

# The Impact of Implementation Interprofessional Education Project Entrepreneurship Based Learning on Student Entrepreneurship Interests

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## Abstract

The concept of independent learning has become an issue that is being widely discussed in the world of Indonesian education today, this policy encourages students to master various fields of knowledge with their fields of expertise, so that they are ready to compete in the global world. This study aims to describe the impact of Interprofessional Education project entrepreneurship based learning (IPE PEBL) on Student Entrepreneurship Interest. This research is a survey with a comparative causal design. The population is all students of Muhammadiyah University of Lamongan. Samples were taken by incidental sampling technique. The total sample was 386 participants which were divided into 2 groups, each with 193 participants in each group. As an IPE PEBL group, there are groups that have participated in the Interprofessional Education project, entrepreneurship based learning and groups that have never participated in entrepreneurship education as NON IPE PEBL. The instrument used is an Entrepreneurship Interest Questionnaire which consists of four domains, namely Entrepreneurship Education, Entrepreneurship Self Efficacy, Social Support and an interest in building a business. The data obtained were then analyzed using the Mann Whitney test to see the benefits of the collaborative classroom-based Project based Learning method in fostering student interest in identifying potential resources that are owned as business opportunities that will be created. This study shows that there are differences in entrepreneurial interest in the IPE PEBL and NON IPE PEBL groups with p value <0.005. The domains that have the most influence on student interest are social support and innovative start-up intentions. Interprofessional Education project entrepreneurship based learning has created entrepreneurial interest in learning that has the potential to foster student creativity in building a business that must be supported by educational support, relation support and student confidence.

**Keywords:** Entrepreneurship, Interprofessional education, Independent Campus, Project-Based Learning

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## Introduction

Facing the 21st century, all countries are competing to build and develop their human resources so that they can work and compete in the global competitive arena. For this reason, competencies that are in accordance with the demands of skills in the 21st century must be improved (Sudirtha et al., 2021). 21st century education requires skills or Intellectual skills that must be possessed by students in order to

prepare students to be actively involved in future challenges. Entrepreneurship skills are one of the fundamental components of 21st Century education (Zulfickar et al., 2019). There are many types of learning models, but not all learning models can accommodate the educational needs and challenges of the industrial revolution 4.0, namely encouraging critical thinking and developing practical skills (Fadillah et al., 2021).

The concept of independent learning has become an issue that is widely discussed in the world of education, the concept that voices independence in learning is carried out in an effort to prepare university graduates, both public and private, to be able to face the times and changes that occur so fast (Fuadi & Aswita, 2021). The policy objective of the Independent Learning Campus is to encourage students to master various fields of knowledge with their fields of expertise, so that they are ready to compete in the global world. This policy provides an opportunity for students to choose the courses to be taken based on their own wishes. One of the eight independent campus programs that students can take is the Entrepreneurship program (Azizah et al., 2021).

The implementation of education based on the cultivation of positive values and character is a priority for educational institutions today, especially education that is able to stimulate productivity for its graduates. But the fact is that the implementation of national education is still experiencing obstacles in producing productive, capable and creative graduates who are able to act as driving forces in various development sectors. Graduates of education are often a burden on the government in meeting the need for social services, employment, subsidies and the like. Learning patterns that lack meaning and are not contextual can be one of the contributing factors, resulting in a lack of students' life skills, so that the positive values of life begin to disappear, such as the value of independence, creativity, innovation and having good life skills (Nurjanah et al., 2021) Interest in Islamic entrepreneurship (Islamic preneurship) plays a very important role in student life and has a major impact on the Indonesian economy. A person is said to have a high interest in Islamic preneurship which can be seen from various aspects such as character, nature and habits carried out in accordance with Islamic business corridors (Bahri, 2018). Becoming an entrepreneur requires mental maturity, one of which is interest or determination. In growing interest in entrepreneurship, it is very important to take part in business learning activities.

Interprofessional Education is a method of learning between different professions and occurs when two or more disciplines are in the learning process together to improve collaboration and understand each other's role (8). Higher education is currently developing IPE in preparing students to value teamwork and developing skills to work in interprofessional teams gi is currently developing IPE in preparing students to value teamwork and develop skills to work in interprofessional teams (Anwar & Rosa, 2019). An educational approach that emphasizes creative thinking, problem solving, and interaction is one that is suitable for sustaining project-based continuous learning (Syakur et al., 2020).

Muhammadiyah University of Lamongan has established the Basic Scientific Pattern (PIP) "Islamic Entrepreneurship" as a basic character and value in all academic activities. The unification of the meaning of "Islamic Entrepreneurship" as the main scientific pattern in realizing excellence, making it easier for graduates to achieve life welfare goals, with an innovative, creative, independent, forward-looking mindset, willing to always do better with strong internal motivation based on values islam (Lamongan, 2019). Collaborative Class as an implementation of Interprofessional Education which has been implemented at the University of Muhammadiyah Lamongan Implementing independent campus learning in the form of entrepreneurship based learning projects between Pharmacy, Nursing, Biology and Management study

programs to improve students' soft skills and hard skills. In addition, students are also expected to be able to think critically, creatively and gain experience in collaborating with students across disciplines. The interaction between students who they just met became focused because they followed the program that had been planned by the lecturer. Everyone has life skills and entrepreneurship, but in different amounts and levels. Both can be developed into a person's character, therefore these aspects must be honed and practiced (Hadromi, 2014).

Project-based learning (PjBL) is carried out to deepen the knowledge and skills acquired in making works or projects related to student competencies (Fajra & Novalinda, 2020). Isro et al., (2021). revealing the critical thinking skills of students who study with the PjBL model show a high category project-based learning (PjBL) as a promising approach to improve student learning in higher education and conducted further studies to assess student learning processes. This article aims to describe the impact of implementing the Interprofessional Education project entrepreneurship based learning on Student Entrepreneurship Interests.

## **Methods**

This study is a survey research with a comparative causal design, which compares a group of students who have taken IPE PEBL and students who have never taken IPE PEBL.

### **Data collection tools**

Sampling using purposive sampling technique. Students who meet the inclusion criteria are 1) students who are still actively studying and 2) understand the purpose of this research and participate 3) students who have participated in IPE PEBL for the IPE PEBL group 4) students who have not participated in IPE PEBL for the non IPE PEBL group. The data was conducted at the University of Muhammadiyah Lamongan in December 2021. A total of 386 students were selected as samples and taken in two groups. Students can participate in the survey after reading and filling out the online informed consent that contains the purpose of this research and willingness to be a respondent. Filling out the questionnaire by students was done directly with the help of a research assistant. Filling out the questionnaire takes about 15 minutes. This research has been through an ethical test and is declared ethically worthy with No.123/EC/KEPK-S2/12/2021.

### **Outcome measurement**

This study assesses the level of student interest in entrepreneurship and compares interest in students who have participated in IPE PEBL and those who have not. Demographic data consisting of age and gender is contained in the first part of the form. In the second part, a questionnaire to measure Entrepreneurship interest consists of four domains, namely Entrepreneurship Education, Entrepreneurship Self Efficacy, Social Support and interest in building a business. Provisions for assessing the questionnaire using a Likert scale: 5 = Strongly Agree (SS), 4 = Agree (S), 3 = Neutral (N), 2 = Disagree (TS), 1 = Strongly Disagree (STS).

### **Statistical Analysis**

The data obtained were then analyzed in 2 stages, namely univariate and bivariate. The univariate test was carried out by determining the mean and SD in each group. The bivariate test used the Mann Whitney test to determine the impact of IPE PEBL on student interest in building a business.

## **Results and Discussion**

Table 1. Frequency Distribution of Respondents

Characteristics	IPE PEBL (n=193)		NON IPE PEBL (n=193)	
	N	%	n	%
Age				
>19 Years	0	0.00%	7	3.63%
19-20 Years	52	26.94%	132	68.39%
21-22 Years	141	73.06%	54	27.98%
Total	193	100.00%	193	100.00%
Sex				
Male	58	30.05%	47	24.35%
Female	135	79.27%	146	75.65%
Total	193	100.00%	193	100.00%

Table 2. Frequency Distribution of Respondents

Entrepreneurship Interest	IPE PEBL (n=193)		NON IPE PEBL (n=193)	
	n	%	n	%
Good	115	59.59%	46	23.83%
Enough	60	31.09%	91	47.15%
Less	18	9.33%	56	29.02%
Total	193	100%	193	100%

Table 1 shows that the total respondents who joined in this study were 386 students. In the IPE PEBL group, 73% of respondents were aged 21-22 years, while in the Non IPE PEBL group 68% of respondents were aged 19-20 years. Gender characteristics in both groups were mostly women, IPE PEBL (79.2%) and non IPE PEBL (75%).

Table 2 shows that 59.9% of respondents in the IPE PEBL group have good entrepreneurial interest, 31.09% have sufficient interest in entrepreneurship, and 9.33% have less interest in entrepreneurship. Meanwhile, in the non-IPE PEBL group, 47.15% interest in entrepreneurship is sufficient, 29.2% is lacking, and 23.83% is good.

Table 3. Domains of Interest in Entrepreneurship

Domain	IPE PEBL				NON IPE PEBL			
	Mean	SD	Min	Max	Mean	SD	Min	Mx
Entrepreneurship Education	2,07	0,81	1	3	2,15	0,80	1	3
Entrepreneurship Self Efficacy	2,10	0,81	1	3	2,18	0,79	1	3
Social Support	2,35	0,86	1	3	2,25	0,67	1	3
In Start Up	2,13	0,81	1	3	1,98	0,24	1	3

Based on table 3, it shows the highest mean difference in the In Start Up domain, namely the IPE PEBL group of 2.13 while the NON IPE PEBL group of 1.98. Furthermore, in the social support domain, the IPE PEBL group is 2.35 while the NON IPE PEBL group is 2.25.

Table 4. Impact of Implementation of Interprofessional Education project entrepreneurship based learning on Student Entrepreneurship Interest.

Group	Mean Rank	z	p
IPE PEBL (n=193)	233.91	-7,677	0,000
NON IPE PEBL (n-193)	153.09		

The results of statistical tests on the impact of implementing Interprofessional Education project based entrepreneurship learning on student entrepreneurship interest (Table 4) show a p value = 0.000 which means that there is a significant difference between the IPE PEBL group and the non IPE PEBL group.

Students who have participated in the Interprofessional Education project on entrepreneurship based learning have a good interest in entrepreneurship. Entrepreneurship education is expected to be literate in developing graduate competencies to identify, understand, interpret, create, and realize business forms after completing studies (Yohana, 2021). Entrepreneurship education, which balances economic goals and the role of institutions in the down streaming of science and technology and research outcomes, offers a solution worth considering (Nandan & Scott, 2013). Universities need to prepare students to become entrepreneurs by implementing an entrepreneurial curriculum in each study program as a provision for students to become entrepreneurs (Indaryani et al., 2021). Nandan & Scott, (2013) revealed that collaborative entrepreneurship education and offering transdisciplinary Project-based programs to prepare entrepreneurs will yield good results.

Both teachers and students discover and explore their project-based learning patterns and collaborate in teams, build ideas, and turn ideas into reality. They create design thinking in innovation and entrepreneurship education and create an entrepreneurial culture in learning for one semester (Huang et al., 2021). This learning process requires students to work together to find solutions to authentic problems in the process of integrating knowledge, resources, and innovation (Guo et al., 2020).

In entrepreneurship learning that has been applied to the PEBL IPE group, students receive lessons from multidisciplinary driving lecturers. Motivating lecturers act as agents of change who will change the mindset of students. Motivating lecturers have the principle that students are partners and involve students with hard and soft skill activities (Siahaan & Munthe, 2021). Lecturers who are active in learning consist of lecturers from multi-disciplines, namely the fields of Nursing, Biology, Pharmacy and Management. Learning with the Project Based Learning method begins with a Focus Group Discussion. Each lecturer provides a tutorial and an overview of problems and needs in the community, then the driving lecturer will also provide an overview of the potential resources they have as business opportunities that will be born. Furthermore, students form teams consisting of multidisciplinary sciences to create projects according to the ideas of each team. Group projects and collaborations help students develop important soft skills (Younis et al., 2021). This collaborative method provides opportunities for students to identify their own strengths and weaknesses and understand the roles (behaviors) of their teammates and their strengths and weaknesses. In addition, it encourages learners to focus explicitly on group work skills (Aranzabal et al., 2021). Each team member explores each other and conveys their perspective to see business opportunities that can be built.

The results showed that there was an influence of Interprofessional Education project on entrepreneurship based learning on student entrepreneurship interest. The results of this study are in line with Indaryani et al., (2021) revealing that family environment and entrepreneurship education have a positive and significant effect on entrepreneurial interest which can be associated with entrepreneurial motivation. Entrepreneurial decision-making involves greater uncertainty, where effective decision-making of each individual is an important key in encouraging this desire (Rodgers et al., 2021). The increasing need for students to develop entrepreneurial skills while at school is forcing universities to realize the essence of the experiential teaching method and its effect on student entrepreneurial interests and business startups. This has far-reaching implications for universities, entrepreneurship educators, and students (Olokundun et al., 2018).

The results of the measurement of student interest in starting a business there are significant differences in the IPE PEBL group. Where in the IPE PEBL group as much as 40% said they wanted to start a business. This is also supported by the results of the measurement of Social support which are classified as good (60%) in the IPE PEBL group. Providing entrepreneurial motivation with the project based learning method is important, but it is also important to develop the potential of each individual to increase student interest in entrepreneurship (Sabahi, 2020).

### **Conclusion**

Project based learning based on collaborative classes in fostering student interest in identifying potential resources that are owned as business opportunities that will be created. This study shows the impact of Interprofessional Education entrepreneurship project based learning (IPE PEBL) learning on Student Entrepreneurship Interest. The domains that have the most influence on student interest are social support and innovative start-up intentions. Interprofessional Education project entrepreneurship based learning has created entrepreneurial interest in learning that has the potential to foster student creativity in building a business that must be supported by educational support, relation support and student confidence.

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