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Research Article

The Influence of Learning Facilities and Practical Activities on Student Competence in the Diploma III Culinary Arts Study Program at the Palembang Tourism Polytechnic

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Abstract: Student competency is a key learning outcome in vocational education, particularly in study programs that emphasize the mastery of practical skills such as culinary arts. This study aims to analyze the influence of learning facilities and practical activities on the competency of students in the Diploma III Culinary Arts Study Program at the Palembang Tourism Polytechnic. The study used a quantitative approach with an associative design through a survey method. Data were collected using a closed questionnaire from 59 students, measuring learning facilities (study room facilities and practice facilities), practice activities, and student competency understood as perceived competence (*self-perceived competence*). The analysis was conducted through descriptive statistics, Cronbach's Alpha reliability tests, and multiple linear regression at a significance level of 5%. The results showed that students rated practice facilities very positively, while study room facilities still left ratings ranging from "fair" to "poor". The regression test indicated that learning facilities and practical activities had a positive and significant effect on student competency, with a moderate contribution to the model's explanation. This finding confirms that the support of learning facilities and the implementation of structured practice complement each other in shaping the competency of vocational students. However, improving the comfort and completeness of study room facilities is still needed for competency formation to take place more optimally.

Keywords: Learning Facilities; Practical Activities; Practical Facilities; Student Competencies; Vocational Education

1. Introduction

Vocational higher education plays a strategic role in preparing competent and work-ready human resources according to the needs of the industrial world. The role of human resource management in organizations is to help achieve the company's strategic and operational goals (Hanif et al., 2024). Unlike academic education, which emphasizes mastery of theory, vocational education is oriented towards developing practical skills through direct learning experiences in the learning environment. In line with the direction of the national vocational education policy, vocational education is directed at producing graduates with competencies according to the needs of the world of work and industry through learning that emphasizes strengthening practical skills and real-world work experience (Directorate General of Vocational Education, 2020). The quality of human resources not only influences service delivery but also long-term sustainable tourism. (Hasan, H et al., 2025) The quality of service delivery, one of which is human resources, plays a crucial role in ensuring a positive experience, as effective service capacity directly influences future performance in the industry. (Karo & Hasan, 2023).

Student competency in vocational education is understood as the integration of knowledge, skills, and attitudes that enable graduates to perform professional tasks in accordance with the work standards of their field of expertise. Research on the implementation of *competence-based education* shows that practical learning activities are a key

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element in developing student competency, as they provide opportunities to apply theoretical knowledge to real-world work contexts (Misbah et al., 2020; Wahyuni, 2021).

The development of student competencies as a result of learning is influenced by various factors, both internal to the student and the learning environment. Slameto (2015) stated that the learning environment, including the availability of learning facilities and infrastructure, is an external factor that influences student learning outcomes. A learning environment supported by adequate learning facilities can create conducive learning conditions and support the achievement of optimal learning outcomes.

In the context of vocational education, learning facilities, particularly practical facilities, play a crucial role in supporting skills-based learning activities. The availability of tools, materials, and practical support facilities that meet industry standards enables students to achieve a more optimal learning experience. Empirical studies in vocational education show that the quality of learning facilities and the design of practical activities contribute to student competency achievement (Wahyuni, 2021).

In addition to learning facilities, structured and consistently implemented practical activities provide learning experiences that play a crucial role in developing student competency. Through practical activities, students not only hone technical skills but also develop work accuracy, procedural understanding, and readiness for the workplace. Students' perceptions of their practical experiences can reflect the extent to which competency, as a result of learning, has been developed (Rahmawati et al., 2023).

In this study, student competency is understood as the competency perceived by students as a result of learning obtained through the learning process, especially practical activities, and not as an objective competency measured through practical tests or formal assessments. Based on this framework, this study aims to determine the influence of learning facilities and practical activities on the competency of students in the D3 Culinary Arts Study Program at the Palembang Tourism Polytechnic.

Adequate facilities, supported by experienced instructors, enable students to effectively observe and master core competencies, preparing them for specific tasks in their field of expertise (Majid & Sudira, 2017). Practical learning is also an essential course that bridges students to be active and creative in the learning process, thus requiring support from relevant learning resources and models to enhance student creativity in practicum activities (Dewy & Isnaini, 2021). Competence is defined as a combination of knowledge, skills, and behaviors relevant to job performance, with quality training proven to significantly improve technical competence and worker safety behavior (Karangan et al., 2025). This competency encompasses not only cognitive abilities but also psychomotor and affective skills that are essential for success in the workplace (Tarigan & Budiastuti, 2020). Therefore, the role of practical facilities and structured practical activities is crucial in producing graduates who are ready to compete in the competitive culinary industry (Marwanto et al., 2017; Suryani et al., 2022). Universities have a responsibility to equip students with ready-to-use skills that are relevant to job market needs, which can be achieved through the provision of study programs that support global competitiveness and adaptability to industry challenges (Tanjung et al., 2023).

2. Research Methodology

This study employed a quantitative approach with an associative research design. An associative research design is used to determine the relationship and influence between independent and dependent variables based on numerical data obtained from respondents (Sugiyono, 2021). A quantitative approach allows researchers to obtain an objective and systematic overview of research data trends, allowing for measurable and logical analysis of research results (Arikunto, 2019). This research requires a rigorous design structure, measurement validation, and instrument reliability (Hasan, H et al., 2025).

The research method used was a survey method. The survey was conducted by distributing questionnaires to active students of the Diploma 3 Culinary Arts Study Program at the Palembang Tourism Polytechnic. The survey method was chosen because it is effective in collecting data on respondents' perceptions in a structured and efficient manner (Creswell & Creswell, 2018; Arikunto, 2019). The population in this study was all active students of the Diploma 3 Culinary Arts Study Program at the Palembang Tourism Polytechnic. The research sample consisted of 59 students who completed the questionnaire completely and met the criteria as respondents.

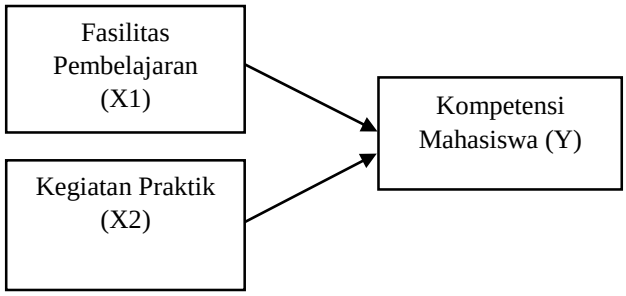

Figure 1. Research Variables.

The variables in this study consist of two independent variables and one dependent variable. The independent variables include learning facilities (X1) and practical activities (X2), while the dependent variable is student competency (Y). Learning facilities are measured through indicators of learning room facilities and practical facilities that support vocational learning. Practical activities are measured based on student perceptions of the implementation of learning practices, including the implementation of practices, the availability of supporting facilities, and practical learning experiences obtained. Student competency in this study is understood as the competency perceived by students as a result of learning obtained through the learning process, especially practical activities.

The research instrument used was a closed-ended questionnaire with a four-level rating scale: very good, good, fair, and poor. The use of a closed-ended questionnaire aims to facilitate respondents' responses and assist researchers in obtaining consistent data that is easy to analyze quantitatively (Arikunto, 2019). This rating scale was used to assess the tendency of respondents' perceptions regarding each indicator assessed. The data obtained were then analyzed descriptively, displaying the percentages and trends of respondents' responses.

Data analysis was conducted in two stages. The first stage was descriptive analysis to describe respondents' perceptions of learning space facilities and practical facilities through the percentage of assessment categories and statistical summaries (mean and standard deviation) at the construct level. The second stage was instrument quality testing and hypothesis testing. The internal consistency of the instrument was tested using Cronbach's Alpha, with an acceptance criterion of ≥ 0.70. Furthermore, to test the effect of learning facilities and practical activities on student competencies, multiple linear regression was used with the model: $Y = \beta_0 + \beta_1 X1 + \beta_2 X2 + \varepsilon$. Significance testing was conducted at a 95% confidence level ($\alpha = 0.05$) by looking at the regression coefficient value and p-value. Model feasibility was evaluated through the R^2 value and the F test to assess the significance of the model simultaneously.

3. Results And Discussion

Table 1. Facility Assessment Matrix (Descriptive Percentage).

Facility Aspects	Very good	Good	Pretty good	Not good
Learning Room Facilities	30.5%	40.7%	25.4%	3.4%
Practice Facilities	52.5%	47.5%	-	-

Based on Table 1, student assessments of the facilities in the Diploma 3 Culinary Arts Study Program show a positive trend. The majority of respondents rated the learning space facilities as good to excellent (40.7% good; 30.5% very good), although there were still assessments in the fair (25.4%) and poor (3.4%) categories. For practical facilities, all respondents rated them as good–excellent (52.5% very good; 47.5% good). This pattern indicates that practical facilities are perceived as adequate to support skills-based learning, while certain aspects of the learning space facilities still require attention to optimize theoretical learning support.

Table 2. Descriptive Statistics Matrix of Constructs (Mean Likert Score).

Variables	n	Number of items	Mean	Elementary School	Min	Max
Learning Facilities (X1)	59	5	3.52	0.79	1.80	5.00
Practical Activities (X2)	59	5	3.79	0.62	2.20	4.80
Student Competence (Y)	59	5	4.12	0.60	2.60	5.00

Table 2 shows an overview of the level of respondents' assessment of each construct. The average learning facilities (X1) were in the moderate-positive category (Mean = 3.52; SD = 0.79), while practical activities (X2) showed a higher average value (Mean = 3.79; SD = 0.62). Student competency (Y) had the highest average (Mean = 4.12; SD = 0.60), indicating that students tended to rate their competency as a learning outcome highly. In general, the distribution of standard deviations was not too large, indicating that the variation in respondents' answers was at a reasonable level and stable enough for further analysis.

Table 3. Reliability Matrix (Cronbach's Alpha).

Variables	Cronbach's Alpha	Decision (>0.70)
Learning Facilities (X1)	0.814	Reliable
Practical Activities (X2)	0.747	Reliable
Student Competence (Y)	0.766	Reliable

As shown in Table 3, all constructs met the internal reliability criteria. The Cronbach's Alpha values for learning facilities (0.814), practical activities (0.747), and student competencies (0.766) were above the 0.70 threshold, indicating that the instrument was consistent in measuring the constructs studied. With reliability met, construct scores can be used to test relationships/influences in the next analysis stage.

Table 4. Influence Test Matrix (Multiple Linear Regression).

Variables	B	SE	Beta (Std.)	T	p-value	Decision
Constrata	2,336	0.540	–	4,324	0,000	-
X1 Learning Facilities versus Y	0.227	0.092	0.302	2,485	0.016	Significant
X2 Practical Activities Against Y	0.260	0.118	0.268	2,204	0.032	Significant

The results of multiple linear regression in Table 4 show that learning facilities (X1) and practical activities (X2) have a positive effect on student competency (Y). Learning facilities have a positive and significant effect (B = 0.227; p = 0.016), and practical activities also show a positive and significant effect (B = 0.260; p = 0.032). The model summary shows an R^2 of 0.173 (p(F) = 0.0049), which means that 17.3% of the variation in student competency can be explained by learning facilities and practical activities, while the remainder is influenced by other factors outside the model. This finding confirms that strengthening learning facilities and the quality of practical implementation are relevant factors in the formation of student competency in vocational education, although there is still room to explore other determinants that also contribute.

Overall, the research results indicate that learning facilities and practical activities play a role in shaping students' perceived competencies. Adequate learning facilities support a smooth learning process, while practical activities provide hands-on learning experiences that enable students to develop skills and work readiness. This indicates that the competencies of students in the Diploma 3 Culinary Arts Study Program at the Palembang Tourism Polytechnic are formed through the support of learning facilities and practical experiences gained during the learning process.

The Influence of Learning Facilities on Student Competence

Research findings demonstrate that learning facilities significantly contribute to the development of student competencies in the Culinary Arts Diploma Program at the Palembang Tourism Polytechnic. This is evident in the highly positive assessment of the

practice facilities, with over 90% of respondents rating them as good to excellent. These results demonstrate that the support provided by the practice facilities, including equipment, material availability, and a conducive practice environment, has provided students with the opportunity to hone their skills to the fullest.

Within the framework of vocational education, the availability of practical facilities is a fundamental element because the learning process is directed at mastering work skills through direct experience. When adequate practical facilities are available, students more easily connect conceptual understanding with field application, resulting in more measurable and tangible competencies. This finding aligns with Handayani, Kusumaningsih, and Sudana (2025), who explained that practical facilities have a positive and significant impact on the quality of vocational learning, and this impact is reflected in improved student competency.

The OECD (2018) emphasizes that the quality of practical facilities that approximate real-world working conditions in industry is a crucial prerequisite for the success of vocational education in producing competent graduates. Therefore, practical facilities not only support the learning process but also serve as the primary medium for developing student competencies according to the needs and standards of the workplace. However, this study also found that classroom facilities tended to receive lower evaluations than practical facilities. Some students still rated them as fair or even poor. This situation suggests the need for improvements in classroom comfort, spatial arrangement, and the completeness of facilities that support theoretical learning. If classroom facilities are suboptimal, the process of understanding basic concepts, which serve as the foundation for students to participate in practicals, could be ineffective. Under such circumstances, competency development can be indirectly impacted.

The difference in assessments between practical facilities and learning spaces also reinforces the notion that vocational students tend to prioritize resources directly related to practical activities. Therefore, strengthening learning facilities should be done in a balanced manner, both in practical facilities and learning spaces, so that theoretical and practical learning can complement each other in developing students' overall competencies.

The Influence of Practical Activities on Student Competence

In addition to learning facilities, practical activities also play a crucial role in developing student competencies. Research shows that practical activities receive positive feedback from students, reflecting that the implementation of the practical activities provides hands-on learning experiences relevant to the field of expertise being studied. Practical activities allow students to practice skills, improve work accuracy, and build confidence in applying their abilities.

Structured practical activities provide students with the opportunity to integrate theoretical knowledge with work skills. Through this process, students not only understand work procedures but also become familiar with the standards and demands of work in the culinary field. This aligns with research by Misbah et al. (2020), which states that competency-based learning in vocational education is highly dependent on the quality and intensity of the practical experience students gain.

Positive practical experiences also contribute to the development of student competencies, perceived as learning outcomes. Students' perceptions of their competencies reflect the extent to which practical activities have provided meaningful learning experiences. Thus, practical activities serve not only as a complement to theoretical learning but also as a core component of the learning process in vocational education.

The Relationship between Learning Facilities and Practical Activities in Developing Student Competencies

Besides the availability of learning facilities, practical activities are an equally important factor in building student competency. Research findings indicate that practical activities receive a generally positive response from students, indicating that the implementation of practical activities provides hands-on learning experiences aligned with the competencies being studied. Through practical activities, students have the opportunity to hone their skills, improve their accuracy in their work, and strengthen their confidence in applying their abilities.

Systematically designed and implemented practicums also provide opportunities for students to bridge conceptual understanding with work skills. This process not only helps students understand operational steps but also familiarizes them with the quality standards, work rhythms, and professional expectations that apply in the culinary field. These findings

are consistent with those of Misbah et al. (2020), who emphasized that competency-based vocational learning is largely determined by the quality and intensity of students' practical experiences. Furthermore, positive practical experiences also strengthen students' perceived competencies as learning outcomes. This perception can be understood as an indicator of the extent to which practicums provide meaningful experiences and impact their abilities. Thus, practicum activities are not merely a complement to theoretical material but a core element of the learning process in vocational education.

4. Conclusions And Suggestions

Based on the analysis results, learning facilities and practical activities have been proven to play a role in developing the competencies of students in the Culinary Arts Diploma 3 Study Program at the Palembang Tourism Polytechnic. Practical facilities received the most positive assessment, while learning room facilities still showed room for improvement. Regression tests showed that learning facilities and practical activities had a positive and significant effect on student competencies, although the model contribution was still moderate, indicating the presence of other factors that also influence competencies. Study programs are advised to maintain the quality of practical facilities through consistent maintenance and availability of tools/materials, while improving learning room facilities in terms of comfort and completeness of theoretical learning facilities. In addition, the implementation of practicals needs to be strengthened through clear SOPs, competency rubric-based evaluations, and structured feedback so that student competency development takes place more optimally and is aligned with the needs of the workplace.

Reference

Arikunto, S. (2019). *Prosedur penelitian: Suatu pendekatan praktis*. Rineka Cipta.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Dewy, M. S., & Isnaini, M. (2021). The effectiveness of using a product-based learning model towards increasing students' entrepreneurial interest. *JEVTE: Journal of Electrical Vocational Teacher Education, 1*(2), 104–110. https://doi.org/10.24114/jevte.v1i2.29253

Directorate General of Vocational Education. (2020). *Indonesian vocational education roadmap 2020–2024*. Ministry of Education and Culture of the Republic of Indonesia.

Handayani, K., Kusumaningsih, W., & Sudana, I. M. (2025). The influence of practical facilities on the quality of learning at state vocational schools. *Jurnal Ilmu Kependidikan, 54*(1), 206–219. https://doi.org/10.15294/lik.v54i1.23521

Hasan, H., Gunung, T. M. R., Nugroho, A. Y., Endayani, S., Uluputty, M. R., Wardhani, R. S., & Sulandjari, K. (2025). *Research methodology*. MMFAST Publishing.

Hasan, H., Hasan, S. M., Anwar, H. M., Lubis, D. S. W., Kharismasyah, A. Y., Sondeng, S., & Kurniawan, Z. (2024). *Human resource management and organization*. Cendikia Mulia Mandiri.

Hasan, H., Sirine, H., Bakti, B., Silintowe, Y. B. R., Kojongian, P. J. C., Baali, Y., & Wekke, I. S. (2025). *Introduction to tourism management*. Tri Edukasi Ilmiah Foundation.

Karangan, M., Lambe, K. H. P., & Halik, J. B. (2025). *The effect of employee competency and training programs on improving occupational safety at PT Vale Indonesia Tbk.*

Karo, P. K., & Hasan, H. (2023). Analysis of tourist destination service capacity to reach the target market of the tourism sector in Sabang City. *Medan Tourism Academy Journal, 11*(2), 83–91.

Majid, N. W. A., & Sudira, P. (2017). The process of acquiring ICT competencies through the industrial practice program for students at SMKN 2 Pengasih Kulon Progo. *Journal of Vocational Education, 7*(1), 14–25. https://doi.org/10.21831/jpv.v7i1.12712

Marwanto, A., Ardian, A., & Suyanto, S. (2017). Evaluation of the implementation of fabrication workshop material forming practices in the Department of Mechanical Engineering Education, Faculty of Engineering, Yogyakarta State University. *Journal of Vocational Dynamics of Mechanical Engineering, 2*(1), 49–57. https://doi.org/10.21831/dinamika.v2i1.13499

Misbah, Z., Gulikers, J., Dharma, S., & Mulder, M. (2020). Evaluating competency-based vocational education in Indonesia. *Journal of Vocational Education & Training, 72*(4), 488–515. https://doi.org/10.1080/13636820.2019.1635634

Monica, E., Suprapto, N., Budiyanto, M., Satriawan, M., & Cheng, T.-M. (2024). Measuring learners' scientific literacy skills using contextual environmental issues. *Jurnal Pendidikan MIPA, 25*(4), 1648–1664. https://doi.org/10.23960/jpmipa/v25i4.pp1648-1664

OECD. (2018). *Seven questions about apprenticeships: Answers from international experience*. OECD Publishing. https://doi.org/10.1787/9789264306486-en

Rahmawati, R., Permana, J., Nurdin, D., Triatna, C., & Fadhli, F. (2023). Analysis of university student satisfaction levels with the learning process on five dimensions of service quality (SERVQUAL). *Al-Ishlah: Jurnal Pendidikan, 15*(2), 1944–1957. https://doi.org/10.35445/alishlah.v15i2.2355

Slameto. (2015). *Belajar dan faktor-faktor yang mempengaruhinya*. Rineka Cipta.

Sugiyono. (2021). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.

Suryani, E., Harahap, M. L., & Siregar, R. J. (2022). The relationship of learning of ASKEB II course practicum laboratory with the achievement of level II students' competence. *International Journal of Public Health Excellence, 1*(2), 105–111. https://doi.org/10.55299/ijphe.v1i2.41

Tanjung, M. H. A. A., Harahap, N. B., Siboro, M. E., & Harahap, M. (2023). Internship program as a means of practice and improving student competence in the field of publishing. *Indonesian Journal of Community Services, 5*(1), 1–11. https://doi.org/10.30659/ijocs.5.1.1-11

Tarigan, C. U., & Budiastuti, E. (2020). Evaluation of laboratory utilization in improving the skin beauty competency of students of cosmetic art study program, State University of Medan. *Home Economics Journal, 4*(1). https://doi.org/10.21831/hej.v4i1.28681

Wahyuni, D. S. (2021). Developing competency-based assessment at vocational high school (VHS) in Bali. *Jurnal Pendidikan Vokasi, 11*(1), 59–67. https://doi.org/10.21831/jpv.v11i1.37383