



## **The Effect of The Teaching Factory Learning Model on The Work Readiness of Class XII Students of SMKN 1 Sinunukan**

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**Received: 21 Juny 2022; Revised: 14 July 2022; Accepted: 20 August 2022**

**DOI: <http://dx.doi.org/10.37905/aksara.8.3.1759-1768.2022>**

### **Abstract**

This study examines the relationship between the variables of production/service -based learning models (teaching factory), the experience of the prekerind and the BKK to the readiness of student work at SMKN 1 Sinunukan. The purpose of this study is to determine the relationship between the variables of production/service -based learning models (teaching factory), the experience of Prakerin and BKK to the readiness of student work at KLS XII SMKN 1 Sinunukan. The process in this study includes: data collection or information and then managed into the form of statistical data so that there is a relationship between variables, the results of this researcher are made with a quantitative descriptive approach because it describes and analyzes the results of the research statistics.

### **Keywords**

Teaching Factory, Work Readiness, Prakerin Experience

### **Abstract**

Penelitian ini menguji hubungan antara variabel model pembelajaran berbasis produksi/jasa (teaching factory), pengalaman magang dan BKK terhadap kesiapan kerja siswa SMKN 1 Sinunukan. Alasan dilakukannya penelitian ini adalah sebagai salah satu syarat untuk ujian tesis. Tujuan penelitian ini adalah untuk mengetahui hubungan antara variabel model pembelajaran berbasis produksi/jasa (teaching factory), pengalaman Prakerin dan BKK terhadap kesiapan kerja siswa di KLS XII SMKN 1 Sinunukan karena hasil penelitian ini diharapkan dapat berkontribusi pada lembaga pendidikan dan ilmiah. pengetahuan. Proses dalam penelitian ini meliputi: mengumpulkan data atau informasi kemudian mengelolanya dalam bentuk data statistik sehingga terdapat hubungan antar variabel, hasil penelitian ini dibuat dengan pendekatan deskriptif kuantitatif karena menggambarkan dan menganalisis hasil penelitian dari statistik penelitian.

### **Keywords**

Teaching Factory, Kesiapan Kerja, Pengalaman Prakerin



## Introduction

In today's millennial times, competition in the world of industry and entrepreneurship is no longer between Indonesian people but has also reached worldwide. Apart from that, with the existence of the ASEAN Economic Community (AEC), this government must also be prepared with all the challenges and obstacles that will be passed in the business world, it is not enough to just compete in terms of products and services, but, more than that, of course, the quality of employment quality is also a thing, which really needs to be considered. So this is where the learning assignment is professional in responding to the need for high -level quality workers in accordance with competition between countries.

Indonesia is one of several developing countries in the world. This economic development in Indonesia has increased the amount needed to become a workforce while the development of the world of technology that is so fast also makes requirements in terms of knowledge and skills also increase. Efforts to make normal assets that are in accordance with world needs. Industry both in terms of seeds and weight, we can reach all of that through SMK. As a national education sub -system, it has a role to prepare reliable human resources. Educational learning at the Vocational School level undergoing millennial times must have expertise that can build themselves in accordance with the rapidly developing science and technology until now.

Learning at SMK has the aim of preparing its alumni to plunge into the industrial world and also prepare human resources that are ready to use and hold quality ready for work. This is the real goal of Vocational School is to prepare human resources who are ready to enter the industrial world. One of the vocational level learning models is SMK, Vocational School is a place of learning that is designed in preparing human resources at the vocational level to be ready to enter the industrial world. Than that, vocational schools are also part of one sub -system of national education that has a very necessary position in the benefits of preparing quality workers in developing the Indonesian development system (Khadifa et al., 2018)

Explained that SMKs are the level of secondary education that is useful in preparing its alumni as a second -level worker and has skills in certain expertise in order to be directly involved in the industrial world and cover the needs of the industrial world. This statement supports Law No. 20 of 2003 PSL 15 regarding learning programs in Indonesia which explains that "Vocational Education is a secondary education that prepares students, especially to work in certain fields"(Iwan Rusliyanto, 2019).

The importance of giving talent (HR) is recognized by public authorities through regulation to work on the nature of professional teaching that focuses on vocational schools. The development of vocational high schools is currently starting to move from the nearest job market to the ASEAN job market inviting the ASEAN Economic Community (AEC), such as preparing alumni with the arrangement of pioneering (business) character. The use of teaching factory in vocational schools is one form of efforts to the Directorate of Vocational Development to further strengthen participation or fabric of cooperation between vocational and industry (Lestari & Siswanto, 2015)

Teaching Factory is a learning idea in real circumstances to connect the ability between information provided by schools and business needs. This Teaching Factory is a refinement of the production unit, especially the use of the modern production



framework which is currently in vocational school. The production unit is the development of school business land as well as the expansion of school income that can be used in an effort to follow developments, improvement of human resources, and so on only to provide real work insights to students (Santoso et al., 2021)

Building work readiness to vocational high school students is very necessary in giving birth to school graduates who can compete and triumphed in the world of work (Iwan Rusliyanto, 2019). Agreeing, Anisa revealed that to form readiness in work of vocational students, there needs to be extraordinary preparation according to their respective fields, so that there is a balance between scientific abilities and practicum (Febrina et al., 2021). Work expertise skills, because since entering the world of the industry the work ability or work practicum is more needed than scientific skills. Industrial work practices can be used as an opportunity for students to further develop work skills before entering the industrial world. Decree of the Minister of Schools and Culture of the Republic of Indonesia Number 323/ U/ 1997 Article 1 states where the PRAKERIND is a professional skill training model that is integrated efficiently and simultaneously with teaching projects in selected schools with capability programs obtained through work.

However, when viewed from the point of view of teaching factory learning and industrial work practice experience (Prakerind) is not enough or incomplete because there is still a final stage that must be pursued in order to produce HR graduates of quality and professional vocational high school ) Namely a school institution that seeks to provide services to prospective alumni or school alumni to enter the world of work such as carrying out career guidance and in the form of programs in offering alumni candidates to the industrial world in order to get work in harmony with expertise, desires and talents possessed as well as the industry that opens the field Work to get employees or workers who are in harmony and are needed and meet the conditions in a certain position or position.

Regarding the definition of special jobs, the Ministry of Manpower, Director General of Binapenta states that: "Special jobs are jobs in secondary education units, in higher education units and in training institutions that carry out activities providing job market information, search registration work, providing counseling and guidance of positions and distribution and placement of job seekers. " Vocational School has a school job market, called the Special Work Exchange (BKK) which is useful in guiding, directing and even helping alumni and even prospective school alumni to get a work position that is in harmony with their fields (Pamungkas & Hanifa, 2020)

Based on the problems that have been revealed, therefore the researcher will examine the problems in the study entitled "The Contribution of the Application of Production/Services Based Learning Models (Teaching Factory), Industrial Work Practice Experience and Special Employment (BKK) to Student Work Readiness In class XII SMK N 1 Sinunukan

## Method

This research is research that uses quantitative research types using the type of correlational research. According to Correlational Research is a study intended to determine the correlation between two or several variables. The amount of relationship is



expressed in the form of correlation coefficient. Even this study aims to express relationships in one variable with another variable

In the implementation of this research, it was carried out through data collection or information and then managed into statistical data so that there was a relationship between variables. In the implementation of this research, the researcher did not give additional attitudes to the subject of the research. This aims to get a view of the variables related to this study, which has been given a picture of the theory in each variable.

The result from this researcher was made with a quantitative descriptive approach because it described and analyzed the results of the research statistics. Then the data obtained is subsequently managed by Correlation and Regression techniques made in the Correlation and Regression Value Numbers. This study aims to determine the relationship between the experience of PRAKERIND, the Service/Production Model (Teaching Factory) and the role of the Special Job Exchange (BKK) together related to student work readiness. The population in this study were TKJ class XII students at SMKN 1 Sinunukan, totaling 70 students. Whereas the instrument trial was held at SMKN 1 Sinunukan, which amounted to 70 students.

Expert validity is carried out by 1 lecturer who has the ability to assess a questionnaire. Researchers provide questionnaire instruments to the validator, then given an assessment by the validator. Expert validity is carried out with the Delvi formula. Before the questionnaire is distributed to students as respondents, it is necessary to test the validity and reliability of the questionnaire instrument. The following formula used validity and reliability.

## **Results And Discussion**

In the description section of this data in detail described about the contribution of the application of production/service -based learning models (teaching factory), the experience of the Job Training of Industry and Special Employments (BKK) to the readiness of student work in class XII SMK N 1 Sinunukan. In this study the object of his research was the Department of Class XII Computer Engineering at SMK Negeri 1 Sinunukan. After a sampling with a total sampling, there were 70 students samples.

The overall data collection of results rather than research included as well as the conditions met, managed and then analyzed with the aim of getting information that is in harmony with the research objectives. So, in short it can be revealed that the description of the research data of variables  $x_1$ ,  $x_2$ ,  $x_3$  and  $y$  can be seen in table 1:



Table 1. Variable Respondent Data (X1), (X2), (X3) and (Y)

|                    | X1      | X2     | X3     | Y      |    |
|--------------------|---------|--------|--------|--------|----|
| N                  | Valid   | 70     | 70     | 70     | 70 |
|                    | Missing | 0      | 0      | 0      | 0  |
| Mean               | 63,23   | 68,03  | 53,04  | 57,87  |    |
| Std. Error of Mean | ,751    | ,758   | ,647   | ,562   |    |
| Median             | 64,00   | 67,50  | 53,00  | 58,00  |    |
| Mode               | 62      | 74     | 53     | 64     |    |
| Std. Deviation     | 6,284   | 6,343  | 5,417  | 4,699  |    |
| Variance           | 39,483  | 40,231 | 29,346 | 22,085 |    |
| Range              | 37      | 22     | 31     | 18     |    |
| Minimum            | 35      | 56     | 37     | 47     |    |
| Maximum            | 72      | 78     | 68     | 65     |    |
| Sum                | 4426    | 4762   | 3713   | 4051   |    |

The normality test uses the Kolmogorv-Smirnov Test analysis technique with the SPSS program version 22 in the probability  $\alpha = 0.05$ . The calculation results of the normality test of the four variables are presented in Table 2:

Table 2. Variable Normality Test Results X1, X2, X3 and Y

| <b>One-Sample Kolmogorov-Smirnov Test</b> |                         |                   |                   |                   |                   |                         |      |
|---|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------------|------|
|   |                         | TOTAL_X1          | TOTAL_X2          | TOTAL_X3          | TOTAL_Y           | Unstandardized Residual |      |
| N   |                         | 70                | 70                | 70                | 70                | 70                      |      |
| Normal Parameters <sup>a,b</sup>          | Mean                    | 63.23             | 68.03             | 53.04             | 57.87             | .0000000                |      |
|   | Std. Deviation          | 6.284             | 6.343             | 5.417             | 4.699             | 3.73996380              |      |
| Most Extreme Differences                  | Absolute                | .204              | .141              | .124              | .104              | .099                    |      |
|   | Positive                | .108              | .109              | .075              | .079              | .085                    |      |
|   | Negative                | -.204             | -.141             | -.124             | -.104             | -.099                   |      |
| Test Statistic                            |                         | .204              | .141              | .124              | .104              | .099                    |      |
| Asymp. Sig. (2-tailed)                    |                         | .000 <sup>c</sup> | .001 <sup>c</sup> | .010 <sup>c</sup> | .057 <sup>c</sup> | .084 <sup>c</sup>       |      |
| Monte Carlo Sig. (2-tailed)               | Sig.                    | .005 <sup>d</sup> | .113 <sup>d</sup> | .212 <sup>d</sup> | .402 <sup>d</sup> | .465 <sup>d</sup>       |      |
|   | 99% Confidence Interval | Lower Bound       | .003              | .105              | .201              | .389                    | .452 |
|   |                         | Upper Bound       | .006              | .121              | .222              | .415                    | .478 |

Overall amounting to 0.465. Then it can be concluded that  $H_a$  is accepted and this shows that one of the conditions for hypothesis testing has been fulfilled.

Linearity tests are carried out with the aim of seeing whether every data on the application of the learning model of production or service (X1), Prakerin Experience (X2), Special Employment (BKK) (X3) tends to form a linear line distribution to the work readiness variable (Y).

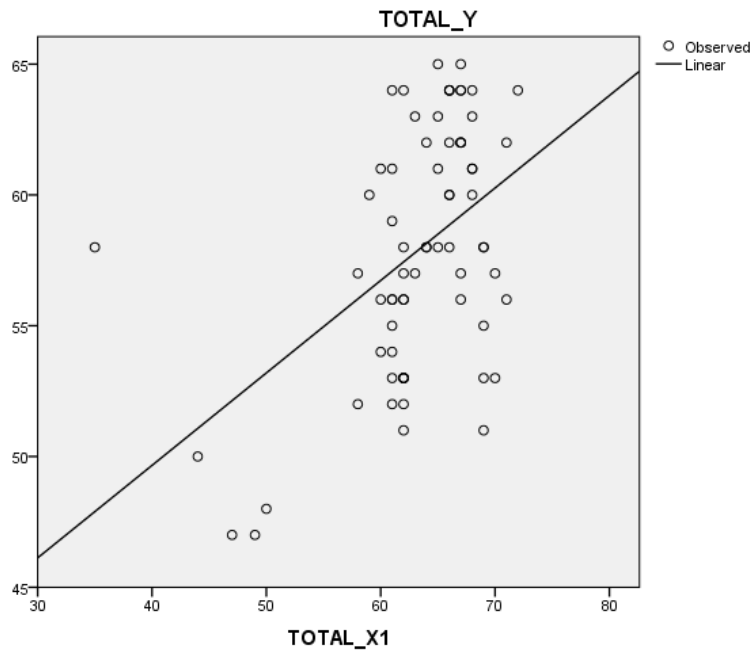


Figure 1. Linearity estimation curve X1 and Y  
 Table 3 Variable Linearity Test Results X1 and Y

**ANOVA Table**

|                       |                |   | Sum of Squares | df | Mean Square | F      | Sig   |
|-----------------------|----------------|---|----------------|----|-------------|--------|-------|
| TOTAL_Y *<br>TOTAL_X1 | Between Groups | (Combined) Linearity Deviation from Linearity | 982.789        | 19 | 51.726      | 4.780  | 0,000 |
|                       |                |   | 340.441        | 1  | 340.441     | 31.461 | 0,000 |
|                       |                |   | 642.347        | 18 | 35.686      | 3.298  | 0,000 |
|                       | Within Groups  |   | 541.054        | 50 | 10.821      |        |       |
| Total                 |                |   | 1523.843       | 69 |             |        |       |

Based on Table 3 above, a linearity probability (Sign) is obtained at 0,000 smaller than 0.05, then when seen based on Figure 1. The Estimated Curve of Linearity X1 and Y is that it has a significant slope of almost 45 degrees with F linearity 31,461 then it can be concluded that the distribution The independent variable data forms a linear line to the dependent variable with a significant linearity.

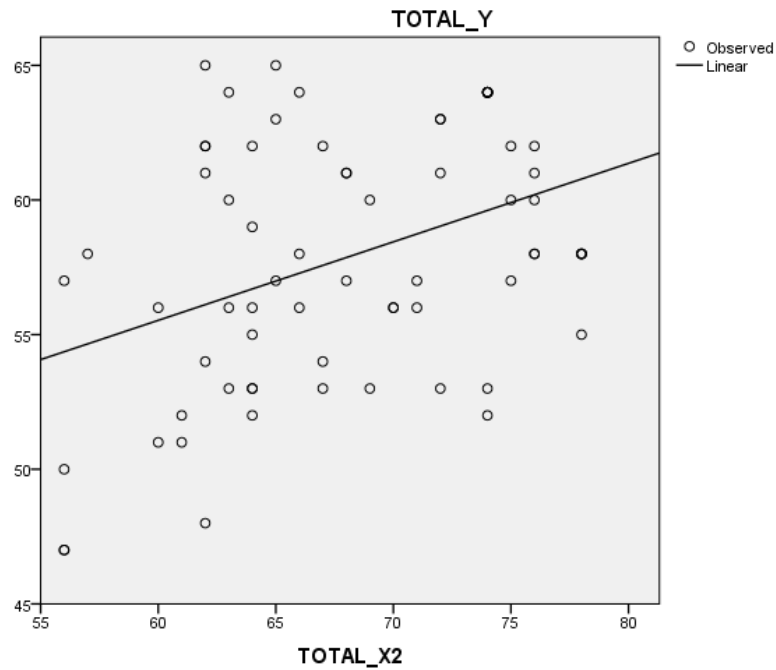


Figure 2. Linearity estimation curve X2 and Y

Table 4. Variables Linearity Test Results X2 and Y

| ANOVA Table                            |                |                          | Sum of Squares | df | Mean Square | F      | Sig.         |
|--|----------------|--------------------------|----------------|----|-------------|--------|--------------|
| <b>TOTAL_Y</b><br>*<br><b>TOTAL_X2</b> | Between Groups | (Combined)               | 632.025        | 18 | 35.113      | 2.008  | <b>0,027</b> |
|  |                | Linearity                | 235.919        | 1  | 235.919     | 13.491 | <b>0,001</b> |
|  |                | Deviation from Linearity | 396.107        | 17 | 23.300      | 1.332  | <b>0,211</b> |
|  | Within Groups  |                          | 891.817        | 51 | 17.487      |        |              |
| <b>Total</b>                           |                | <b>1523.843</b>          | <b>69</b>      |    |             |        |              |



Based on Table 4 above, a linearity probability (Sign) is obtained at 0.001 smaller than 0.05, then when viewed based on Figure 2 The X2 and Y linearity estimation curve is to have a significant slope, namely with F linearity 13,491, it can be concluded that the distribution of variable data Free data forms a linear line to the dependent variable with significant linearity.

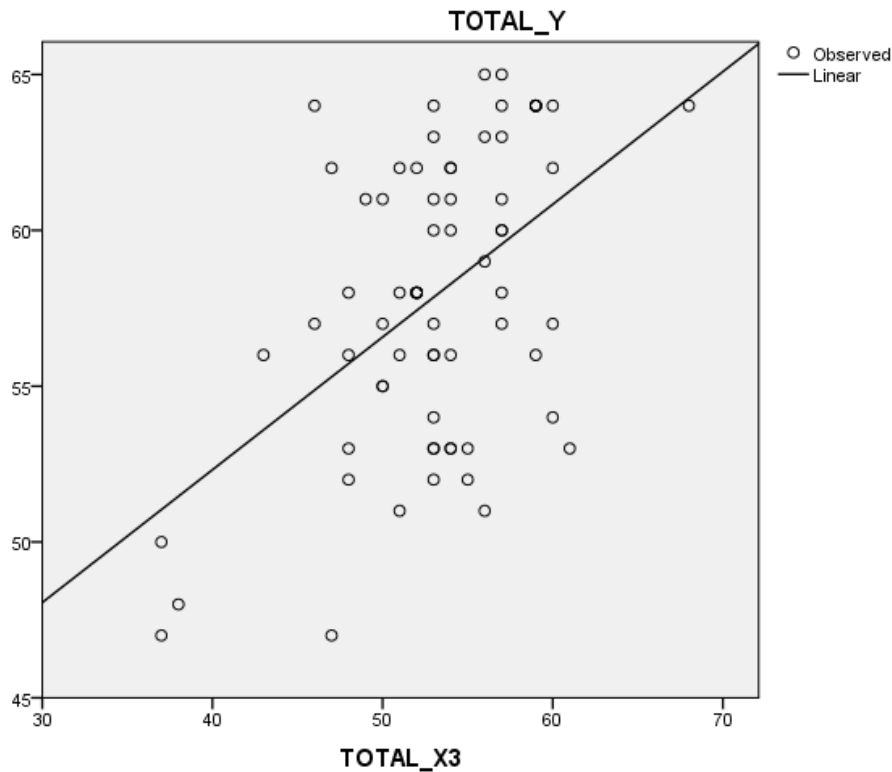


Figure 3. Linearity estimation curve X3 and Y

Table 5. Variables Linearity Test Results X3 and Y

| ANOVA Table                   |                |                          | Sum of Squares  | df        | Mean Square | F      | Sig.         |
|-------------------------------|----------------|--------------------------|-----------------|-----------|-------------|--------|--------------|
| <b>TOTAL_Y *<br/>TOTAL_X3</b> | Between Groups | (Combined)               | 697.566         | 18        | 38.754      | 2.392  | <b>0,008</b> |
|                               |                | Linearity                | 367.287         | 1         | 367.287     | 22.670 | <b>0,000</b> |
|                               |                | Deviation from Linearity | 330.279         | 17        | 19.428      | 1.199  | <b>0,299</b> |
|                               | Within Groups  |                          | 826.277         | 51        | 16.202      |        |              |
| <b>Total</b>                  |                |                          | <b>1523.843</b> | <b>69</b> |             |        |              |

Based on Table 5 above, a linearity probability (Sign) is obtained at 0,000 smaller than 0.05, then when viewed based on Figure 3 The X3 and Y linearity estimation curve is that it has a significant slope of almost 45 degrees with F linearity of 22,670 it can be





concluded that the distribution Data of the independent variable forms a linear line to the dependent variable with significant linearity.

This multicollinearity test is used to determine the presence or absence of a significant relationship between each independent variable in the regression model. Multicollinearity testing by looking at the Collinearity Statistics in the SPSS 22 program, provided that if the value of the Value Inflation Factor (VIF) tolerance value of each independent variable is below 5 ( $VIF < 5$ ), there is no multicollinearity problem (Priyatno, 2008: 41). The summary of the results of the multicollinearity test analysis is shown in the following Table 6.

Table 6. Uji Multikolinieritas

| Model | Collinearity Statistics |             |              |                   |
|-------|-------------------------|-------------|--------------|-------------------|
|       | Tolerance               | VIF         | Keterangan   |                   |
| 1     | (Constant)              |             |              |                   |
|       | X1                      | .817        | 1,224        | <b>Independen</b> |
|       | X2                      | .811        | 1,233        | <b>Independen</b> |
|       | X3                      | <b>.809</b> | <b>1,236</b> | <b>Independen</b> |

Based on Table 6 above, it shows that the VIF value below 5, namely the variable application of the production learning model or service (teaching factory) of  $1,224 < 5$ , the Prakerind experience variable is  $1,233 < 5$ , the student work readiness variable is  $1,236 < 5$ . Thus it can be concluded that the three independent variables do not occur multicollinearity problems towards student work readiness variables.

### Conclusion

Based on the discussion that has been explained, it is expected that schools will pay attention to the facilities and services of the Teaching Factory and the role of the Special Job Exchange (BKK) as a facilitator for students in implementing better student work readiness and placing students when doing internships so that they really get the appropriate vocational experience required. learned in school so that it can be implemented optimally. Furthermore, what students can do is to improve self-motivation and self-awareness, be more updated in digging up information and developments that can improve students' abilities. So that in the future students can adapt and be able to compete in the industrial world with technological developments that are increasingly developing day by day.

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