



# The Role of Teaching Factory Learning on Entrepreneurial Readiness of Students of Visual Communication Design Competency SMKN 1 Tasikmalaya

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## Abstrak

Kewirausahaan memiliki peran yang sangat penting dalam mengatasi masalah pengangguran karena melalui berwirausaha seseorang dapat menciptakan serta memberikan lapangan pekerjaan yang baru. Lahirnya seorang wirausaha dilatarbelakangi oleh kesiapan berwirausaha atau terdapat perasaan siap yang dibekali dengan kemampuan, kemauan, serta keinginan untuk menghadapi berbagai situasi dan kondisi dalam berwirausaha. Tujuan penelitian ini adalah untuk mengidentifikasi pengaruh pembelajaran Teaching Factory terhadap kesiapan berwirausaha siswa di kompetensi Desain Komunikasi Visual SMKN 1 Tasikmalaya. Penelitian ini melibatkan populasi sebanyak 93 siswa kelas XI dari kompetensi tersebut. Penentuan sampel pada penelitian ini yaitu menggunakan teknik *purposive sampling* atau penentuan sampel dengan pertimbangan tertentu. Sampel penelitian ini terdiri dari 34 siswa yang sedang menempuh pembelajaran Teaching Factory. Teknik pengumpulan data pada penelitian ini yaitu melalui wawancara dan penyebaran kuesioner melalui *google form*. Analisis regresi linear sederhana digunakan untuk menganalisis data. Hasil dari penelitian ini menunjukkan bahwa pembelajaran *teaching factory* berpengaruh sebesar 47,7% terhadap kesiapan berwirausaha siswa kompetensi desain komunikasi visual SMKN 1 Tasikmalaya.

**Kata Kunci:** Pembelajaran *Teaching Factory*, Kesiapan Berwirausaha, Desain Komunikasi Visual

## Abstract

*Entrepreneurship has a very important role in overcoming the problem of unemployment because, through entrepreneurship, a person can create and provide new jobs. The birth of an entrepreneur is motivated by entrepreneurial readiness or there is a feeling of readiness equipped with the ability, willingness, and desire to face various situations and conditions in entrepreneurship. The purpose of this study is to identify the effect of Teaching Factory learning on student entrepreneurial readiness in Visual Communication Design competency of SMKN 1 Tasikmalaya. This study involved a population of 93 students in grade XI of the competency. Determination of the sample in this study is using purposive sampling technique or sampling with certain considerations. The sample of this study consisted of 34 students who were taking Teaching Factory learning. The data collection technique in this study was through interviews and distributing questionnaires via Google Forms. Simple linear regression analysis was used to analyze the data. The results of this study indicate that teaching factory learning has an effect of 47.7% on the entrepreneurial readiness of visual communication design competency students of SMKN 1 Tasikmalaya.*

**Keywords:** *Teaching Factory Learning, Entrepreneurial Readiness, Visual Communication Design*

## Introduction

Entrepreneurship has a vital role in overcoming the unemployment problem in Indonesia. The birth of a new entrepreneur can help

overcome the economic issues of unemployment in Indonesia. This is because, with entrepreneurship, a person will not depend on available jobs but can create and provide employment to others. Becoming an entrepreneur and starting

entrepreneurship is a suitable alternative to overcoming unemployment. (Farkhan, 2019). In addition, entrepreneurship is also one of the supporting factors that determine the back-and-forth of the economy; this is because, through entrepreneurship, a person can have the freedom to work and be independent (Walipah & Naim, 2016). Entrepreneurial readiness is one of the determinants of a business's success (Indarto, 2020).

Entrepreneurial readiness is a condition of an individual having a feeling of readiness with the provision of abilities, willingness, and desire to face various situations and conditions in Entrepreneurship (Arys et al., 2018). In addition, entrepreneurial readiness is a business activity carried out by someone with a business goal to take advantage of opportunities equipped with physical, mental, and emotional knowledge and skills (Apiatun & Prajanti, 2019). One way to increase knowledge and skills that can support entrepreneurship is to obtain them through formal, informal, and non-formal education (Afifah et al., 2020).

SMKN 1 Tasikmalaya is one of the formal educational institutions that organize vocational education at the secondary education level located in Cipedes District, Tasikmalaya City. Vocational high school is a model of education that aims to prepare graduates for work or entrepreneurship (Tarigan et al., 2022). In addition, vocational education creates graduates who can compete, have character and an entrepreneurial spirit, and are competent in their fields (Nova Maryanti, 2019).

Permendikbud No. 34 of 2018 states that the competency standards of SMK graduates are to have productive abilities in the field of knowledge to work or run a business. Article A.9 Competency standards on entrepreneurship include identifying and utilizing business opportunities, considering and taking risks in business management and development, and having a strong desire to manage a business based on the student's knowledge and skills in a particular field.

Based on the previous explanation, to determine entrepreneurial readiness at SMKN 1 Tasikmalaya, a pre-survey was conducted by distributing questionnaires consisting of indicators of entrepreneurial readiness according to (Meredith et al., 2002). namely self-confidence, task and result orientation, risk-taking courage, business skills, originality, and future-oriented. The questionnaire was distributed to 34

students. Based on the distribution of the questionnaire, the following data were obtained.

Table 1. Initial survey based on indicators of entrepreneurial readiness of students of SMKN 1 Tasikmalaya in 2024

Indicator	Average score	Category
Self-confidence	3,7	Poor
Task and result-oriented	4,1	Good
Risk-taking	3,5	Poor
Business skills	4,1	Good
Originality	3,4	Poor
Future-oriented	3,9	Good
<b>Median</b>	<b>3,8</b>	

Based on this data, it can be seen that the entrepreneurial readiness of students of SMKN 1 Tasikmalaya still needs to improve. There are still several weak indicators, including the lack of student confidence in starting a business, the lack of student courage in taking a risk, and the lack of originality or creative and innovative spirit in students when creating a product.

Self-confidence in entrepreneurship is a person's psychological state of confidence in individuals in their entrepreneurial abilities, responsibility, optimism, rationality, objectivity, and realism (Komala & Mujiasih, 2019). Meanwhile, the courage to take risks is an attitude that is not worried in uncertain situations even though the business may not profit. In addition, originality is an indicator of creative and innovative values (Ranto, 2017). Creativity is developing new ideas and ways to solve problems and find opportunities (thinking new things). While innovative, it is the ability to apply creativity to solve a problem and find opportunities (doing new things) (Saada, 2016).

Based on the results of the temporary pre-research of 34 students of SMKN 1 Tasikmalaya, there are several problems in entrepreneurial readiness: low self-confidence, low risk-taking courage, and low creative and innovative spirit. This theory by Meredith et al. (2002) states that several factors affect entrepreneurial readiness, including psychological readiness, skills, experience, economic conditions,

social, knowledge and education, and facilities and infrastructure. To overcome these problems, it needs to be re-emphasized in the field of education through the learning process. There are four learning theories in Hartati & Panggabean (2023): behavioristic learning theory, cognitivism, constructivism, and humanism. Learning theory is the first step for correct development and can make it easier for students to understand something learned and make the learning atmosphere feel more relaxed and fun (Almallial, R., & Faldholi, 2013). Previous research by Artawan et al. (2017) showed that constructivist learning could foster self-confidence, dare to take risks through various sources in finding information and train a creative and innovative spirit.

The theory of constructivism, in general, says that learning is a process of knowledge formation using four principles; knowledge is built by students themselves, both personally and socially, and cannot be transferred directly from teacher to student. Instead, knowledge is developed through students' active participation in the process of reasoning and participating. Students who are actively and continuously involved in the construction of their knowledge can produce significant changes in their understanding. To achieve optimal results, students need to be continuously and actively involved in the learning process, given that this process involves active participation in developing their own knowledge (Saputro & Pakpahan, 2021). Based on this, efforts can be made using the theory of constructivism through teaching factory learning (Sueb & Churiyah, 2023). Implementing Teaching Factory learning can improve the quality of graduates ready to work or entrepreneurs (Suryati & Yulastri, 2023).

PP 41 of 2015 states that a teaching factory is a concept of learning in production/service-based vocational schools that refers to the standards and procedures that apply in the industry and are carried out in an atmosphere like what happens in the industry. Implementing teaching factories in vocational schools by combining business and vocational education concepts with the competence of expertise and presenting the real industrial world in the school environment can prepare graduates to work as entrepreneurs (Dewi et al., 2023). Teaching factory learning is an authentic learning concept; this can bridge the competency gap in vocational schools that refers to the needs of the industrial world and build an entrepreneurial spirit in students (Firdaus et al., 2021). Based on the background of

the above problems, the formulation of the problem is how the picture of entrepreneurial readiness of students of visual communication design competence and whether teaching factory learning affects the entrepreneurial readiness of students of visual communication design competence. Based on this, the authors are interested in researching "The Role of Teaching Factory Learning on Entrepreneurial Readiness of Visual Communication Design Competency Students of SMKN 1 Tasikmalaya".

## Method

The research method used in this study is quantitative research with descriptive and verification approaches. A descriptive approach is used to see the picture of the entrepreneurial readiness of students of Visual Communication Design competency of SMKN 1 Tasikmalaya. The verification approach aims to test the theory with a hypothesis to decide whether the theory is accepted or rejected. The hypothesis in the study is based on an investigation of the formulation of the problem as follows:

H0: Teaching factory learning does not affect entrepreneurial readiness.

H1: Teaching factory learning affects entrepreneurial readiness.

Population is a generalisation area consisting of objects or subjects with specific qualities and characteristics set by researchers to study and then draw conclusions (Sugiyono, 2017). The population in this study was 11th-grade students of Visual Communication Design competency of SMKN 1 Tasikmalaya. The following is a population table of XI students in the Visual Communication Design Competency class of SMKN 1 Tasikmalaya.

Table 2. The population of Class XI Students of Visual Communication Design Competency in 2024

Class Number	Total
XI DKV 1	25
XII DKV 2	34
XIII DKV 3	34
<b>Total</b>	<b>93</b>

The sampling technique in this study was purposive sampling. Purposive sampling is a technique that requires specific considerations

(Sugiyono, 2017). The sample in this study was students who were teaching factory learning. This teaching factory learning uses a block system for class XI students. The block system is a system developed to answer the problem of links and match between the world of education and the industrial world by dividing students based on learning blocks, namely (i) normative/adaptive, (ii) vocational theory, (iii) vocational practice, which is interrelated with each other in a unified process (Angelina Phila et al., 2023). Among the three classes currently teaching factory learning is class XI DKV 2, with as many as 34 people. So, the sample in this study was 34 people.

This study's data collection technique involved distributing questionnaires using Google Forms to students who were teaching factory learning. The questionnaires were used to measure the variables to be studied using a 5-point ordinal Likert scale. The following are the two variables in this study.

Table 3. Operasional Variabel

Variable	Indicator	Scale
<i>Teaching Factory Learning</i> (X)	a). Human Resources	Ordinal
	b). <i>Partnership</i>	
	c). Facilities and Infrastructure	
	d). Products Produced	
Entrepreneurial Readiness (Y)	a). self-confidence	Ordinal
	b). task and result-oriented	
	c). courage to take risks	
	d). business skills	
	e). originality	
	f). future-oriented	

Data analysis or testing in this study uses SPSS version 24 by conducting an instrument test consisting of validity and reliability tests, which

aims to determine the accuracy and consistency of the research instrument. Then, descriptive analysis is carried out to provide an overview of the study. Next, The classical assumption test includes normality, multicollinearity, and heteroscedasticity. which aims to determine the data quality so that the prerequisites for analysis can be met. In addition, a simple linear regression test is used in this study, which aims to examine the effect of teaching factory learning on student entrepreneurship readiness. In addition, this simple linear regression test seeks to determine how much influence the teaching factory learning variable (X) has on the entrepreneurial readiness variable (Y). This analysis can be interpreted to answer research questions, test hypotheses, and provide an overview of teaching factory learning on the level of student entrepreneurial readiness.

## Result and Discussion

### School Profile

Sekolah Menengah Kejuruan Negeri 1 Tasikmalaya, or SMKN 1 Tasikmalaya, is one of the schools located at Jalan Mancogeh No. 28 Cipedes Sub-district, Tasikmalaya City. It provides various vocational programs, one of which is visual communication design. Learning at SMKN 1 Tasikmalaya is designed to prepare graduates to face the world of work and practical entrepreneurship challenges through factory learning. It is equipped with facilities and competent teaching staff.

Implementing the teaching factory learning system is an effort to directly integrate theory with industrial practice. In this case, students learn the theory in class and are involved in the production process as in an industrial environment. Thus, students gain practical experience that can improve their ability to work or be entrepreneurs. In addition, through a teaching factory, SMKN 1 Tasikmalaya has succeeded in bridging the world of education and industry, which can create graduates with both academic knowledge and practical experience that makes students feel ready and competitive in the world of work or entrepreneurship. Thus, schools play a vital role in preparing a skilled and adaptive workforce and entrepreneurs for industrial developments that will continue to change.

### Instrument Test

#### Validity Test

Validity testing in this study was carried out with the help of SPSS 24 to determine whether the questionnaire used in measuring and obtaining

research data was valid. The provisions of valid or not can be seen through the comparison between the value of the count and the table. If  $r_{count} > table$ , then it can be said to be valid. If  $count < table$ , it can be said to be invalid. table in a significant 5%  $n = 34$  is several 0.3291. The results of the validity test that has been carried out with a total of 58 items can be declared valid because  $r_{count} > 0.3291$ .

#### Uji Reliabilitas

Tabel 4. Hasil Uji Reliability

Variable	Cronbach's Alpha	Items
Teaching Factory	0.903	29
Entrepreneurship Readiness	0.962	29

In Table 3, the Cronbach's Alpha results for Teaching Factory learning get a value of 0.903, and the Cronbach's Alpha results for entrepreneurial readiness get a value of 0.962. Both results can be declared reliable because the reliability coefficient of Teaching Factory learning and entrepreneurial readiness is more than 0.60.

#### Descriptive Statistics

Table 5. Descriptive Statistics

Variable	Indicator	Average	Median	Category
Teaching factory learning	Human resources	3,73		Poor
	Partnership	3,89		Good
	Facilities and infrastructure	3,86		Good
Entrepreneurial readiness	Product	3,90		Good
	Self-confidence	3,91	3,85	Good
	Task and result-oriented	4,34		Good
	Risk-taking courage	3,88		Good

Business skills	3,90	Good
Originality	3,78	Poor
Future-oriented	3,78	Poor

Based on the results of the descriptive test above, it can be described that the distribution of data on teaching factory learning variables has the highest category. Namely, this shows that the products produced by students are of the highest quality in the industry and can meet market expectations. Besides, the production system in teaching factory learning can provide learning experiences that can prepare students to understand the production process. However, there are still wrong categories in this teaching factory learning variable, namely in human resources, with a mean of 3.73. This shows that students need to be guided and trained in the learning process to improve the quality of good resources. Then, the entrepreneurial readiness variable has the highest category, task and result-oriented, at 4.34. This shows that students have high self-confidence and determination, a drive to get results, and a high initiative in creating the products they produce. However, there are still indicators with poor categories in the entrepreneurial readiness variable, namely originality and future-oriented, with a mean of 3.78. In the originality indicator, students show that they need more flexibility of insight in thinking to create something new. In contrast, future-oriented indicators show that students still need to develop a mature plan for entrepreneurship after graduating from school later.

#### Classical Assumption Test

The Kolomogorov-Smirnov Test states that the data is declared to have passed the normality test if the results are  $asympt. sig. (2\text{-tailed}) > 0.05$  (Ghozali, 2016). in this study,  $asympt. sig. (2\text{-tailed})$  is 0.200. This shows that the data studied is standard because the value of  $0.200 > 0.05$ . the multicollinearity test indicates that the Teaching Factory Learning variable has a tolerance value of 1 and a VIF value of 1. Then, this value can be declared free from multicollinearity, and there are no symptoms of multicollinearity because the tolerance value is  $> 0.10$  and  $VIF < 10$ . Then, the heteroscedasticity test has a Sig. The value of the Teaching Factory Learning variable is 0.509, and it

is stated that there are no symptoms of heteroscedasticity because of the Sig value. >0,05.

### Simple Linear Regression Analysis

Table 6. Simple Linear Regression Analysis

Model	Unstandardised Coefficients		Standardised Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	6.954	19.835			.351	.728
X	.955	.1775	.691		5.403	.000

In Table 5, the simple linear regression equation model is as follows:

$$Y = 6.954 + 0,955X$$

Based on this equation, it can be seen that the constant value is 6.954, while the regression coefficient value is 0.955. Then, the equation of the relationship between teaching factory learning variables and entrepreneurial readiness variables can be stated as follows:

1. The constant value (a) is equal to 6.954, meaning that if a change in the teaching factory learning variable has a value = 0, entrepreneurial readiness is 6.954.
2. The regression coefficient value of the teaching factory learning variable is 0.955, which means that if the teaching factory learning variable increases by 1%, entrepreneurial readiness increases by 0.955. Then, the regression coefficient can be stated to be positive, and the effect of teaching factory learning on entrepreneurial readiness increases.

### T-test

In this study, the T-test was conducted to determine the effect of the independent variable on the dependent variable. In this case, the teaching factory learning variable has a significance value of 0.000 <0.05. The calculated t value is 5.403 > 0.3291. This shows that H1 is accepted and H0 is rejected. So, the hypothesis is that there is a significant influence between the teaching factory learning variables and entrepreneurial readiness.

### Test Coefficient of Determination (R<sup>2</sup>)

Table 7. Hasil Uji Koefisien Determinasi

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691	.477	.461	13.389

The coefficient of determination test measures the influence of variables X and Y. In Table 6, the R Square value is 0.477, or 47.7%, which means that the teaching factory learning variable affects entrepreneurial readiness by 47.7%. Other factors such as psychological readiness, skills, experience, economic conditions, social, and facilities and infrastructure influence 52.3%.

### Effect of Teaching Factory Learning on Entrepreneurial Readiness

The results of this study indicate that teaching factory learning affects the entrepreneurial readiness of visual communication design competency students at SMKN 1 Tasikmalaya. This can strengthen the hypothesis that teaching factory learning can positively and significantly affect entrepreneurial readiness. In this study, the indicators used to see the effect of teaching factory learning can improve entrepreneurial readiness well. This is in line with the opinion of Hasanah et al., (2023) ,who state that in teaching factory learning or factory learning, students are equipped with theory and more practice to increase knowledge, abilities, and readiness to start a business. This is also in line with research conducted by Wardana et al., (2020) which states that the implementation of entrepreneurship-based education organised by schools that are not only presented in the form of material but coupled with training activities or organising entrepreneurial simulations has a good impact on opportunities, risk tendencies, tolerance, and readiness for entrepreneurship.

Based on the coefficient of determination analysis, the R Square value is 47.7%. This shows that teaching factory learning affects the entrepreneurial readiness of students of visual communication design competency of SMKN 1 Tasikmalaya. According to Ghazali (2016), the R Square value of 0.67 is categorised as strong if 0.33 is classified as moderate or medium and 0.19 as weak. So, the effect is in the mild category, meaning that 47.7% of changes in student entrepreneurial readiness can be explained by knowledge and education through teaching factory learning. Besides, four of the six indicators of entrepreneurial

readiness can be categorised as good. It can strengthen the idea that teaching factory learning is effective on the level of entrepreneurial readiness. At the same time, the remaining 52.3% is influenced by other variables not examined in this study, such as psychological readiness, skills, experience, economic conditions, social, and facilities and infrastructure (Meredith et al., 2002).

Based on the data that has been processed, it is known that the indicators of teaching factory learning variables that affect the readiness of student entrepreneurship are partnerships/partnerships that are characterised by the suitability of the form of cooperation/partnership in teaching factory learning and resource sharing or technological resources that support the learning process takes place such as software or other hardware that can help in optimising productivity. In addition, facilities and infrastructure in teaching factory learning have adequate quality and quantity. In addition, the products created by students have product quality based on industry needs. As for human resource indicators, they have little effect on student entrepreneurial readiness and need to be re-enhanced by conducting guidance and training in the learning process.

In addition, entrepreneurial readiness variables indicate that students already have entrepreneurial readiness. It can be seen through the data that has been processed that students tend to be more confident by having a passion for hard work, having high confidence in entrepreneurship, and being independent and optimistic. Facts in the field include that students can also be task-oriented, and results are characterised by a determination to work hard, drive to get results and take the initiative to achieve the results. Then, students dare to take risks in decision-making, dare to act, and have the ability to be responsible for the risks faced in entrepreneurship.

In addition, students also have good business skills. It is characterised by students having plans

and potential for entrepreneurship in the future, and then students can overcome the challenges and obstacles that exist in a business. However, there are still weak indicators in this variable, one of which is originality and future-oriented. In the indicator of originality, students do not have a spirit of originality, which is characterised by a lack of insight into entrepreneurship, inability to think creatively, failure to see the opportunities that exist, and students who have yet to dare to make decisions in entrepreneurship. Then, students also need to be able to orient to the future. A need for more knowledge provision and careful planning for students in entrepreneurship characterises it.

### Conclusion

From the results of this study, it is concluded that Teaching Factory learning positively and significantly influences the improvement of students' entrepreneurial readiness in the field of Visual Communication Design at SMKN 1 Tasikmalaya. If this teaching factory learning is given, then the entrepreneurial readiness of students can experience a significant increase. Whereas factory learning is not taught, students' entrepreneurial readiness will stay the same. It shows that this teaching factory learning has a vital role in efforts to improve student entrepreneurial readiness. It will only be achieved by teaching factory learning.

This study still has weak indicators, namely human resources. Therefore, it needs to be improved again by providing guidance and training to students in the learning process so that this teaching factory learning can run as expected. Other variables that can affect entrepreneurial readiness but are not examined in this study are psychological readiness, skills, experience, economic conditions, social, and facilities and infrastructure.

Therefore, further researchers are expected to add other variables to provide a clearer picture of the results of teaching factory learning on entrepreneurial readiness to make the students' results more accurate.

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