



Unpacking the Link Between Work-Integrated Learning and Graduate Work Readiness: The Mediating Role of Student Commitment

Wisudani Rahmaningtyas^{1*}, Anna Kania Widiatami²

^{1*}Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia.

²Faculty of Social Sciences, Oslo Metropolitan University, Norway.

*Corresponding Author. Email: wisudani.rahmaningtyas@mail.unnes.ac.id

Abstract: This study aims to investigate the relationship between Work-Integrated Learning (WIL) and graduate work readiness, with a particular focus on the mediating role of student commitment as a key psychological mechanism in the learning process. Employing a quantitative cross-sectional design, data were collected from 367 undergraduate students enrolled in economics-related study programs at universities in Indonesia who had completed recognized Work-Integrated Learning (WIL) programs. Respondents were selected using proportional random sampling, and the data were analyzed using PLS-SEM. The findings reveal that WIL positively influences student commitment ($\beta = 0.52$) and work readiness ($\beta = 0.21$). Student commitment also demonstrates a positive effect on work readiness ($\beta = 0.47$) and partially mediates the relationship between WIL and work readiness ($\beta = 0.24$). These findings indicate a positive and significant relationship between experiential learning and learning outcomes, emphasizing that the effectiveness of WIL depends on students' active psychological engagement. This study contributes to the existing literature by providing empirical evidence that student commitment serves as a critical pedagogical mechanism in transforming experiential learning into meaningful learning outcomes and offers practical implications for the design of WIL-based learning models that foster engagement, reflection, and sustainable competence development.

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Introduction

Work readiness has become a major concern in higher education globally due to its crucial role in connecting students to the labor market (Aliu, 2020). Employers' assessment of graduate work readiness extends beyond academic competence and includes graduates' ability to adapt in the labour market (Lisá, 2019). Employers require a workforce that possesses technical expertise and non-technical skills (Suarta et al., 2024). Consequently, graduate work readiness is widely used as an indicator of curriculum relevance and alignment between higher education and industry needs (Chukwuedo & Ementa, 2022). Statistics Indonesia reported that unemployment reached 7.35 million people as of November 2025, with more than one million unemployed individuals holding higher education degrees. This condition indicates a mismatch between graduates' competencies and labor market expectations, highlighting the need for learning approaches that better prepare students for workplace realities (Adely et al., 2021).

One widely implemented approach to address this issue is Work-Integrated Learning (WIL), which integrates workplace experience into higher education learning processes (Adegbite, 2024). Through internships and workplace-based learning activities, students are provided opportunities to apply theoretical knowledge in authentic professional settings and



develop competencies relevant to the labor market (Mandal & Edwards, 2022). In Indonesia, WIL has increasingly been strengthened through the Merdeka Belajar–Kampus Merdeka (MBKM) policy, which emphasizes experiential and workplace-based learning. However, despite the widespread implementation of WIL-based programs, the rate of educated unemployment remains relatively high. This condition suggests that workplace learning opportunities alone do not automatically translate into improved work readiness. Prior studies consistently report a positive relationship between WIL and work readiness (Syed et al., 2025), yet limited attention has been given to understanding how students psychologically process workplace experiences and transform them into meaningful employability outcomes. This indicates the existence of a “missing link” in explaining the effectiveness of WIL.

To address this gap, this study positions student commitment as a psychological mechanism linking WIL and work readiness. Student commitment reflects emotional attachment, sense of belonging, and willingness to invest effort in learning and professional development. Students who are highly committed tend to engage more actively in workplace learning, reflect more deeply on their experiences, and interpret workplace challenges as opportunities for self-development. This study integrates Social Exchange Theory and Experiential Learning Theory (ELT) to explain the relationship among WIL, student commitment, and work readiness. Social Exchange Theory suggests that meaningful workplace experiences, supportive supervision, and developmental opportunities encourage students to reciprocate through stronger psychological engagement and commitment. Meanwhile, ELT explains that learning occurs through a cyclical process involving concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb et al., 2014). Within this framework, workplace experiences become meaningful only when students actively reflect on and engage with those experiences.

WIL has been widely recognized as an instructional approach capable of enhancing student engagement through authentic workplace experiences aligned with industry needs (Jackson et al., 2022). Students who perceive WIL experiences as meaningful and professionally relevant are more likely to develop emotional attachment and willingness to invest effort in learning and self-development. From the perspective of Social Exchange Theory, positive workplace experiences encourage reciprocal psychological responses in the form of stronger commitment toward learning and professional growth. Therefore, WIL is expected to positively influence student commitment. In addition, work readiness is not determined solely by technical competence but also by psychological preparedness to navigate workplace challenges (Zhang et al., 2025). Highly committed students tend to be more proactive, reflective, and adaptive in developing their competencies (Novian & Sukardi, 2023). Within the framework of ELT, commitment supports students’ engagement in reflective learning processes that transform workplace experiences into meaningful competencies. Therefore, stronger student commitment is expected to contribute positively to work readiness.

WIL was also developed to help students connect classroom learning with real-world workplace demands (Reverte et al., 2025). Through direct workplace exposure, students gain opportunities to apply theoretical knowledge, develop technical and non-technical competencies, and better understand professional expectations. Experiential learning enables students to connect academic knowledge with practical workplace applications, thereby contributing directly to competence formation and work readiness (Duran, 2025). However, workplace experience alone may not automatically produce meaningful employability outcomes unless students are psychologically engaged in the experiential learning process. Students with stronger commitment tend to engage more actively in workplace learning, cope

better with workplace challenges, and reflect more deeply on their experiences (Tentama & Abdillah, 2019). From the perspective of ELT, workplace experiences become meaningful learning outcomes when students are cognitively and affectively engaged in reflective processes. Therefore, student commitment is expected to mediate the relationship between WIL and work readiness. Based on these arguments, the hypotheses proposed in this study are as follows:

H1: WIL has a positive and significant effect on student commitment

H2: Student commitment has a positive and significant effect on work readiness

H3: WIL has a positive and significant effect on work readiness

H4: Student commitment mediates the relationship between WIL and work readiness.

The purpose of this research is to examine the effect of Work-Integrated Learning (WIL) on students' work readiness, as well as the role of student commitment in this relationship. While WIL is increasingly adopted in higher education to improve graduate employability, previous research has mainly focused on the direct impact of WIL on skills outcomes. The study contributes to the existing literature in several ways. First, it brings empirical evidence on the mediating role of student commitment in the WIL and work readiness relationship. Second, the findings provide practical implications for higher education institutions to develop WIL programs that not only expose students to the workplace environments but also encourage active participation, reflection, and long-term professional development.

Research Method

In order to investigate the direct and indirect relationships among Work-Integrated Learning (WIL), student commitment, and work readiness, a quantitative cross-sectional research design with a causal-explanatory research approach was used. The specific objectives were to establish the direct effect of WIL on work readiness, the indirect effect of WIL on work readiness through student commitment as the mediator, and the magnitude and significance of the structural relationships in the conceptual model. The primary objective was to test a theoretically grounded structural model in which student commitment functions as a mediating variable between WIL and work readiness. This design is particularly appropriate for investigating causal mechanisms and estimating simultaneous relationships among latent constructs, which is consistent with contemporary approaches in higher education research focusing on employability development and experiential learning outcomes.

The population of this study consisted of 4,382 undergraduate students enrolled in economics-related study programs. A total of 367 respondents were selected using a probability sampling technique, specifically proportional random sampling, to ensure representativeness across study programs. The sample size was determined using the Slovin formula with a 5% margin of error. The inclusion criteria required participants to have completed a Work-Integrated Learning (WIL) program, such as the Merdeka Belajar–Kampus Merdeka (MBKM) initiative, independent internships, or other formally recognized WIL programs. This criterion ensured that all respondents had authentic exposure to workplace environments, which is essential for accurately measuring WIL experience and its influence on student commitment and work readiness.

The research instrument was developed to measure three principal constructs: Work-Integrated Learning (WIL), student commitment, and work readiness. All items were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). WIL was operationalized based on the framework proposed by Smith (2012), with a

sample item such as: “*The work experience I gained during the WIL program reflects real workplace conditions.*” Student commitment was measured by adapting the instrument developed by Wilkins et al. (2016). A representative item includes: “*I feel a strong emotional attachment to the work experience I undertook during my internship*”. Work readiness was measured by integrating indicators derived from Syed (2022), Ferguson et al. (2024), Adegbite (2024), and Jackson and Tomlinson (2020). A sample item for this construct is: “*I feel prepared to adapt to demands and changes in the workplace*”. All statement items were measured using a five-point Likert scale, with response categories adjusted appropriately for each construct (for example, 1 = strongly disagree to 5 = strongly agree). The validity and reliability results of the constructs are presented in Table 2.

The data collection process was conducted over a four-month period, from November 2025 to March 2026, using an online survey method. The questionnaire was distributed through multiple digital platforms, particularly via email and WhatsApp, to enhance accessibility and increase response rates among participants. The use of these platforms is consistent with recent trends in higher education research, where digital survey distribution has been recognized as an effective approach for reaching geographically dispersed respondents and improving participation rates. Furthermore, the use of widely adopted communication tools such as WhatsApp has been shown to facilitate timely responses and reduce non-response bias in student-based surveys. Prior to participation, respondents were informed about the purpose of the study and provided informed consent, ensuring voluntary participation. Anonymity and confidentiality were strictly maintained throughout the research process in accordance with established ethical research standards.

After distributing the questionnaire, the collected data were tabulated using Microsoft Excel. The dataset was subsequently analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS. This analytical approach was selected due to its suitability for testing mediation models and its robustness against violations of multivariate normality assumptions. The analysis was conducted in two stages. First, the measurement model was evaluated by examining factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE) to ensure validity and reliability. Discriminant validity was assessed using the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT). Second, the structural model was assessed by examining collinearity using the Variance Inflation Factor (VIF) and testing the significance of path coefficients through bootstrapping. Hypotheses were supported when p-values were below 0.05.

Results and Discussion

The first stage of data analysis involved examining factor loadings and Average Variance Extracted (AVE). Indicator loadings exceeding 0.60 were considered acceptable for retention, while AVE values above 0.50 indicated adequate convergent validity. Table 2 presents the results of the convergent validity assessment for this study.

Table 1. Convergent Validity

Construct	Indicators	Factor Loading	Composite Reliability	Average Variance Extracted (AVE)
<i>Work Integrated Learning (WIL)</i>	WIL 1	0,81	0.87	0,66
	WIL 2	0,78		
	WIL 3	0,80		
	WIL 4	0,83		
	WIL 5	0,70		

Construct	Indicators	Factor Loading	Composite Reliability	Average Variance Extracted (AVE)
<i>Student Commitment (SC)</i>	SC1	0,87	0.90	0,72
	SC2	0,77		
	SC3	0,79		
<i>Work Readiness (WR)</i>	WR1	0,89	0,89	0,59
	WR2	0,82		
	WR3	0,75		
	WR4	0,80		
	WR5	0,77		

Note. Factor Loading > 0.60; Realibility > 0.70; AVE > 0.50

Subsequently, discriminant validity was calculated to ensure that each construct was truly distinct from the other constructs in this study.

Table 2. Fornell Larcker

	WIL	SC	WR
WIL	0.812		
SC	0.52	0.849	
WR	0.41	0.60	0.768

Based on Table 2, the square root of the AVE for each construct (WIL = 0.812; SC = 0.849; WR = 0.768) is higher than the correlations with other constructs in the model. This finding indicates that each construct explains the variance of its own indicators better than the variance shared with other constructs. Therefore, the Fornell–Larcker criterion has been satisfied, and there is no strong indication of construct overlap. To address the known limitations of the Fornell–Larcker criterion in detecting discriminant validity issues, the analysis was further extended using the Heterotrait–Monotrait Ratio (HTMT) approach, as presented in Table 3.

Table 3. Heterotrait-Monotrait Ratio (HTMT)

	WIL	SC	WR
WIL			
SC	0.64		
WR	0.48	0.71	

The test results indicate that all HTMT values range between 0.48 and 0.71, which are well below the recommended threshold of 0.85. This suggests that the relationships among constructs remain within acceptable limits and do not reflect conceptual redundancy. Therefore, it can be concluded that the results obtained from both approaches provide consistent empirical evidence that WIL, SC, and WR are empirically distinct constructs, and the discriminant validity of the measurement model can be considered satisfactorily established.

Before assessing the structural model, collinearity among predictor constructs needs to be examined to ensure that the estimated regression relationships are not distorted. VIF values above 5 indicate a high risk of collinearity, while values between 3 and 5 suggest potential collinearity concerns. Ideally, VIF values should remain close to or below three to confirm the absence of collinearity issues (Hair et al., 2014).

Table 4. Inner VIF Value

	WIL	SC	WR
WIL			1.527
SC	1.000		1.527
WR			

Table 4 shows that the endogenous construct work readiness is influenced by Work-Integrated Learning and student commitment, each with a VIF value of 1.527. Meanwhile, the construct student commitment, which serves as the mediating variable, is influenced by Work-Integrated Learning with a VIF value of 1.000.

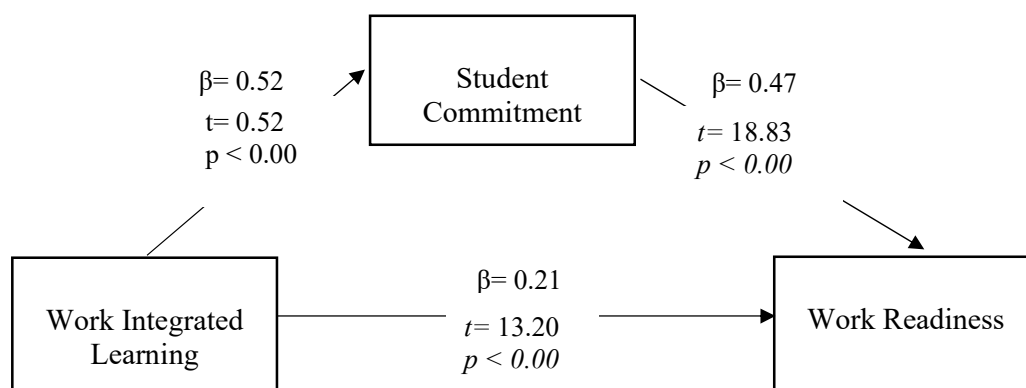


Table 5. Path Coefficient and Hypothesis Testing

Hypothesis	Structural Path	Path Coefficient (β)	t-statistic	p-value	Decision
H1	Work Integrated Learning $\rightarrow$ Student Commitment	0.52	9.84	0.000	Supported
H2	Student Commitment $\rightarrow$ Work Readiness	0.47	18.83	0.000	Supported
H3	Work Integrated Learning $\rightarrow$ Work Readiness	0.21	13.20	0.000	Supported
H4	Work Integrated Learning $\rightarrow$ Student Commitment $\rightarrow$ Work Readiness	0.24	7.78	0.000	Supported

Note: Significance tested using bootstrapping procedure (two-tailed test); $p < 0.05$.

Discussion

H1: WIL has a Positive and Significant Effect on Student Commitment

The findings confirm that Work-Integrated Learning (WIL) contributes positively to the enhancement of student commitment (Jackson, 2025). This suggests that students' involvement in authentic work-based experiential learning fosters the development of emotional attachment (Ajjawi et al., 2020) and a stronger sense of responsibility toward the learning process they undertake (Choi et al., 2023). When students are directly exposed to workplace demands, workflows, rhythms, and professional expectations, learning is no longer perceived as a detached academic activity; rather, it becomes a meaningful experience closely connected to their future careers.

From the perspective of Experiential Learning Theory, this condition represents an initial phase in which concrete workplace experiences stimulate active engagement, involving

both physical participation and psychological investment (Morris, 2020). Real-world work exposure enables students to recognize the practical value of their academic learning, thereby encouraging them to participate more seriously and responsibly in the learning process (Tuononen et al., 2024). Accordingly, WIL functions not merely as a mechanism for strengthening skills but also as a platform for cultivating student commitment to learning and professional self-development.

This finding helps explain why work-based learning often produces stronger developmental impacts than classroom-based instruction alone. When students learn within authentic workplace environments, they gain clearer insight into the purpose and relevance of their studies, rendering their engagement in learning more meaningful and future-oriented. Conceptually, these findings align with the core dimensions of WIL, particularly the authenticity of work experience, integration of learning, and student engagement. Authentic workplace exposure enables students to perceive the direct relevance between classroom-acquired knowledge and the competencies demanded by employers, thereby reinforcing emotional attachment and a sense of belonging (Neill et al., 2025). Furthermore, the integration of theory and practice, often identified as a weakness in traditional instruction, has been shown to increase students' willingness to exert effort, as learning is reframed as an investment in future career development rather than merely a requirement for graduation (Thi et al., 2023). These results strengthen the argument that student commitment is not solely an individual attribute but also an institutional outcome shaped significantly by the design of field-based learning programs (such as independent internships or MBKM initiatives), the quality of supervision, and the provision of meaningful assessment and feedback. Consequently, failures in fostering student commitment may more accurately reflect weaknesses in the WIL ecosystem rather than deficiencies in students' intrinsic motivation.

H2: Student Commitment has a Positive and Significant Effect on Work Readiness

The findings of this study demonstrate that student commitment plays a significant role in shaping work readiness. Students with higher levels of commitment tend to exhibit stronger preparedness in responding to workplace demands, particularly in terms of adaptability (Zhao et al., 2024), self-confidence (Magnano et al., 2021), and readiness to respond to change (Yi & Park, 2024). These results indicate that work readiness is not determined solely by the mastery of technical competencies but is also influenced by how students interpret their learning experiences and engage in continuous career development processes.

Theoretically, student commitment, reflected in emotional attachment, a sense of belonging, and a willingness to exert effort, encourages deeper engagement in learning activities. Such engagement is manifested in students' efforts to develop communication skills, teamwork capabilities, problem-solving competencies, and technological proficiency. Students with high levels of commitment are generally more proactive in seeking feedback, more open to collaborative work, and demonstrate stronger adaptability in utilizing technology during their participation in Work-Integrated Learning programs (Cimma et al., 2024; Albaqami et al., 2025).

Student commitment also reflects how learners construct meaning from their educational experiences as part of their emerging professional identity (Simon, 2024). Committed students tend to reflect on their workplace experiences, learn from encountered challenges, and connect these experiences to long-term career goals (Chen et al., 2022). This reflective process contributes to their preparedness for navigating dynamic, uncertain, and continuously evolving work environments. The findings therefore reinforce the argument that affective and psychological dimensions are essential components in the formation of work

readiness. Without adequate commitment, both learning experiences and workplace exposure during WIL risk becoming superficial, limiting their impact on graduates' preparedness to face real-world professional challenges.

H3: WIL has a Positive and Significant Effect on Work Readiness.

The findings confirm that WIL exerts a direct influence on work readiness. Workplace experiences obtained through WIL provide students with opportunities to develop an understanding of professional environments, strengthen soft skills, and build confidence in facing future career demands (Jackson et al., 2025). This evidence supports the role of WIL as a strategic mechanism for bridging the gap between higher education and labor market expectations. However, the magnitude of the direct effect of WIL on work readiness is relatively smaller than the indirect effect mediated through student commitment. This suggests that while workplace exposure is important, its impact may remain limited if students are not actively and reflectively engaged in the experiential process. In other words, WIL provides learning opportunities, but work readiness develops optimally only when students meaningfully internalize and utilize those opportunities.

The Experiential Learning Theory (ELT) argues that work readiness is formed through a cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. WIL provides students with the opportunity to experience the workplace first-hand and to be exposed to the realities and expectations of performance. However, work readiness is not merely a function of being in the workplace. Students develop their readiness when they engage in active reflection of their experiences, evaluate the challenges they encountered during their internship and make connections between their experiences and their prior academic knowledge. Through reflective observation and abstract conceptualization, students begin to reframe workplace experiences as learning and professional development opportunities. The process of reflection results in increased self-awareness, improved problem-solving skills, and increased confidence to face future career challenges.

The results also show that the relatively smaller direct effect of WIL as compared to the indirect effect through student commitment suggests the importance of psychological engagement in experiential learning processes. Applying social exchange theory, students' positive attitudes toward learning and career preparation are associated with perceptions of a supportive, developmental, and professionally meaningful work environment. Supportive supervision, constructive feedback, and meaningful work relationships motivate students to put forth effort toward adapting to professional expectations and developing workplace competencies. As a result, workplace learning is more than passive participation in internship activities; it is a reciprocal process in which students actively participate in professional self-development as they see value and support in the learning environment.

These findings highlight the importance of ensuring the quality of WIL experiences rather than merely implementing the program structurally. Work placements that are routine, minimally supervised, or lacking structured learning integration may generate only modest improvements in work readiness. Therefore, the effectiveness of WIL depends not only on program availability but also on the depth of experiential engagement, reflective processes, and supportive learning ecosystems that facilitate meaningful competence development.

H4: Student Commitment Mediates the Relationship Between WIL and Work Readiness.

The positive and statistically significant coefficient demonstrates that improvements in the quality and intensity of WIL (internship) experiences strengthen student commitment, which subsequently enhances work readiness. Thus, the effect of WIL on work readiness is



not solely direct but also operates through an affective psychological mechanism in the form of student commitment.

From a theoretical standpoint, this finding aligns with Experiential Learning Theory, which posits that experiential learning extends beyond concrete experience to include reflective observation, abstract conceptualization, and active experimentation in order to generate competence transformation. While WIL provides authentic workplace exposure, the transformation of that experience into work readiness depends substantially on students' emotional attachment, sense of belonging, and willingness to exert effort in the learning process. Without strong commitment, workplace experience risks remaining superficial and minimally transformative.

More specifically, the mediating mechanism identified in this study seems to be more closely related to affective commitment than continuance or normative commitment. In the context of Work-Integrated Learning, the students develop emotional attachment, sense of belonging and personal engagement toward their learning experiences when they perceive the workplace activities as meaningful and relevant to their future careers. Authentic workplace exposure, supportive supervision and opportunities for professional growth help students to become psychologically invested in the learning process. By contrast, continuance commitment, which is typically associated with perceived costs of withdrawal, and normative commitment, which reflects feelings of obligation, seem to be less dominant in shaping students' work readiness in experiential learning contexts. This finding suggests that the effectiveness of WIL largely depends on its ability to foster affective forms of commitment that motivate students to actively reflect, participate and engage in professional self-development.

This result can also be interpreted through the lens of Social Exchange Theory, which suggests that individuals reciprocate perceived support with positive attitudes and behaviors. Within the WIL context, students who receive meaningful work experiences, constructive supervision, and developmental feedback are more likely to feel valued and acknowledged. These perceptions foster stronger commitment toward learning and career goals, which in turn promote higher levels of work readiness.

Empirically, the mediating role of student commitment reinforces the argument that affective factors play a significant role in the formation of work readiness. Contemporary studies in reputable journals highlight that student engagement and commitment function as psychological mechanisms linking authentic learning experiences with career competence development (Naseer et al., 2025; Liu et al., 2023). These findings underscore that work readiness is not merely the accumulation of technical skills but rather the outcome of integrating experience, reflective processes, and psychological investment in learning.

Conclusion

This study shows that Work-Integrated Learning (WIL) plays an important role in improving students' work readiness, both directly and through student commitment as a mediating variable. The findings indicate that WIL not only influences work readiness but also strengthens student commitment, which in turn contributes to how well students are prepared to enter the workforce. In addition, student commitment was found to partially mediate the relationship between WIL and work readiness. These results suggest that workplace experience gained through WIL does not automatically lead to optimal work readiness. Such experience becomes more meaningful when students are actively involved, emotionally engaged, and able to reflect on and make sense of their learning process. In this regard, student commitment serves as an important link between work experience and the



development of work readiness. From an educational perspective, the findings imply that the implementation of WIL should not be limited to placing students in workplace settings.

Recommendation

Higher education institutions need to develop WIL programs more thoughtfully by embedding more structured, reflective, and mentoring activities over the internship period. For instance, internship program administrators could introduce weekly reflective journals to encourage students to critically evaluate their workplace experiences, to identify learning challenges, and to relate practical activities to academic learning. In addition, portfolio-based mentoring could be implemented to facilitate ongoing dialogue between students, academic supervisors, and industry mentors about competency development and professional growth. Regular formative feedback sessions are also essential to improve students' reflective learning and engagement. It is essential to ensure that workplace experiences are aligned with intended learning outcomes so that students can effectively transform their experiences into relevant professional competencies. The study highlights that the effectiveness of WIL is not only determined by the availability of workplace exposure but also by the quality of students' psychological engagement in the learning process. Therefore, efforts to improve students' work readiness should focus on strengthening both experiential learning practices and meaningful student involvement.

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