

Science and Technology Program for Entrepreneurship (STPE) of Malikussaleh University in North Aceh

Fuadi¹, Nirzalin², Apridar³, Umaruddin Usman⁴, Muhammad Daud⁵

^{1,5} Faculty of Engineering, ^{3,4} Faculty of Economics and Business,
² Faculty of Social and Political Science,
Malikussaleh University, Aceh, INDONESIA.

¹ fuadyyahya@gmail.com, ⁵ syechdaud@yahoo.com

ABSTRACT

Science and Technology Program for Entrepreneurship (STPE) is one of community service programs in higher education world in Indonesia. This program aims to develop science and technology in train students in developing entrepreneurship mentality (entrepreneur soft skills) and entrepreneurship skills (entrepreneur hard skills) to enable them to become job creators. The program also intends to establish business incubation unit at Malikussaleh University as practical medium for project-based learning of business. Targeted real work is to create 20 new micro and small business at Malikussaleh University. Methods of community service used are learning to run a business using Project Based Learning method (PBL). To determine entrepreneurial understanding, entrepreneurial personality test models using Hawkin & Turla (1986) is used. To determine the entrepreneurial skills, teamwork ability test, leadership test, test marketing expertise, and skills tests to manage capital and operating profit are used. A collection of the results of these tests demonstrate entrepreneurial profile. After being trained, coached, placed on internship, acted, and mentored for six months, the results show the following: (1) from the entrepreneurial personality side, of 10 tenants (auxiliaries), 5 business group achieved a score of 300-360, which means a successful and independent, high entrepreneurial spirit, disciplined risk-taking and very responsible. There are 8 groups attempt to obtain a total score of between 210-299, which means that they might hope to achieve, but is still lacking in the ability of self-confidence and the courage to take the risk. While 7 other business group only achieved a score of less than 280, which means that they lack of entrepreneurship soul and still have much to learn and hone themselves, because of inadequate business motivation, discipline, self-confidence, and courage to take the risk. (2) In terms of the business skills that include the ability to cooperate (building networks), leadership, marketing capabilities, and the ability to manage capital and profits, there are as many as 13 business groups that have been successful, while there are seven other groups that have not been successful.

Keywords: Entrepreneur, job creators, and business projects

INTRODUCTION

Since the 1970's until the 2000's, North Aceh district has been known as one of the districts famous for oil and gas producer to the Republic of Indonesia and even to the International World. In addition, North Aceh district is known as the largest industrial area in the entire province. As a district that once had major industries, had most people in the region been prosperous? Have people in the district been trained by the major industries to be competitive and ready to plunge into the world of work and business towards the Asean Economic Community (AEC) in 2015? So, what about the real conditions in North Aceh district today? Data show that the number of unemployment in North Aceh district continues to increase

every year. Source from Ministry of Employment and Population Mobility North Aceh illustrates that;

"Unemployment in North Aceh district in December 2013 was 41.556 people. While in March 2014, it rose to 43.016 people. That means the number of unemployed in North Aceh increased by nearly two thousand people. Head of the Office stated that one of the causes of high unemployment was due to low quality and productivity of labor."(Source: Central Bureau of Statistics Aceh Utara)

Malikussaleh University has been improving itself to equip students hoping that graduates will no longer be job seekers or even unemployed (cannot obtain job) but the creator of the work (job creators). Various attempts have been made such as empowerment in student entrepreneurship program among students who received *bidikmisi* scholarships and the alumni who managed to become successful entrepreneur to play active role in *carrier centre* forum Malikussaleh University by opening a business unit to develop retail businesses. The university and successful alumni were willing and happy to assist the student in doing business in the form of business development, capital and business assistance.

In addition, Malikussaleh University developed several business ventures such as stock market corner, cocoa cultivation, catfish and grouper cultivation, and Aceh traditional art. The business is managed by the university by empowering students and alumni to add to their experience of being a successful entrepreneur in the future.

This paper is organized as follows. In the next section we will present a brief description of the entrepreneurship programs in Malikussaleh University and the motivations to build the Science and Technology Programs for Entrepreneurship (STPE). In third section, we describe the implemented methods on STPE. We present the result and discussion in fourth section. We end with the conclusion.

ENTREPRENEURSHIP PROGRAMS IN MALIKUSSALEH UNIVERSITY

Programs of SEP, ESCP, and NVPS

There were three programs of entrepreneurship for students which early organized namely the Student Entrepreneurial Program (SEP), the Entrepreneurship Student Creativity Program (ESCP), and New Venture Pioneer Students (NVPS). SEP activities funded in fiscal year 2013 there were a total of 14 titles involving 14 groups. Sixteen titles business program involving 16 SEP groups of students were approved in 2014. After carefully identified, business programs can be grouped into five business areas, namely:

1. 1 unit of handicraft business of industry venture group,
2. 1 unit of garment/ clothing business of industry venture group,
3. 3 units of snack and culinary business of industry venture group,
4. 4 units of engineering technology and services business industry venture group, and
5. 7 units of livestock raising business of industry venture groups.

Company partners directly involved with SEP activities are university students of Malikussaleh University in charge of the business.

Based on the results of monitoring by the ESCP supervisor, it can be concluded that not all SEP students were successful in developing their business. Approximately 90% groups of program participants of the entrepreneurial students have stopped doing business activities or failed. It happened due to the existence of barriers in terms of marketing, because they did not make a business plan when starting a business comprehensively.

In addition, poor communication between students and lecturers added to the issue. Guidance activities were limited on the preparation of a proposal only and did not continue until the implementation of the business program. Once the program is completed and the student activities were completed and have drawn up a report, then they assume ESCP responsibility is over, without regard to the continuity and growth of its business.

Economic Potential of ESCP Products, ESCP Products, and NVPS Products

Business of Entrepreneurship Student Creativity Program (ESCP), Entrepreneurship Student Creativity Program (ESCP), and New Venture Pioneer Students (NVPS) can be grouped into four core business; they are handicraft and clothing business, snacks and culinary business, farming and agriculture technology engineering. Of the four areas of the business farming had the most turnout followed by snacks and culinary business and handicraft businesses, meanwhile agricultural technology engineering was the last. Therefore, the Science and Technology Programs for Entrepreneurship (STPE) will be focused on four areas of the business as it is still a great opportunity to be developed into Small and Medium Enterprises (SMEs) and are still prospective in North Aceh.

Based on the analysis of Malikussaleh University STPE team, goat breeding market share is still open and has been run by the students of Faculty of Engineering under the guidance Malikussaleh Consulting field Livestock, Dr. Zulfikar, M.Si. and Geuchik Wan as the owner of "Ternak Kambing Syar'i" which has pioneered a new business in March 2014 with capital of Rp32,500,000.00. We have already gained revenue of Rp45,000,000.00. Thus, net income amounted to Rp 12,500,000.00 or 28% in each semester.

Market share of broiler chicken farms as the only product in North Aceh, also engaged a group of students of the Faculty of Economics and the Faculty of Engineering under the guidance of Geuchik Fajriin Cotseurani village, about 7 km from the Malikussaleh University rector building. This shows that broiler chicken business in North Aceh is still open and has the potential to be developed. Broiler chicken production has been marketed to several Restaurants in Lhokseumawe and ever reached Restaurants in Banda Aceh. Geuchik Fajri started its business in 2012 with capital of Rp14,000,000.00. We have already gained revenue of Rp20,000,000.00. Thus, net income amounted to Rp 6,000,000.00 or 30% on each transaction for 45 days of maintenance.

Aceh traditional handicrafts bag has been tested and practiced by students of the Economics Faculty of Malikussaleh University under the guidance of Mr. Hamidi Usman as owner "Tabina Souvenir" who started business in 2008 with capital of Rp 41,000,000.00. We have already gained revenue of Rp60,000,000.00. Thus, net income amounted to Rp 19 million or 31.5% on each transaction month. Acehnese cake has also been practiced by students of the Engineering Faculty of Malikussaleh University under the guidance of Miss. Fatimah who has pioneered efforts in 2014 with capital of Rp 8,300,000.00. We have already gained revenue of Rp15,000,000.00. Thus, net income amounted to USD 6.7 million or 45% on each transaction weekly.

Finally, the mushroom has been successfully practiced thanks to the joint collaboration between the students of the Faculty of Engineering and the Faculty of Agriculture, Malikussaleh University in 2014 with capital of Rp 2,200,000.00. We have already gained revenue of Rp6,000,000.00. Thus, net income amounted to Rp 3,800,000.00 or 63% on each transaction weekly. Mushroom production is marketed to *morning market* Batuphat. Currently, they are able to meet the demand of mushroom, even to obtain a mushroom customer should queue and pre-order.

Management of Science and Technology Programs for Entrepreneurship (STPE)

The Science and Technology Programs for Entrepreneurship (STPE) program of Malikussaleh University services will be managed professionally by lecturer, practitioners (partners) and skilled technicians under the coordination of the LPPM Malikussaleh University by forming STPE special team. The facilities provided is a space for STPE management at LPPM Malikussaleh University building on Tgk.ChikDitiro26 Street Lhokseumawe with the size of 30 m². Room facilities available are furniture, air conditioning, telephone/facsimile, computer and internet network as well as other administrative tools.

As a medium of field training, students participating in the STPE (tenant) deployed directly at the location of the business partners to observe, implement and explore a real experience. As for the business partners who have made the MoU with STPE of Malikussaleh University, among others; on a goat farm field owned Geuchik Wan is located in the village of Glumpang Sulu, about 1 km from the University rectorate building. Aceh traditional handicraft bag "Tabina Souvenir" owned by Mr. Hamidi Usman located near Airport Malikussaleh. For tenants who are interested in snacks and culinary interns placed at the resident "Bunda Fatimah", located in the village of Mon Gedong Lhokseumawe, about 2 km from the building of the Islamic Center. The mushroom production business owned by Malikussaleh University students located in eastern Reuleut village, about 150 m from the Malikussaleh Rectorate building.

So far, there has not been any Service and Industry Unit (SIU) ever managed by Malikussaleh University. Of course, this is a good opportunity to develop human resources of Malikussaleh University.

IMPLEMENTATION METHODS OF STPE

Tenant Recruitment Method

Tenant is a business group of students chosen to be trained by STPE team of Malikussaleh University. There were 20 *tenants* in the STPE program coming from students involved in ESCP, SEP, and NVPS. Therefore, it needs to be selected carefully in order to obtain quality tenants. As for the selection program includes:

- i. Fill out the curriculum vitae and types / areas of business operated at this time,
- ii. Fill out interest and motivation questionnaire about entrepreneurship,
- iii. Fill out the form on simple business plan.

Selection results were announced no later than one week after the selection process. If at the first stage of selection target number of tenants do not meet the quota, readmission prospective tenant for the second stage of selection is held, and further to obtain the expected number of tenants. Selected tenant must meet the requirements of the type of business that has a touch of the production technology, operations management or unique marketing technology.

Venture Coaching Technique

Community service methods used are learning to start business under Project Based Learning (PBL) method. Selected groups of students who have graduated and financed by the Entrepreneurship Student Creativity Program (ESCP), conduct selection, provide motivation training and business knowledge, technical coaching to start a business, internships, business plan, stimulation fund, conduct business and mentoring, as well as monitoring and evaluation of the business. To determine the understanding of the entrepreneurial spirit, entrepreneurial personality test models of Hawkin & Turla (1986) were used. To determine the

entrepreneurial skills, several testing techniques that test the ability of cooperation, leadership test, test marketing expertise, and skills tests managing capital and operating profit were used. A collection of the results of these tests entrepreneurial profile is concerned.

The development step can be seen as follows:

- i. Entrepreneurship education and training by team and resource persons (lecturers and practitioners / partners),
- ii. Deployed for internships in companies,
- iii. Provide with rolling capital to develop the business,
- iv. *Up grading* in product development and the latest production equipment in the Laboratory
- v. Mentoring and continuous supervision on a periodic basis by a team of business tenants and partners.
- vi. Evaluation of the ability of the entrepreneurial spirit (soft skills business) and evaluation of business skills.

Collaboration with External Institution

External institution that have agreed to collaborate with STPE program are the business partners who are ready to help in training, production and marketing of proprietary of tenants' products under *help to sell*(consignment) as has been mentioned before, namely; Mr. Geuchik Wan as the owner of Goat farming, and Mr. Hamidi Usman as owner of Tabina Souvenir, Miss. Fatimah as trainer in baking cake and *Morning Market* seller in Batuphat.

Coaching Implementation Technique

Preparation

Preparatory activities include stages such as: preparation of the implementation team and resources as well as briefing material, program socialization to ESCP and NVPS students, and the identification and selection of participants / tenant

Implementation

Program is done with the following steps: debriefing of participants, education and entrepreneurship training, preparation of business plan, the selection and revision of business plans, internships at partner companies, provision of revolving capital facility is equipped with a contract, to develop business independently or in groups of maximum 5 students, and coaching and mentoring by STPE team and partners. The last is evaluation. The evaluation is done by: monitoring and evaluation, and improvement or revision.

Target Number of Tenants

STPE program aims to produce new highly educated entrepreneur as well as the development of STPE development institute at the University of Malikussaleh. Therefore, the program is planned to be able to produce and form 20 new entrepreneurs. If a tenant has been running his business successfully, new tenant selection is conducted again (as the recruitment pattern at front) to recruit new tenants so that the number of tenants remains 20. So on so forth, that's how STPE team and institution operates.

RESULTS AND DISCUSSION

Implementation Schedule

The schedule of implementation activities for venture coaching is described in Table 1. There were 16 activities during April until June 2015.

Table 1. Implementation Schedule

<i>No.</i>	<i>Day, Date</i>	<i>Type of Activity</i>	<i>Venue</i>
1	Fri, 03 April 2015	Tenant recruitment for STPE program	LPPM Hall of Unimal
2	Fri, 10 April 2015	Tenant coaching in STPE program	LPPM Hall of Unimal
3	Fri, 17 April 2015	Venture motivation training and real business application	LPPM Hall of Unimal
4	Fri, 24 April 2015	Real business mentoring	STPE partner
5	Sun, 26 April 2015	Real business mentoring	STPE partner
6	Sun, 03 May 2015	Real business mentoring	STPE partner
7	Sun, 10 May 2015	Real business mentoring	STPE partner
8	Tue, 12 May 2015	Real business mentoring	STPE partner
9	Fri, 15 May 2015	Business mentoring	STPE partner
10	Sun, 17 May 2015	Business mentoring	STPE partner
11	Sun, 24 May 2015	Business mentoring	STPE partner
12	Sun, 31 May 2015	Business mentoring	STPE partner
13	Tue, 02 June 2015	Business mentoring	STPE partner
14	Fri, 05 June 2015	Real business evaluation	STPE partner
15	Fri, 12 June 2015	Venture improvement follow up	STPE partner
16	Fri, 19 June 2015	Business running up grading	STPE partner

Job Distribution in the Workshop and Business Mentorship

The job distribution in the workshop and business mentorship is described in Table 2. There were five job description handled by five persons in charge. One person responsibly a job description respectively.

Table 2. Job Distribution in the Workshop and Business Mentorship

<i>No.</i>	<i>Name</i>	<i>Job Description</i>
1	Fuadi, S. Ag., M.Ag.	Coordinator and Main Motivator in STPE Program
2	Dr. Nirzalin, M.Si.	Coach of Communication and partnership
3	Prof. Dr. Apridar, M.Si.	Coach of Business Plan
4	Umaruddin Usman, S. E., M.Si.	Coach of Accounting and Cash flow
5	Fitriati, S. E.	Administration and Finance

List of Tenant

The list of *tenant* is gathered in Table 3. The table list name of *tenant*(student), his or her faculty, type of business have been ventured, and the location of their business respectively.

Table 3. List of *Tenant*

<i>No.</i>	<i>Name</i>	<i>Faculty</i>	<i>Type of Business</i>	<i>Location</i>
1	Asdi	FE	Mushroom	East Reuleut
2	Nasrol Kamal	FP	Mushroom	East Reuleut
3	Muhammad Syafi	FP	Mushroom	East Reuleut
4	Muhammad Wali	FT	Mushroom	East Reuleut
5	Marini	FT	Aceh Traditional Cake	Mon Gedong
6	Susi Susanti	FT	Aceh Traditional Cake	Mon Gedong
7	Miftahul Jannah	FT	Aceh Traditional Cake	Mon Gedong
8	Muammar	FT	Aceh Traditional Cake	Mon Gedong
9	Syarifuddin	FE	Aceh Authentic Souvenir	UleeMadon
10	Sulaiman	FE	Aceh Authentic Souvenir	UleeMadon
11	AsmaulHusna	FE	Aceh Authentic Souvenir	UleeMadon
12	Cut Nova Najmiyanti	FE	Aceh Authentic Souvenir	UleeMadon
13	AanGunawan	FT	Chicken Farm	Cotseurani
14	AsyrafAkmal	FT	Chicken Farm	Cotseurani
15	SahlanNasution	FT	Chicken Farm	Cotseurani
16	Dhedy Syuaib	FT	Chicken Farm	Cotseurani
17	Tito Harto S. Manik	FT	Superior Goat	Glumpang Sulu
18	Suhairi	FT	Superior Goat	Glumpang Sulu
19	ZiscaNuzul	FT	Superior Goat	Glumpang Sulu
20	Ira Monika Br. Ginting	FT	Superior Goat	Glumpang Sulu

Tenant Business Performance

The *tenant* business performance is gathered in Table 4. There are five parameters (indicators) of evaluation, i.e. personality, collaboration and teamwork, leadership, marketing skill, and capital skill.

Table 4. Tenant Business Performance

<i>No.</i>	<i>Name</i>	<i>Personality Score</i>	<i>Collaboration & Team Work Score</i>	<i>Leadership Score</i>	<i>Marketing Skill Score</i>	<i>Capital Skill Score</i>	<i>Note</i>
1	Asdi	288	280	286	290	288	Success
2	Nasrol Kamal	110	200	180	175	163	Fail
3	Muhammad Syafi	286	290	292	288	290	Success
4	Muhammad Wali	307	295	291	295	390	Really Success
5	Marini	325	325	330	328	360	Really Success
6	Susi Susanti	284	288	280	278	286	Success
7	Miftahul Jannah	280	286	288	284	280	Success
8	Muammar	290	282	260	368	262	Success
9	Syarifuddin	340	350	360	340	380	Really Success
10	Sulaiman	110	200	180	172	160	Fail
11	Asmaul Husna	290	284	282	288	284	Success
12	Cut Nova Najmiyanti	288	280	290	282	292	Success
13	Aan Gunawan	120	118	120	120	130	Fail
14	Asyraf Akmal	326	324	320	328	330	Success
15	Sahlan Nasution	220	280	280	272	288	Success
16	Dhedy Syuaib	334	320	310	300	320	Success
17	Tito Harto S. Manik	108	200	210	218	230	Fail
18	Suhairi	332	320	320	330	340	Success
19	Zisca Nuzul	240	210	240	242	238	Success
20	Ira Monika Br. Ginting	90	118	110	120	124	Fail

Note:

Average indicator score: 300 – 360 =A (really success), 210 – 299 =B (success), 120 – 209=C (fail), 1 – 119 =D (really fail).

Based on the mentioned criteria above, we can say that tenant business performance are as follows: 15 groups are successful (12 success and 3 really success), 5 groups fail or not successful. Success rate in this project is 75%.

CONCLUSIONS

Based on the analysis and findings in the field, we can conclude that coaching process of venture groups under Science and Technology program for entrepreneurship in Malikussaleh University is successful. This can be seen in mastery of entrepreneurship personality (soft skill) of most of the tenants as much as 75% tenant. They managed to attain a score of 210 or even more. Likewise, business application skill level can be mastered by 75% of tenants with the score of above 210, both in collaboration and team work skill, leadership, marketing, and capital and profit management.

ACKNOWLEDGEMENTS

This STPE programs were funded by Ministry of Research Technology and Higher Education. The authors would like to thank them. The authors also thank Center for Community Service and Institution of Research and Community Service, Malikussaleh University.

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