreneurial Program (PMW) to fund a larger, improved up to Rp 40 million per college student group. For lecturer is provided the science and technology program for Campus Innovation and Creativity (IbIKK) with the help of funds reached Rp 300 million for three years of activity (Higher Education, 2009). The three program included the growth models of business units and new entrepreneurs through education, training, and mentoring.

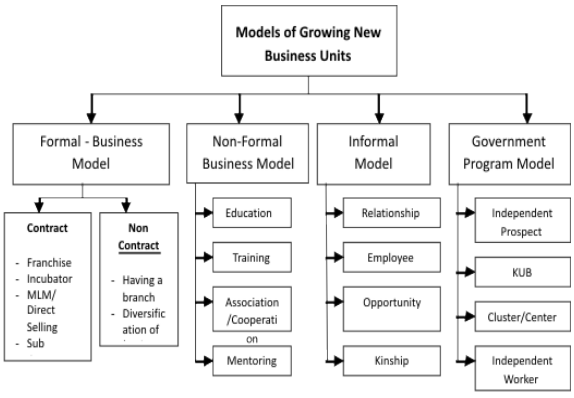


Figure 1, Models of Growing New Business Units in Indonesia

In the Ministry of Agriculture has long been applied the growth model of entrepreneurs (farmers) and unit-farming businesses through the Corporate Program of Nucleus-plantation or abbreviated PIR-BUN (BIP West Sumatra, 1985). In this program, the government provides loan funds/credit card for every farmer in the amount not less than USD 50 million. The use of this fund is organized and guided by the experiencedGreat Gardening in the field to foster new businesses in the form of palm plantations, rubber, cocoa and other commodities for comprehensive and garden 2 ha for each farmer regardless of the education level. PIR-BUN program that has managed to grow millions of entrepreneurs (farmers) palm, rubber and cocoa, include the growth model of entrepreneurs in the government programs.

## 2. METHOD

This study uses Experimental Design, the design of the one-group pretest-posttest design or the design of a single group research through the provision of pre- and post-treatment questionnaire. Experiments conducted on dressmaking Studies Program, Department of Family Welfare, Engineering Faculty, the State University of Padang in Odd Semester, January to June, Academic Year 2014/2015. The study population was dressmaking students, Family Welfare Department, Engineering Faculty of UNP who took the course of Clothing Business Management from January to June, Academic Year 2014/2015. Due to the number of population members is not too large, listed as many as 40 students, all members population become sample.

The treatment of this study in the form of giving a capital loan Rp 150 million to the students from the lecturer concerned to set up a fashion business. The use of such capital to rent a building, hire purchase and installation of furniture, fittings and power tools to install wages, purchase mannequin and hanger, the cost of the opening ceremony event, and the purchase of fashion items.

Planning for learning in this treatment as follows: "Knowledge of the fashion business management, including the form of business entity, the organizational structure and production units (design, pattern, sewing, accessories, and costing), plan, arrangement of the showroom, and capable of opening and managing the fashion business".

Material subject of learning include: (1) Understanding and the business clothingorientation, (2) Procedure of fashion business establishments, (3) Creating a fashion business proposal (4) The comparative study / observation to related companies, (5) Structuring the fashion showroom, (6) Promotion and marketing (7) excellent service for business clothing, (8) Management space for fashion production, include: the selection of design, procurement patterns, cutting, sewing and packaging, and (9) Evaluation of the business, including profit / loss and term long planning.

Some competencies should be mastered by students after the completion of the lecture are: (1) capable of designing the organizational structure of the fashion business and assign job desscription each part, (2) is able to make a fashion business proposal, (3) capable of establishing cooperation with other

companies related to getting fashion items, (4) is able to open a fashion business firm, (5) is able to organize the business fashionshowroom, (6) is able to hold the fashion promotions and bussiness marketing, (7) capable to run the fashion business, (8) capable of managing the clothing production room, and (9) is able to evaluate the fashion business.

The task given to the students of them are looking for relationships and build partnerships with other companies to supply clothing, supplies fashion accessories, and textiles to be sold in the showroom, as well as the promotion of looking for customers who want to create clothes. Each student must obtain at least two customers until the fourth week of lectures and complete that order until eight weeks of lecture.

At the fourth week, students were given the task of field observations to: (1) review several existing clothing business in Padang city in order to get a real picture of the business model that they will work and plan the business that they will open in the practicum, (2) explores the location and the building will be leased business premises, and (3) explore the point of sale and the price of furniture and equipment needed to be purchased.

In week 5, 6, and 7, the results of field observations and customer orders that have been obtained previously discussed in class to get the right way in realizing products. The results of discussions organized into clothing business plan that they will work and be recorded in the minutes of the meeting.

The business plan includes: the organizational structure, infrastructure, capital and the source, location and place of business, promotion, subscription/targets, manpower, feasibility studies, and business analysis. In a period of weeks, this course also made leasing business premises, purchase of tools and machines needed, as well as providing all the facilities and infrastructure of a boutique. Especially with regard to capital, the student must make an effort capital loan agreement between lecturers and students were signed during this period. Capital is invested in shareholding companies and can be resold to the lecturer concerned to pay the loans. Furthermore, at eighth week, it is carried the Middle Semester Exam.

At week 9th to 16th, the action plan began to be implemented, starting with the arrangement of the showroom, corporate offices, production space, followed by the opening ceremony of the fashion business. Since that time a fashion showroom to be opened every day to serve visitors who come buy the clothing/equipment and accept orders for the stitching.

The research instrument is a questionnaire following the model Likert scale with four levels of alternate answers. Pretest and posttest questionnaire is the same questionnaire, consisting of 52 items of questions, grouped into seven indicators of readiness of entrepreneurship, namely: (1)Motivation of Entrepreneurship with 7 questions, (2) Knowledge of Entrepreneurship 9 with questions, (3) Skills entrepreneurship with 15 questions, (4) Experience entrepreneurship with 5 questions, (5) Ability to Establish Cooperation with 5 questions, (6) The courage to risk with six questions, and (7) entrepreneurship trigger factor with 5 questions.

The research sample of pretest and posttest is paired samples. That is, the provision of a number of respondents for data collection and processing should be the same at the time of the pretest and posttest. If the number 1 is given to a respondent at the time of the pretest, posttest responded then when it still was given the number 1, and so on for all respondents. Pretest meeting held on the second week of lectures and posttest at the sixteenth week or after completion of final exams.

The average score obtained from the questionnaire is transformed into the form of a percentage and grouped into five categories: Very High (85.00 - 100.00), High (70.00 - 84.99), Medium (55.00 - 69.99), Low (40.00 - 54.99), and Very low (25.00 - 39.99).

The value of the average percentage score and the category of the interpretation presented in tables and graphs. Furthermore, the average percentage score of each sample is tested statistically by using t-test to see the level of significance or difference between the pre-test to post-test.

## 3. RESULTS

### 3.1 Pretest and Posttest Data of Students' Entrepreneurship Readiness

The results of the questionnaire before treatment (pretest) and after treatment (posttest) was treated with Program Exel and SPSS version 16 for each indicator. The details are shown in table 1.

Table 1 shows almost all indicators of student entrepreneurship readiness before treatment (pretest) are in the category of "medium". After treatment (posttest) category was increased significantly to "very high". On the other hand, the average score of students in entrepreneurship readiness variables (measured with 52 items of questions) before treatment include the category of "moderate" with an average score of 2.72 or 67.95% of the ideal score (score or the ideal or highest score is 4.00). After treatment of these categories was significantly increased to "very high" with an average score of 3.52 or 86.16% of the ideal score.

| No. | Indicator | Item Qty | Pretest | | | posttest | | | test T |
|---|---|---|---|---|---|---|---|---|---|
| | | | The average scores | % Score | Category | The average scores | % Score | Category | |
| 1 | Motivation | 8 | 3.16 | 78.98 | High | 3.70 | 92.42 | Very high | significant Increase |
| 2 | Knowledge | 8 | 2.62 | 65.39 | moderate | 3.45 | 86.33 | Very high | significant Increase |
| 3 | skills | 15 | 2,73 | 68.17 | moderate | 3.50 | 87.50 | Very high | significant Increase |
| 4 | Experience | 5 | 2.70 | 67,50 | moderate | 3.46 | 86.38 | Very high | significant Increase |
| 5 | Cooperation | 5 | 2,68 | 66.88 | moderate | 3.58 | 89.38 | Very high | significant Increase |
| 6 | Bravery | 6 | 2.35 | 58.65 | moderate | 3.44 | 86.04 | Very high | significant Increase |
| 7 | Triggers | 5 | 2,79 | 69.75 | moderate | 3.53 | 88.25 | Very high | significant Increase |
| Variables | | 52 | 2.72 | 67.95 | moderate | 3.52 | 86.16 | Very high | significant Increase |

Table 1. The category of achievement and significance test pretest and posttest

Differences entrepreneurship readiness of each student from research samples before treatment and after treatment were measured in paired samples clearly demonstrated by the graph 2. The graph shows that the average percentage of student entrepreneurship readiness score for each respondent prior to treatment largely middle category (55.00 to 69.99%). After treatment, the bulk of its category increased and are at the very high category (85.00 to 100.00%).

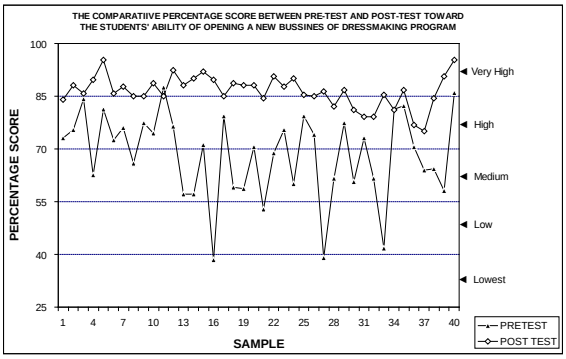


Figure 2. Graph of score average percentage between pretest and posttest

Lastly, different test (t-test) parametric statistical sample two pairs or Paired-Samples T-test by using SPSS Version 16 help show t = 9.039. Table t on the real level α = 0.05 with degrees of freedom or df = n - 1 or 40-1 = 39 was 1.685. Therefore t> t table it can be concluded that there are significant differences between the score average percentage pretest to posttest at the 95% confidence level. At first, the entrepreneurship skills of students before the treatment is in the category "medium" after treatment was significantly increased to "very high".

## 4. DISCUSSION

The high degree of entrepreneurship readiness of dressmaking students of UNP after following a pilot project of practicum courses in the Fashion Business Management, from the category of "Medium" (67.95%) was significantly increased to the category of "Very High" (86.16%) is physically evidenced by the establishment of a business unit of fashion boutiques, have a fairly large initial capital of Rp 150 million, and business activities went well.

In non-physical level of preparedness of the student entrepreneurship besides evidenced by the increase the average score of the students entrepreneurship readiness during the pretest (2.27) to 3.52 when posttest reinforced by the absence of the desire of students who took off the company stock after the completion of their course, when they were given the freedom to sell its shares to the lecturer of related subjects as payers of loans they have received. All students of the respondents maintain its stake as the owner of fashion business company that they founded.

Therefore, a business that opened by the student is a boutique business can grow into a large business then, of course, it will be able to employ tens or even hundreds of students later.

Currently, DGHE has pioneered the growth of new entrepreneurship among students with a variety of programs, such as CRP and PMW. But the program is not associated with lectures so that the level of business success and the loan repayment is not guaranteed.

On the other hand, as a pilot project practicum courses of Clothing Business Management is associated with learning curriculum so that the success rate of business and loan repayment is guaranteed. Faculty and students certainly strive earnestly to do it because it is associated with job performance ratings of faculty and students learning outcomes.

If within four years students successfully repay their capital to the faculty related to the means 4 times injection of successive governments to related lecturers then certainly every lecturer of the course line of business could open at least one new business unit each semester and grow dozens of student entrepreneurs through learning course of business fields.

## 5. CONCLUSION

First: The purpose of the pilot project of practicum teaching of Clothing Business Management as contained in the synopsis of learning has been achieved well. Implementation of the pilot project of this lab can improve student readiness for entrepreneurship from the "Medium" category (67.95%) before experimental (pretest) rose to the "Very High" category (86.16%) after the experiment (posttest).

Second: Statistical t-test showed that the differences in pretest to posttest results were significantly different at the 95% confidence level,

meaning that the increase happened not by chance but because of the treatment effect.

Third: Physically increase student readiness for entrepreneurship is evidenced by the establishment of a business unit of fashion boutiques, have a fairly large initial capital of Rp 150 million, and business activity was going well.

Fourth: improvement of student readiness for entrepreneurship is reinforced by the absence of the students desire to release the company's stock after completing the course, when they are given the freedom to sell its shares to the lecturer of related subjects as payers of loans they have received. All students of the respondents maintain ownership of a company that they have set up.

## 6. SUGGESTION

First: Lecturer in the business field, especially in Indonesia Clothing Business Management advised to carry out practical lectures as a pilot project of this lab to improve the student's entrepreneurship readiness after graduation.

Second: Lecturer of business subject lines using a model such as the learning lab such as pilot project is suggested has an own business according to their field in order to become an entrepreneur who truly knows and understand the business world. Therefore, only entrepreneurs also who can perfectly produce the new entrepreneurs as well as himself.

Third: The management of the college and its staff are advised to provide the widest opportunity and encourage the use of laboratory models of learning as the project pilot for the course of business, in particular subjects Fashion Business Management. Therefore not all lecturers courses in entrepreneurship business sector suggested it to the person concerned to be trained to be able to self-employed and open a business in accordance with the subjects to be learned.

Fourth: The Directorate General of Higher Education recommended to provide the widest opportunity and encourage the use of laboratory models of learning as a pilot project to subject fields of business by providing a variety of policies and facilities to enable the lecturers to prepare students to become entrepreneurs. Parties to the Directorate General of Higher Education is expected to finance budgeted for faculty training, preparing institutions or courses, faculty, and the opening of new enterprises seeking capital for lecturers. In addition, DGHE also expected to fight to convince the government in providing budget loans for students opening new businesses that have grown from this pilot project.

Fifth. Researchers in the field of learning and the curriculum are advised to make similar studies in different places that the results are expected to be used to strengthen the Directorate General of Higher proposals to the government about the importance of the provision of loans for students opening new businesses as a pilot project.

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**Dr. Ernawati, M. Pd.,** born in Pariaman, West Sumatra province on May 3, 1953, graduated from elementary school in Kampung Dalam, Pariaman in 1965, junior high school in Kampung Dalam 1969 Pariaman and Padang State SKKA 1971. Then get a Bachelor's degree (BA) in study program of dressmaking of IKIP Padang in 1976, the title of Doktoranda (Dra) Bachelor S1 of dressmaking in IKIP Jakarta, 1980, Master of Education (M.Pd.) from Graduate Program of Padang State University in 2005, and last Doctoral degree in Educational Science, Vocational Education Concentration 2015. From 1981 till now works as a lecturer at the Department of Family Welfare, Tourism and Hospitality Faculty, the State University of Padang. In addition also holds the position of Chairman for Integrated Services Business Unit and fashion Industry, IbIKK of Padang State University since 2009 and as a Commissioner of PT. Rumah Gadang Cendikia engaged in general trading. The areas of research interest are entrepreneurship, small and medium enterprises, and learning methods.Married to husband, Ir. H. Suhatril Malik, President Director of PT. Rumah Gadang Cendikia engaged in general trading and former clerks of BLPP Bandar Buat, Padang.