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Strategies to Develop Technopreneurship in College (Best Practices in the Implementation of Community Service Through the Entrepreneurship Development Program Scheme)

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## ARTICLE INFO

ABSTRACT

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Keywords: Technopreneurs, Community Service, a New Strategy The number of Indonesian entrepreneurs is still 3.1% of the total population. Whereas in developed countries, at least 14% of the population are entrepreneurs. For this reason, the government through various programs is trying hard to accelerate its development. One of them is through the Entrepreneurship Development Program (EDP) which is implemented in several universities, including the Surabaya State University (Unesa). The purpose of writing this article is to describe Unesa's practical experience in implementing EDP which includes: 1) the right strategy in developing technopreneurs; 2) Newly developed Technopreneursh, and 3) Establishment of a new entrepreneurial incubator. The method used in implementing this EDP is the PALS (Participatory Action Learning System) method which includes three phases, namely: 1) awareness); 2) capacity, and scaffolding entrepreneurship capacity building, and (3) institutionalization. The results of the EDP implementation show; 1) found new strategies in developing technopreneurs; 2) Ten (10) tenants become new technopreneurs, and 3) The establishment of a new entrepreneurial incubator center on the Ketintang campus. The EDP program was implemented 100% according to the target. Many thanks go to the Directorate of Research and Community Service(DRCS) for funding the implementation of this program.

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# INTRODUCTION

Until now, Indonesia only has 3.1% of the total population of entrepreneurs. In the ideal case, according to President Jokowi, so that Indonesia can progress, it must have entrepreneurs above 14% of the population (Kuwado, 2018). Therefore, the Indonesian government strives to continue to spur the growth of entrepreneurs through various programs, ranging from high schools to universities (PT). Entrepreneurial development through education is considered very appropriate because education can also function as a medium of information to increase the understanding and interest of students in the world of entrepreneurship (Marti'ah, 2017). Likewise, according to Useni Elizabed Funmi (2017) (Oseni, 2017), efforts to develop entrepreneurs through education like this are very appropriate. It should not only develop entrepreneurs, but more than that, its development should lead to technopreneurs to suit the needs of the industrial revolution 4.0 era. Technopreneurs are entrepreneurs who can empower technology, are creative, innovative, dynamic, dare to be different and take unexplored paths, and have high enthusiasm for work (Selladurai, 2016).

One of the competitive programs launched by the Directorate of Research and Community Service (DRCS) starting in 2019 is the Entrepreneurship Development Program (EDP). This program is an evolution of the previous program called the Entrepreneurship Apprenticeship (EA) in 2013. Two years later it was changed to Business Work Course (BWC). Three years later it changed again to Science and Technology for Entrepreneurship (STE), and in the last two years, it became the Entrepreneurship Development Program (EDP). This evolutive program aims to spur the growth of new entrepreneurs among students and to develop entrepreneurs from graduates who are starting entrepreneurship. Based on the experience of implementing the STE program, and the first year EDP, achieving these goals is not easy. Because this involves changing the mindset (mindset) of students who generally still have a "priyayi" mentality, they have high hopes that after graduation they can immediately become employees/State Civil Apparatuses (SCA) according to their parents' expectations. Even though the opportunities for that are very limited and getting narrower.

To support the efforts of developing entrepreneurs, all PT. have attempted to organize the "Entrepreneurship" course. But in general, the results have not been effective in fostering the birth of new entrepreneurs (new entrepreneurs). This is because in its implementation it still faces various obstacles. In general, the obstacles faced by PT. including the State University of Surabaya (Unesa) are almost the same, namely because 1) graduates' understanding of business concepts and tips on entrepreneurship is not yet complete; 2) unable to present figures (entrepreneurial practitioners) who can become motivators to generate interest in entrepreneurship; 3) lack of entrepreneurial practices; 4) the entrepreneurship internship program is not yet optimal; 5) inadequate business capital assistance, and 6) the lack of an appropriate entrepreneurship learning method that can encourage/motivate students to become entrepreneurs.

This article aims to describe the success of the Unesa Community Service implementing (CSI) team in overcoming these obstacles through the implementation of a collaborative program between Unesa and DRCS which has been proven to be able to foster the birth of new entrepreneurs according to the set targets. The program in question is EDP.

## **IMPLEMENTATION METHOD**

To achieve the desired target optimally, namely the growth of new technopreneurs from among students, the growing business of graduates who are fostered, the program implementing team carries out a series of strategic activities ranging from socialization, recruitment, technopreneur lectures, technopreneur training, applied science and technology, and action programs with the following methods: Participatory Action Learning System (PALS) (Sitepu, 2019). This is done by focusing on the transformation of activities that have been designed so that changes will occur towards improving the condition of student technopreneurs through 1) entrepreneurship awareness phase, 2) capacity phase, and entrepreneurship scaffolding (technopreneur). capacity building), and (3) the institutionalization phase of new technopreneurs. Diagrammatically the method is shown in Figure 1.

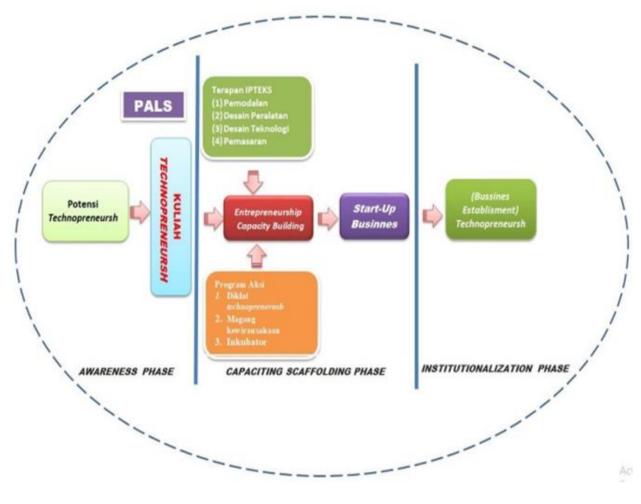
1. Phase of Entrepreneurship Awareness (awareness)

Activities in this phase/stage begin with the program socialization stage, recruitment of tenants (technopreneur prospective students), and end with technopreneurs lectures. Technopreneurs is the process of combining technological prowess with entrepreneurial talents and skills (Suradi et al., 2017).

The socialization was carried out to introduce the program to the Vice-Chancellor 1, Deans in the Environment, Heads of Departments, Head of Study Programs, and students. The target of this socialization is not only to introduce the program but also to get support from the leadership (legality) and to get more and more qualified applicants (raw input) so that the CSI implementing team has more opportunities to choose them. The following is a snapshot of the EDP program socialization activities carried out at the Unesa Faculty of Engineering, can be seen in Figure 2.

The results of the socialization turned out to be very good, and beyond the expectations of the CSI implementing team. Because in addition to getting enthusiastic responses from students, 244 students also registered to take part in the EDP program. Even though the available quota is only 30 tenants. As a consequence, the Implementing Team was forced to make a selection.

Selection/recruitment of prospective EDP program participants is done by filling in personal data and taking a pre-test by filling out an instrument (questionnaire) that has been prepared in advance. The pre-test was conducted with the aim that the CSI implementation team could recruit tenants who had a positive attitude towards entrepreneurship, high interest, and strong motivation for entrepreneurship. Because, these three factors are very decisive in the effort to grow new

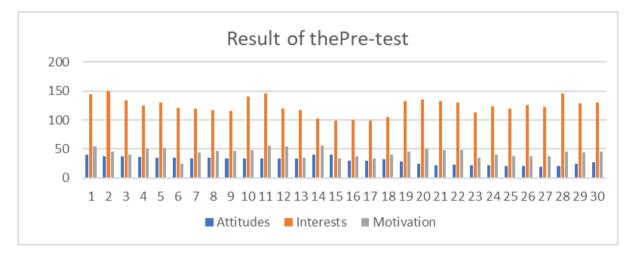






**Figure 2.** Socialization of the KDP Program at the Faculty of Engineering

technopreneurs candidates (Sumarno & Suarman, 2017). The registrant's data and data regarding the attitude, interest, and motivation of tenant entrepreneurship will be used as the basis for selecting the next stage of tenants, namely the capacity and scaffolding stages. The following is a description of the attitudes, interests, and motivations of 30 students who passed the selection. For more details, see Figure 3. below.



**Figure 3.** Graph of Tenants' Attitudes, Interests, and Motivations Passing Selection

From the test results like the picture above, it was found that the entrepreneurial attitude of the 30 tenants who passed the selection was on average in the good category, their interest in entrepreneurship was in the high category, and the motivation for entrepreneurship was on average in the strong category, so it needs to be improved. through Technoprenership Lectures.

Technopreneurs' lectures are held with learning tools that have been prepared through Focus Group Discussions (FGD). Unlike the entrepreneurship course participants in general, this technopreneur course is supported and equipped with special tools from FGD results which include syllabus, technopreneur lesson plans, technopreneurs modules, media power points (ppt.), and other reference sources such as books, journals, and videos. closely related to technopreneur. The following is a picture of the atmosphere of the inaugural Technopreneur lecture held at the Unesa Faculty of Engineering. For more details, see Figure 4. below. It is hoped that with this lecture the participants can have a complete understanding of business concepts and entrepreneurship tips.



**Figure 4.** Technopreneurship Inaugural Lecture

2. Phases of Capability and Entrepreneurship Scaffolding (technopreneur capacity building) Activities in this phase are education and training (Training) for Technopreneurs. This training is intended to be able to boost the attitude, interest, and motivation of tenant entrepreneurship. This is believed to be because based on the experience of the first-year PKM team, and the results of research (Mulyani, 2012), it is proven that entrepreneurship education and training can improve students' entrepreneurial attitudes, interests, and motivation. In this training, the implementing team deliberately invites entrepreneurial practitioners who are currently successful in running their businesses. The tenants are also allowed to choose and invite any resource persons who they think will be able to generate and boost their motivation for entrepreneurship.

After their attitude, interest, and motivation increase, the training participants are given tips to make a good business plan and present it in front of friends and assessors. Of the 30 tenants, according to the plan, 20 tenants were taken to be given a science and technology applied assistance program or an Action program according to the results of the assessment. To obtain an action program or the application of science and technology, apart from being based on the development of attitudes, interests, and motivation of the participants, it is also based on the feasibility of the business to be run, and the presentation of the business being carried out. The applied science and technology programs include, among others, capital assistance, technology design, equipment design, and marketing. Meanwhile, the Action Program includes education and training assistance according to tenant needs, apprenticeships to relevant industries, and incubators.

The following is a picture of the atmosphere of the technopreneur training (Figure 5.), giving gifts to resource persons (Figure 6.), and business presentations at the Faculty of Engineering, UNESA (Figure 7.).

The results of measuring the attitude, interest, and motivation of tenant entrepreneurship after attending the training are presented as shown in the following Figure 8.

From the graph above, it is clear that there is an increase in tenant entrepreneurship attitudes, interests, and motivation after participating in the training by inviting resource persons as motivators.



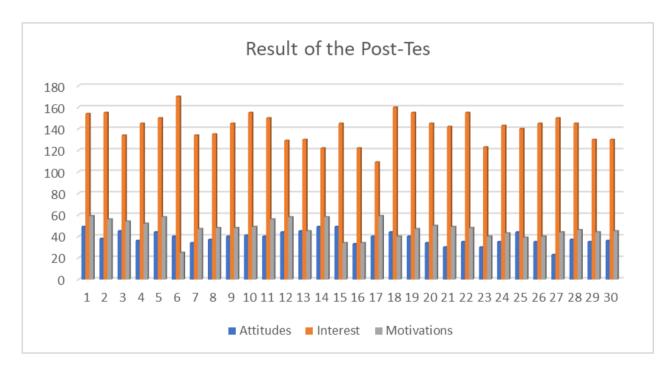
**Figure 5.** Technopreneurship Training



**Figure 6.** Giving Souvenirs to Resource Persons



**Figure 7.** Business Plan Presentation



**Figure 8.** Graph of Post-test Results of Entrepreneurial Attitudes, Interests, and Motivation

#### **RESULTS AND DISCUSSION**

From a series of KDP program implementation activities that have been carried out, the following outputs have been produced:

1) The right strategy in developing technopreneurs in universities.

The strategy in the context of technopreneur development referred to here is an effective and efficient method for fostering the birth of technopreneurs from among students. This method is not easy to implement, because in principle you have to change the mindset of the tenants who generally still have a "jobseeker" mindset into a "job creator" mindset. However, the CSI implementation team has found this strategy. That is by carrying out a series of strategic activities ranging from program socialization, tenant recruitment, technopreneurs lectures, technopreneur training, to providing applied science and technology programs and action programs.

To be successful, the tenants who are recruited must be selected based on priorities for tenants who are proven to have a good attitude towards entrepreneurship, strong interest, and motivation for entrepreneurship. Because these three things are ignored, it will be more difficult for implementers to create new technopreneurs. Besides, the selected tenants must be truly not "technologically stuttering". Because according to the definition, technopreneurs are entrepreneurs who can create new businesses and jobs through technological innovation (Kamil et al., 2018). German economist Jeme Clause also said that anyone (including tenants), any organization of any kind, and even institutions such as the state will surely be left behind if they are not able to empower technology. In terms of technopreneurs, the key to success is winning the competition. Therefore, even though he has a good attitude, interest, and motivation for entrepreneurship, he is also strong, but if you do not master technology, you should not be selected as a tenant.

2) Successfully developed new technopreneur.

Through a series of strategic activities, the EDP implementation team succeeded in fostering the birth of 10 tenants to become new entrepreneurs who are independent and ready to exist in the community. The names of the tenants and the business fields involved are described in the following Table 1.

No	Tenant's Name	Business Name	Address and contact person
1	M. Samsudin	TriD Expert	Jl. Ketintang, Kec. Gayungan, Surabay 083857440487
2	Herwin Agustyanila Sari	Herwin Signature	Jl. Raya Banyu Anyar Kecamatan Gurah Kabu. Kediri
3	Muhammad Erwin Hadi Sya'roni	TriD Expert	Jl. Ketintang, Kec. Gayungan, Surabay 083857440487
4	Achmad Toifur	Café Arah Langkah	Desa Pucangtelu, Dusun Dandang, RT2. RW4, Kalitengah, Lamongan 081553654592
5	Hanifa	UD. Ratna	Jl. Jetis Kulon No 54B, Wonokromo,Surabaya 081234038520
6	Binti Alik Katur Rofiah	TriD Expert	Jl. Ketintang, Kec. Gayungan, Surabay 083857440487
7	Sulihan	Cv Hidroponik "JawaRa Farm"	Jl. Ketintang No. 23 Surabaya
8	Anggun Larasati	Café New Normal	Jl. Prof. Dr. Moestopo, Ngadiluwih, Kediri 08125927431
9	Titania Ainayah	Belipisang	Jl. Kebonsari baru selatan, Griya Kebonsari Regency. Gg IV No. 18 1C Kota Surabaya, Gayungan, Jawa Timur.
10	Izzatus Syafa'ah	Belipisang	Jl. Kebonsari baru selatan, Griya Kebonsari Regency. Gg IV No. 18 1C Kota Surabaya, Gayungan, Jawa Timur.

 Table 1.

 Name of Tenant, Name of Business, Address, and Contact Person

# **CONCLUSIONS AND SUGGESTIONS**

Based on the explanation above, related to the implementation of EDP at Unesa, it can be concluded as follows.

- 1. The Unesa CSI implementation team has succeeded in finding the right strategy in developing new technopreneurs in universities, namely by carrying out a series of strategic activities ranging from program socialization, recruitment strategies or selection of prospective tenants, technopreneur lectures, technopreneur training, to techniques for implementing applied science and technology programs and the right action program to be able to nurse the birth of new technopreneurs
- 2. The Unesa EDP implementation team has succeeded in fostering the birth of 10 tenants (unesa students and alumni) into new technopreneurs who are ready to run businesses in various spectrums of business activities, such as culinary, boutique services, design, and printing services.
- 3. The realization of the Unesa EDP entrepreneurial incubator as a center of technopreneur in developing an entrepreneurial culture at Unesa, which is centered in the Kocika building, 2nd floor, Ketintang Campus, Surabaya.

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