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(Research/Review) Article

The Effect of Practical Learning and Field Work Practical Experience on the Work Readiness of Vocational School Students in The Expertise of Building Design, Modeling and Information

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Abstract: Vocational High Schools (SMKs) are educational institutions that emphasize equipping students with specific skills that can be directly applied in the workforce, aiming to reduce unemployment rates. However, unemployment in Indonesia remains significantly high among SMK graduates, which is largely attributed to the low work readiness of students. This study aims to examine the influence of practical learning and field work practical experience (PKL) on the work readiness of class XII students in the Building Design, Modeling, and Information Expertise Program (DPIB) at SMK Negeri 6 Malang, both partially and simultaneously. The research employed a quantitative approach using a saturated sampling technique, with all 89 students of class XII DPIB participating as respondents. Data collection was conducted through structured questionnaires and observations. The data were analyzed using descriptive statistics, prerequisite tests, multiple regression analysis, multiple correlation analysis, and calculations of relative and effective contributions, assisted by IBM SPSS Statistics software. The results indicate that both practical learning and field work experience have a significant and positive effect on students' work readiness. When analyzed partially, each variable contributes differently: practical learning accounts for an effective contribution of 15.9% while field work experience contributes 48.2%. In terms of relative contribution, practical learning accounts for 24.8% and field work experience 75.2%. Collectively, these findings demonstrate that practical learning and field work experience significantly enhance the readiness of students to enter the workforce. This highlights the importance of integrating hands-on learning experiences and real-world field work into vocational education to better prepare students for professional environments and improve their employability. The study recommends that SMKs continue to strengthen practical learning curricula and provide ample field work opportunities to ensure graduates possess both the technical skills and work readiness necessary for successful employment.

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1. Introduction

Vocational High Schools (SMK) are secondary-level educational institutions focused on cultivating and developing students' skills, both soft and hard skills, in specific fields. This allows students to apply these skills to the next level, such as universities and polytechnics, and even into the workplace (Safitri, 2022). Student skill development in vocational high schools is generally conducted through several learning methods, including theoretical and practical learning (Murniati et al., 2021). Practical learning can be carried out through fieldwork and practical work, covering subjects such as land surveying and building model making (Aisyah et al., 2023).

One of the goals of vocational high schools is to address the high unemployment rate in Indonesia (Rafidiyah & Kailani, 2020). Vocational high schools play a significant role in addressing the high Open Unemployment Rate (TPT) in Indonesia, yet sadly, the TPT in Indonesia is still dominated by vocational high school graduates (Akbar et al., 2024). According to data from the Central Statistics Agency (BPS) as of 2024, vocational high school graduates contributed 9.01%, or 25.3 million, of Indonesia's total population of 281.6 million,

to the Open Unemployment Rate (TPT) in Indonesia, compared to other educational levels (Central Statistics Agency, 2024).

Practical learning is a teaching and learning activity that encourages students to conduct experiments to prove a theory through practical activities (Rini et al., 2023). Practical learning in vocational high schools generally uses a hands-on activity system, which applies the concept of engaging students in obtaining information, engaging in activities, collecting data, and analyzing their own conclusions freely. This learning method is therefore suitable for use in vocational high schools (Norhasanah & Fanani, 2016). The current implementation of practicums is generally considered adequate, but attention must be paid to how the knowledge and skills, and even the assignments given during practicums, can be effectively applied directly to the workplace. Fieldwork internships (PKL) are a program that implements all the knowledge learned by vocational high school students in an effort to gain experience through direct involvement in the world of work. Therefore, PKL is a mandatory program for every vocational high school in Indonesia (Fajri et al., 2025). However, most students do not fully absorb the experience during fieldwork internships, and many students hold negative perceptions that PKL is merely a formality and a graduation requirement. Furthermore, many students forget much of the practical material that should be applied in PKL.

Practical learning, PKL, and the work readiness of vocational high school students are inseparable (Murniati et al., 2021). Effective practical learning can produce optimal results from fieldwork internships. If the combination of the two is realized well, most vocational high school graduates will be well-prepared for the workforce (Potutu et al., 2023). This approach is expected to be implemented in vocational high schools throughout Indonesia to ensure optimal and well-prepared work readiness for vocational high school students. Currently, most vocational high school students, particularly those at SMK Negeri 6 Malang, are uncertain and unsure about their goals after graduation. This suggests that their job readiness at the school is still not optimal.

This study examines the effect of practical learning and internships on the job readiness of 12th-grade students majoring in the Department of Education and Culture at SMK Negeri 6 Malang. The results are expected to serve as guidelines and benchmarks for developing and implementing effective strategies to further develop job-ready students aligned with their majors and the demands of the industry.

2. Proposed Method

This research is a correlational study, processing data from research results to analyze the relationship and reveal the strength of the correlation between two or more variables without altering or modifying the data (Puspita et al., 2024). This study uses a quantitative approach, which is used to study a specific population and sample, collect data, use research instruments, and describe and analyze the data to test the hypotheses (Riyanto & Hatmawan, 2020).

In this study, there are two independent variables: practical learning (X1) and fieldwork experience (X2), and one dependent variable: work readiness (Y). The independent variable is the cause, while the dependent variable is the effect (Sugiyono, 2019). The sample in this study was 89 grade XII DPIB students of SMK Negeri 6 Malang in the 2024/2025 academic year who had completed their internship. The research was conducted at SMK Negeri 6 Malang, located on Jl. Ki Ageng Gribig No. 28, Madyopuro, Kedungkandang District, Malang City, East Java 65139.

Data collection in this study used a closed-ended questionnaire, which provided several answer alternatives according to the respondent's circumstances using the Google Forms platform. The choice of these alternatives determined the scoring system. In this study, the researcher also visited the research location to directly observe the 12th-grade DPIB students at SMK Negeri 6 Malang through observation techniques. They observed the practicum activities, the learning conditions after the 12th-grade DPIB students had completed their internships, and the level of work readiness of the 12th-grade DPIB students at SMK Negeri 6 Malang. The focus was on indicators for each studied variable. For the practicum learning variable, indicators included laboratory conditions, practicum time, preparation and implementation, and student interest in the practicum. Meanwhile, for the fieldwork experience variable, indicators included knowledge, skills, and abilities related to the field, interaction methods, and attitudes. Furthermore, indicators for the student work readiness variable included knowledge, skills, attitudes, and mental state.

Based on the validity test results, it was found that 75 question items had a calculated r value > r table 0.404, thus a conclusion was obtained that each question item was declared valid and could be used in research. Based on the results of the reliability test, it was proven that the Cronbach's Alpha value for each variable was greater than 0.60. Thus, a conclusion was obtained that each item in each variable was declared reliable.

3. Results and Discussion

Results

The descriptive statistical analysis results for variable X1, practical learning, obtained an average of 132.3 with a standard deviation of 9.638. The highest score was 148 and the lowest score was 111. The descriptive statistical analysis results for variable X2, fieldwork experience, obtained an average of 79.71 with a standard deviation of 6.37. The highest score was 90 and the lowest score was 65. The descriptive statistical analysis results for variable Y, student work readiness, obtained an average of 121.33 with a standard deviation of 8.51. The highest score was 135 and the lowest score was 101.

Table 1. Normality Test Results.

Variables	Sig.	Conclution	Interpretation
Practical Learning	0,062	Sig. > 0,05	Normal
Internship Experience	0,064	Sig. > 0,05	Normal
Work Readiness	0,063	Sig. > 0,05	Normal

The results of the normality test showed that the significance values for the variables of practical learning, internship experience, and work readiness were >0.05, thus concluding that the data for each variable were normally distributed.

Table 2. Linearity Test Results.

Variables	Sig.	Conditions	Interpretation
Practical Learning on Job Readiness	0,137	Deviation > 0.05	Linear
Internship Experience on Job Readiness	0,138	Deviation > 0.05	Linear

Each independent variable has a Deviation from Linearity value of >0.05 relative to the dependent variable, indicating a linear relationship between the independent and dependent variables.

Table 3. Multicollinearity Test Results.

Variables	Condition	Collinearity Statistics	
		Tolerance	VIF
Practical Learning	Tolerance > 0.10 VIF < 10	0,936	1,069
Internship Experience	Tolerance > 0.10 VIF < 10	0,936	1,069

Each independent variable in this study has a tolerance value > 0.10 and a VIF value < 10, thus indicating no signs of multicollinearity between the independent variables.

Table 4. Autocorrelation Test Results.

Variables	Sig.	Condition	Interpretation
Practical Learning and Internship Experience	1,907	du < dw < 4-du (1,725 < 1,907 < 2,275)	No Autocorrelation Occurs

The independent variables in this study have a Durbin-Watson coefficient value of du < dw < 4-du, which indicates the absence of autocorrelation between the independent variables.

Heteroscedasticity Test Results

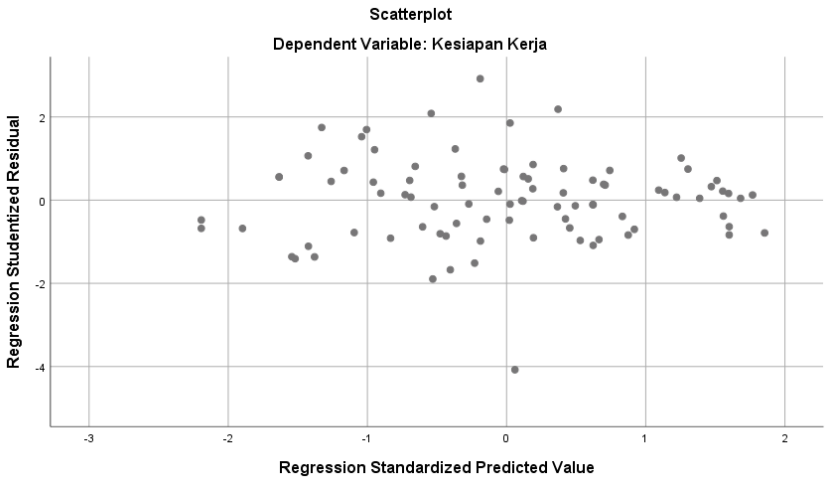

Figure 1. Heteroscedasticity Test Results.

The points in the scatterplot shown above are spread out, do not form a specific pattern, and do not converge at a single point. Therefore, it is concluded that there are no symptoms of heteroscedasticity and the data passes the heteroscedasticity test.

Table 5. Results of Multiple Regression Analysis.

Variable	Unstandardized Coefficients	
	B	Std.Error
(Constant)	13,753	9,146
Practical Learning	0,286	0,059
Fieldwork Practice	0,874	0,089

Based on the regression analysis above, the constant value (α) obtained is 13.753, which means that if the values of X1 and X2 = 0, then the Y value, or student work readiness, is 13.753. The coefficient values of X1 and X2 are 0.286 and 0.874, respectively, which can be concluded that the regression coefficient of the independent variable significantly influences the dependent variable.

Table 6. Results of Multiple Correlation Analysis.

Variable	R	Sig. F Change	Interpretation
Practical Learning and Internship Experience	0,801	0,000	Very Strong Correlation

The sig. F-change value for the Practical Learning and PKL Experience variables is 0.000, where the sig. F-change value is <0.05 and the R value is 0.800 > R > 1, which is

included in the very strong correlation category, meaning that the independent variables simultaneously have a very strong correlation with the dependent variable.

Table 6. Partial Test Results.

Variables	Sig.	α	t_{count}	t_{table}	Interpretation
Practical Learning on Job Readiness	0,000	0,05	4,854	1,662	H_{a1} accepted
Internship Experience on Job Readiness	0,000	0,05	9,794	1,662	H_{a2} accepted

Based on the results of the previous partial test, it was concluded that for the independent variable, practical learning, the significance value was 0.000 <α value of 0.005, and the calculated t value was > t table, namely 4.854 > 1.662, indicating a significant and positive influence between practical learning and the work readiness of grade XII DPIB students at SMK Negeri 6 Malang. For the independent variable, PKL experience, the significance value was 0.000 <α value of 0.005, and the calculated t value was > t table, namely 9.794 > 1.662, indicating a significant and positive influence between PKL experience and the work readiness of grade XII DPIB students at SMK Negeri 6 Malang.

Table 7. Simultaneous Test Results.

Variable	Sig.	α	f_{count}	f_{table}	Interpretation
Practical Work Experience and Internship Experience on Job Readiness	0,000	0,05	76,762	3,100	H_{a3} accepted

It is known that the sig. value of 0.000 < the α value of 0.05 and the calculated f value > f table, namely 76.762 > 3.100, it can be concluded that the two independent variables of practical learning and PKL experience have a positive and significant effect simultaneously on the dependent variable of work readiness of class XII DPIB students at SMK Negeri 6 Malang.

Table 8. Results of the Determination Coefficient Test.

Variable	R_{square}	Interpretation
Practical Learning and Internship Experience on Students' Work Readiness	0,641	Provides almost all information

Based on the calculations presented above, the R-square value of the independent variable on the dependent variable is 0.641, which falls between 0 < R-square < 1. This concludes that the dependent variable contributes the majority of the overall information needed to predict the dependent variable, at 64.1%. The closer the R-square value is to one, the greater the independent variable's influence on the dependent variable. Therefore, the remaining 35.9% is influenced by other factors.

Table 9. Predictor Contribution Results.

Variables	SE Total (%)	SR Total (%)
Practical Learning (X1)	15,9	24,8
Internship Experience (X2)	48,2	75,2
Total	64,1	100

Based on the table above, the practicum learning variable has an effective contribution of 15.9% and a relative contribution of 24.8%, while the PKL experience variable has an effective contribution of 48.2% and a relative contribution of 75.2%.

Discussion

Discussion of the Effect of Practical Learning on Job Readiness

The results of the hypothesis testing indicate that practical learning has a significant and positive influence on the job readiness of grade XII DPIB students at SMK Negeri 6 Malang. The magnitude of the influence of practical learning on the job readiness of grade XII DPIB students at SMK Negeri 6 Malang, based on the calculation of the SE predictor contribution (effective contribution), is 15.9%. Based on the results of the descriptive statistical analysis, it is known that the practical learning implemented in grade XII DPIB students at SMK Negeri 6 Malang in an effort to improve students' job readiness is categorized as high.

From the observation results, the DPIB practical laboratory of SMK Negeri 6 Malang is classified as a laboratory that meets the established standards, such as clean laboratory conditions, there are necessary practical tools such as computers and projectors in sufficient numbers, the room is quite large, sufficient lighting and adequate air ventilation. The interest of class XII DPIB SMK Negeri 6 Malang students in practical learning is quite high because through practical learning students can channel their expression and creativity so that students are more active when carrying out practical learning compared to theoretical learning in general. The preparation for practical work carried out in class XII DPIB SMK Negeri 6 Malang is in accordance with the preparation standards for practical implementation carried out by other SMKs, including praying, providing theories and guidebooks regarding the practical material to be carried out, to preparing the necessary tools and materials. The practical time carried out by class XII DPIB SMK Negeri 6 Malang students is quite long and has been scheduled systematically.

Discussion of Fieldwork Experience on Job Readiness

The results of the hypothesis testing indicate that fieldwork experience has a significant positive effect on the job readiness of grade XII DPIB students at SMK Negeri 6 Malang. The magnitude of the effect of fieldwork experience on the job readiness of grade XII DPIB students at SMK Negeri 6 Malang, based on the calculation of the SE predictor contribution (effective contribution), was 48.2%. Based on the researcher's direct observations of grade XII DPIB students at SMK Negeri 6 Malang, the fieldwork experience of grade XII DPIB students at SMK Negeri 6 Malang, in its efforts to improve students' job readiness, is categorized as high.

Based on the researcher's direct observations, there were differences in attitudes among students who had participated in fieldwork practice. Some students experienced improvements in attitudes and character, such as greater respect for teachers, respect for time, and good language skills. Based on observations and information from teaching staff, most grade XII DPIB students at SMK Negeri 6 Malang were able to integrate and adapt well to the fieldwork environment. However, some students felt their hard and soft skills were insufficient and not aligned with the industry's field and needs. This led to doubts and a lack of optimism when participating in the internship program. However, after participating in the internship program, students experienced increased knowledge, both in terms of basic knowledge and additional knowledge gained from the industry where the internship was conducted.

Discussion of Practical Learning and Field Work Experience on Work Readiness

The results of the hypothesis testing indicate that practical learning and field work experience simultaneously have a positive and significant influence on the work readiness of grade XII DPIB students at SMK Negeri 6 Malang. The magnitude of the simultaneous influence of practical learning and field work experience on the work readiness of grade XII DPIB students at SMK Negeri 6 Malang, based on the total contribution of the SE predictor (effective contribution), is 64.1%. The distribution of the influence between practical learning and field work experience on the work readiness of grade XII DPIB students at SMK Negeri 6 Malang, based on the output of the SR predictor contribution calculation, is 24.8%, while field work experience contributes 75.2%. Based on the researcher's observations of grade XII DPIB students at SMK Negeri 6 Malang, the work readiness of grade XII DPIB students at SMK Negeri 6 Malang is categorized as high.

Based on direct observations, grade XII DPIB students at SMK Negeri 6 Malang have prepared themselves to compete in the workforce after graduation. However, some students are still not optimistic about facing the tight competition in the work environment, considering the importance of attitude and mentality as one of the determining factors in student job readiness. However, the knowledge and skills possessed by students are increasing, especially as the final exam approaches. Most students will try to study the material regarding questions that are likely to appear and review material that has been studied previously, both theory and practice.

4. Conclusions

The results of the hypothesis testing indicate that practical learning and field work experience simultaneously have a positive and significant influence on the work readiness of grade XII DPIB students at SMK Negeri 6 Malang. The magnitude of the simultaneous influence of practical learning and field work experience on the work readiness of grade XII DPIB students at SMK Negeri 6 Malang, based on the total contribution of the SE predictor (effective contribution), is 64.1%. The distribution of the influence between practical learning and field work experience on the work readiness of grade XII DPIB students at SMK Negeri 6 Malang, based on the output of the SR predictor contribution calculation, is 24.8%, while field work experience contributions 75.2%. Based on the researcher's observations of grade XII DPIB students at SMK Negeri 6 Malang, the work readiness of grade XII DPIB students at SMK Negeri 6 Malang is categorized as high.

Based on direct observation, grade XII DPIB students at SMK Negeri 6 Malang have prepared themselves to compete in the workforce after graduation. However, some students are still not optimistic about facing the tight competition in the work environment, considering the importance of attitude and mentality as one of the determining factors in student job readiness. However, the knowledge and skills possessed by students are increasing, especially as the final exam approaches. Most students will try to study the material regarding questions that are likely to appear and review material that has been studied previously, both theory and practice.

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