

COLLABORATION AND INNOVATION IN VOCATIONAL EDUCATION: STRATEGIES TO STRENGTHEN ENTREPRENEURSHIP SPIRIT FOR VOCATIONAL HIGH SCHOOL STUDENTS IN EAST JAVA

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Abstract: The open unemployment rate (TPT) in East Java is still dominated by graduates of Vocational High Schools (SMK), which shows a gap between the skills taught in schools and the needs of the workforce. This study aims to analyze the influence of entrepreneurial and culinary aspects on the readiness of vocational high school students to become entrepreneurs. Using a quantitative approach, data were collected from six vocational high schools in East Java that have Culinary, Agribusiness, and Marketing majors, with a closed questionnaire-based survey method using a Likert scale. The results of the study showed that entrepreneurial aspects, such as creativity, innovation, and courage to take risks, had a positive and significant effect on students' readiness to become entrepreneurs. Likewise, culinary aspects that include production skills, business management, and marketing strategies also increase students' readiness to build independent businesses. The implementation of "Practical Training to Become an Entrepreneur" has proven effective in improving students' entrepreneurial skills and mindsets, with students from the Agribusiness and Marketing majors showing a higher tendency to become entrepreneurs compared to the Culinary major. These results emphasize the importance of strengthening practice-based entrepreneurship curricula and collaboration between schools, industry, and government in creating an ecosystem that supports young entrepreneurs.

Keywords: *Entrepreneurship, Vocational Schools, Culinary Sector, Agribusiness Sector, Practical Training.*

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1. Introduction

The Culinary Business Tourism Study Program (CBZ) is a study program that focuses on creating business opportunities, agricultural innovation, creativity, and entrepreneurial skills to create culinary entrepreneurs, and the International Business Management Study Program (Faculty of Management and Business) has succeeded in creating graduates who create jobs, have independence and innovation and can calculate risks to create jobs. Universitas Ciputra Surabaya has assisted (mentoring) a lot until the graduates are easily able to open business opportunities. The excellence of the learning process is carried out in an innovative and creative

way. Actively learn various concepts, skills, and knowledge about business through hands-on practice.

The alignment between the changes to the RPJMD 2019-2024 of East Java Province and KLHS, where the East Java Government plays an active role in supporting the achievement of Sustainable Development Goals (SDGs). One aspect of the SDGs that is the focus of this research is eliminating hunger, achieving food security and good nutrition, and improving sustainable agriculture. Thus, the changes in the RPJMD 2019-2024 of East Java Province, namely Mission 2: The creation of social sustainable welfare, fulfillment of basic needs, especially health and education, provision of employment by paying attention to vulnerable groups [1] and the Strategic Plan of the East Java Agriculture & Food Security Office 2019-2024 [2]. Vocational High School (SMK) graduates have the highest TPT in East Java, seen from the level of education completed in 2021, the TPT for Vocational High School (SMK) is still the highest among other education levels, which is 8.59 percent followed by the TPT for Senior High School (SMA) at 6.16 percent in Table 1.

Table 1. TPT Data 2021

Education Level	Regional Type		Gender		Youth
	Rural	Urban	Male	Female	
(1)	(2)	(3)	(4)	(5)	(6)
Not graduated from elementary school	22.49	6.68	13.40	11.41	12.99
Elementary School	10.89	7.37	8.31	9.95	8.84
Junior High School	13.02	9.51	10.26	12.61	11.10
Senior High School/Vocational School	14.70	14.90	15.91	12.60	14.78
Higher Education	9.81	7.23	10.05	12.90	9.07
Youth	13.41	11.49	13.28	11.58	12.61

Source: BPS East Java Province Uploaded 2022.

The phenomenon of the Open Unemployment Rate (TPT) in East Java has consistently decreased. In fact, the current TPT rate is lower than the national TPT. Based on data from the Central Statistics Agency (BPS) in November 2023, the East Java TPT in August 2023 was at 4.88 percent or 1.17 million people. Meanwhile, unemployment in East Java is dominated by SMK graduates", where the Open Unemployment Rate (TPT) in East Java in February 2023 amounted to 4.33 percent, down 0.48 percent compared to February 2022. East Java's TPT is lower than the national rate of 5.45 percent.

In addition to challenges in the education and training system, students' understanding of the importance of collaboration in entrepreneurship is still limited. In fact, in a dynamic business ecosystem, the ability to collaborate is a key factor in creating a sustainable business. Students' lack of practical competence in managing a business or venture independently is also an obstacle in encouraging the creation of young entrepreneurs among SMK graduates. Furthermore, the mindset of students who tend to be oriented towards finding a job after graduation is a challenge in developing an entrepreneurial spirit. Therefore, a training strategy is needed that not only equips students with technical skills, but is also able to change their paradigm to be more oriented towards job creation.

This study aims to analyze the suitability of the educational structure in SMK with the demands of the development of science and technology and the needs of the world of work, as well as to examine the effectiveness of entrepreneurship training in building the spirit of entrepreneurship among students majoring in Catering, Agriculture, and Marketing. In addition, this study also aims to explore students' understanding of the importance of collaboration in entrepreneurship and its implications for business sustainability. Furthermore, this research will assess the students' level of practical competence in managing a business or venture independently and formulate training strategies that can change the mindset of students from merely looking for work to creating jobs through entrepreneurship. Thus, the results of this research are expected to provide recommendations for curriculum development and training programs that are more relevant to industry needs and support the improvement of the entrepreneurial spirit among vocational students.

2. Literature Review

2.1. Practical Training.

Training is a series of activities both personally to having skills and adding skills systematically so that they have the appropriate abilities in their fields. Training is a learning process that allows students to carry out current practice activities in accordance with the provisions (Widodo, 2015). Elnaga and Imaran (2013), explain that in fact if without proper training for students, then in the end they will not get news and skill improvement up to the maximum limit in carrying out work. According to Ragawati, et al. (2014); Sultana, et al. (2012), training activities have the following intentions and objectives: meeting the needs of the current world of work, namely that the training carried out will provide benefits and skills to complete a job. Sultana, et al. (2012), training is an indicator in efforts to improve performance, therefore training is positively and significantly correlated with student performance. Triasmoko, et al. (2024) stated that training has a positive and significant impact on student performance.

Efforts to improve the performance of educators, students must be attempted in the form of educational education and/or training. The most common and almost average method of interest in training and development is the 'on the job' method Busono (2016). On the job training (OJT) is a form of training through instructions, namely using each worker allocated according to field conditions, with assistance and mentoring that is ready to train Supriatna & Sutisna (2016). Training is more directed at improving HR capabilities related to their current responsibilities.

2.2. Entrepreneurship.

Entrepreneurial activities can lead to growth and development of competitiveness for economic growth, in addition there is also a tendency for everyone to dare to take risks as an entrepreneur higher than if the person works as an employee or staff. Through entrepreneurship education is a process of teaching and learning entrepreneurship which includes adding or improving knowledge, personality character, skills, and level of behavior Isrososiawan (2012); Harianti, et al. (2021). In general, entrepreneurship education has the intent and purpose of being aware that entrepreneurship is a career choice and understanding the process of building and managing a new business venture (Arasi, et al., 2012). Several things that reflect the character, attitude and decisions as entrepreneurs cannot be implemented by students individually. While the attitude as an entrepreneur shows an effective spirit for students in creating jobs and becoming independent entrepreneurs Mopangga (2014). Several factors that

foster entrepreneurship in several countries related to the role of universities how the concept of implementing entrepreneurship education (Chimucheka, 2013); (Ion, 2015), has stated that entrepreneurship education is a mindset that contributes to improving economic growth.

Ion, (2015), various educational programs used in variations of learning methods used to improve student skills in this case also have an important role in the development of society in the economic, social, political and cultural fields (Kimiyaei, et al., 2015).

2.3. Agribusiness Sector.

The job prospects for SMK graduates majoring in agribusiness can work in the agricultural, plantation and food industry sectors as experts or decision makers in every business process, of course in the agricultural sector.

Based on data from the Central Statistics Agency in 2020, the agricultural sector is the second largest sector that influences the country's economic growth by 12.72%, which means that the agricultural sector has a fairly large influence on economic growth so that special attention is needed in the development of the agricultural sector and the relationship between local wisdom, so that local wisdom must continue to be used as the foundation of life (Rusani, et al., 2023; Mujahidin, 2017; Munawaroh & Abdillah, (2022).

2.4. Culinary Sector

According to the World Travel & Tourism Council. Travel & Tourism Economic Impact (2015), Culinary is a science that covers the scope of managing cooking, from processing to serving food both traditionally and internationally. With the basic culinary curriculum for students, it is hoped that they will have expertise, professionalism and be ready to work in the culinary field (Moerwanto & Janoasmoro (20217). The material taught in the culinary field includes: learning about tools or machines in the food industry; learning recipes, basic ingredients, main ingredients, nutrition, nutrition; and learning about food processing techniques.

2.5. Marketing Aspects

Marketing is the process of creating, distributing, promoting, and pricing goods, services, and ideas with the aim of meeting consumer needs (Tjiptono & Diana, 2020). Marketing is also one of the main activities that companies need to carry out in running their businesses (Kotler & Keller, 2028); Assauri (2017) is a marketing technique that allows businesses to use any channel to communicate directly with customers. To accelerate promotional activities and have an impact on productivity in the organization itself, several businesses are currently conducting direct marketing (Tirtayasa, et al., 2021)

3. Research Method

This research is a quantitative study aimed at obtaining valid data. The variables used in this study are: entrepreneurship and culinary aspect. In this study, the population consists of Vocational Students in East Java namely: (1) SMK Muhammadiyah 5 Panceng Gresik; (2) SMKN 1 Cerme Gresik; (3) SMKN 1 Dlanggu, Mojokerto; (4) SMKN 1 Wonokromo, Surabaya; (5) SMK Unitomo Surabaya. The sample size to be used is 10 times the number of indicators in all variables in the study, thus using the "rule of thumb" formula, and the sampling method is purposive sampling. The determination of the population and sample size was carried out by considering the relevance and representation of students in the field of study under study. The data sources and types used in this study include primary data, which is distributed to the

Vocational Schools in East Java with a focus on three main majors, practical training; entrepreneurship; culinary sector, agribusiness sector and marketing. The method used by the researcher to collect data is the closed-ended questionnaire method. This study uses a Likert scale to make it easier for respondents to answer the questions. Data analysis in this study is conducted using SPSS 25 program.

4. Results and Discussion

4.1 Results

Validity Test

Table 2. Validity Test Result

Variables	Indicator	Pearson Correlation	Sig.	Remarks
Practical Training (X1)	X1.1	0.678	0.000	valid
	X1.2	0.689		
	X1.3	0.701		
	X1.4	0.788		
Entrepreneurship (X2)	X2.1	0.721	0.000	valid
	X2.2	0.726		
	X2.3	0.803		
	X2.4	0.808		
	X2.5	0.850		
Agribusiness Sector (X3)	X3.1	0.670	0.000	valid
	X3.2	0.699		
	X3.3	0.721		
	X3.4	0.782		
Culinary Sector (X4)	X4.1	0.741	0.000	valid
	X4.2	0.766		
	X4.3	0.823		
	X4.4	0.812		
Marketing Aspects (Y)	Y1	0.860	0.000	valid
	Y2	0.690		
	Y3	0.691		
	Y4	0.721		

Sources: Processed Data SPSS (2025)

Based on Table 1, all indicators of each variable have a sig of less than 0.05, so that all indicators of the validity test results can be declared valid.

Reliability Test

Table 3. Reliability Test Result

Variables	Indicator	Cronbach's Alpha if Item Deleted	Cronbach's Alpha	Remarks
Practical Training (X1)	X1.1	0.656	0.711	reliable
	X1.2	0.633		
	X1.3	0.701		
	X1.4	0.688		

Entrepreneurship (X2)	X2.1	0.689	0.733	reliable
	X2.2	0.629		
	X2.3	0.685		
	X2.4	0.702		
	X2.5	0.724		
Agribusiness Sector (X3)	X3.1	0.640	0.657	reliable
	X3.2	0.609		
	X3.3	0.621		
	X3.4	0.632		
Culinary Sector (X4)	X4.1	0.641	0.721	reliable
	X4.2	0.700		
	X4.3	0.678		
	X4.4	0.712		
Marketing Aspects (Y)	Y1	0.660	0.789	reliable
	Y2	0.720		
	Y3	0.699		
	Y4	0.722		

Sources: Processed Data SPSS (2025)

Based on Table 2, it shows that all indicators of each variable have a Cronbach's Alpha value greater than 0.6, while the Cronbach's Alpha if item deleted for each indicator is less than 0.6, so the results of the reliability test can be stated that all result indicators can be stated as reliable.

Multiple Linear Regression Equation

In hypothesis testing, researchers use multiple linear regression equations to conduct partial tests (t-tests).

Partial Test (t-Test)

Table 4. Result of t -Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std.Error	Beta		
1	(Constant)	0.131	0.482		0.262	0.797
	Practical Training	0.191	0.089	0.226	2.812	0.006
	Entrepreneurship	0.257	0.055	0.377	4.672	0.000
	Agribusiness Sector	0.306	0.069	0.315	4.649	0.000
	Culinary Sector	0.378	0.071	0.416	4.810	0.001

Sources: Processed Data SPSS (2025)

Based on Table 3, the results of the definite Test (t-Test) function to test the influence of each independent variable partially or independently on the dependent variable. If the sig. value obtained from $t < 0.05$, then H_0 is rejected. This means that the independent variable has a significant partial effect on the dependent variable. The conclusion of the results of the hypothesis H1; H2; H3 and H4, there is a significant relationship partially or independently on the dependent variable

Simultaneous Test (F-Test)

Table 5. ANOVA

		Sum of Square	df	Mean Square	F	Sig.
1	Regression	25.685	4	8.562	144.904	0.000
	Residual	12.171	205	0.059		
	Total	37.856	209			
a. <i>Dependent Variable:</i> Marketing Aspect						
b. <i>Predictors:</i> (Constant), Practical Training, Entrepreneurship, Agribusiness Sector, Culinary Sector						

Based on Table 4, the results of the simultaneous test (F test), where the sig. value < 0.05, so it is concluded that the independent variables simultaneously affect the dependent variable on marketing aspect.

Coefficient of Determination

Table 6. Coefficient of Determination Result

Model Summary			
Model	R	R Square	Adjusted Square
1	0.862 ^a	0.743	0.689
a. <i>Predictors:</i> (Constant), Practical Training, Entrepreneurship, Agribusiness Sector, Culinary Sector			
b. <i>Dependent Variable:</i> Marketing Aspect			

Based on Table 5, the test results of the coefficient of determination is 0.743 or equal to 74.3%. These results mean that the variables X1, X2, X3, and X4 simultaneously affect the variable Y1 is 74.3%, where the rest are other variables outside the variables studied by the researcher.

4.2 Discussion

This study aims to analyze the influence of entrepreneurial and culinary aspects on the readiness of Vocational High School (SMK) students in entrepreneurship. Based on data collected from respondents from six vocational schools in East Java.

This is indicated by the high path coefficient value and the level of significance that meets the statistical test criteria. Factors in entrepreneurship, such as creativity, innovation, and courage to take risks, have been shown to contribute to increasing students' motivation to start a business independently.

From the culinary aspect, the results of the study indicate that understanding culinary business management, cooking skills, and mastery of product marketing techniques have a significant impact on students' readiness to become entrepreneurs in the culinary field. Students who have better technical skills and a strong understanding of business strategies tend to be more confident in starting their own businesses.

In addition, the practical training provided in this study proved effective in improving students' readiness to become entrepreneurs. Respondents who had participated in the training showed a significant increase in their understanding of business planning, financial management, and marketing strategies. These results indicate that a practice-based learning approach is more effective than conventional methods that are only based on theory.

The results of the analysis also showed that students from the Agribusiness and Marketing majors had a higher tendency to become entrepreneurs than students from the culinary majors, although all majors experienced an increase in understanding after participating in the training. School environmental factors and support from teachers and industry also participated in forming an entrepreneurial mindset among students.

Overall, this study confirms that a practice-based training approach and increasing entrepreneurial and culinary aspects can improve the readiness of vocational high school students to start a business independently. Therefore, the recommendation that can be given is the need for the development of a more intensive entrepreneurial practice-based curriculum and increased collaboration between schools, industry, and government in supporting entrepreneurship programs for vocational school students.

5. Conclusion

Based on the results of the research that has been conducted, it can be concluded that the entrepreneurial and culinary aspects have a significant role in increasing the readiness of Vocational High School (SMK) students to become entrepreneurs.

The implementation of the "Practical Training to Become an Entrepreneur" program has proven effective in improving the entrepreneurial skills and mindset of SMK students, especially in the Culinary, Agribusiness, and Marketing majors. Students who took this training experienced an increase in understanding in business planning, financial management, and marketing strategies needed in running a business. In addition, this study found that students from the Agribusiness and Marketing majors had a higher tendency to become entrepreneurs than students majoring in Culinary, although overall, this training had a positive impact on all groups.

Thus, this study emphasizes the importance of strengthening the practice-based entrepreneurship curriculum for vocational high school students to reduce unemployment rates among graduates. Collaboration between schools, industry, and government needs to be strengthened to provide a learning ecosystem that is more supportive of the creation of young entrepreneurs. It is hoped that the results of this study can be the basis for formulating vocational education policies that are more oriented towards job creation through entrepreneurship. As a suggestion for further research, it is recommended to expand the scope of the study by involving more vocational high schools from various regions so that the research results are more representative. In addition, a mixed-method approach can be used to explore more deeply the non-quantitative factors that influence students' readiness to become entrepreneurs, such as the role of the social environment and family support.

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