



JIPTEK: Jurnal Ilmiah Pendidikan Teknik dan Kejuruan

Jurnal Homepage: <https://jurnal.uns.ac.id/jptk>

Theoretical Foundations of Work-Based Learning in Vocational Education: A Narrative Literature Review (2021–2025)

Budiyanto^{1*}, Tri Wrahatnolo², Heru Arizal³, Achmad Imam Agung⁴

^{1*,2,3,4} Program Studi Pendidikan Teknologi Kejuruan, Sekolah Pascasarjana, Universitas Negeri Surabaya, Indonesia

Email: 25070895038@mhs.unesa.ac.id

ABSTRACT

Studies on Work-Based Learning (WBL) in vocational education published during 2021–2025 demonstrate rapid growth, reflecting the increasing demand for graduates equipped with technical competence, adaptability, and employability skills. However, WBL implementation remains largely focused on workplace practice, while reflective learning, authentic assessment, digital technology integration, and supportive policy frameworks have yet to be systematically embedded. This study aims to identify, map, and analyze the theoretical foundations of Work-Based Learning in vocational education through a Narrative Literature Review. The review examined 14 journal articles published between 2021 and 2025 and retrieved from the Scopus and Google Scholar databases using structured inclusion and exclusion criteria. The synthesis identified five major themes: competency and employability development, supervision and assessment, education–industry collaboration, technology and gamification integration, and discipline-specific pedagogy. The findings indicate that WBL has expanded considerably; however, its implementation is constrained by fragmented instructional design, limited authentic assessment, and insufficient policy support for sustainable education–industry collaboration. WBL effectiveness depends on authentic workplace experiences, reflective learning, effective supervision, authentic assessment, and strong industry partnerships. These findings provide both a conceptual foundation and practical implications for vocational education policymakers to strengthen WBL implementation standards, enhance industry collaboration, and accelerate digital technology integration into vocational curricula.

Keywords: *Work-Based Learning; Vocational Education; Digital Transformation*

JIPTEK: Jurnal Ilmiah Pendidikan Teknik dan Kejuruan
Vol 19 Issue 2 2026
DOI: <https://doi.org/10.20961/jiptek.vyyix.xxxxx>
© 2026 The Authors. Published by Universitas Sebelas Maret.
This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

INTRODUCTION

The transformation of vocational education in the competency-based industrial era has created an increasingly strong demand for learning systems that effectively connect academic knowledge with the needs of the workplace.

Vocational education is no longer intended solely to produce graduates with technical skills but also individuals who are capable of adapting to technological changes, solving problems, collaborating effectively, and meeting the continuously evolving competency demands of industry. Within this context, strengthening learning processes that integrate workplace experience with academic learning has become

one of the key strategies for improving the quality of vocational education graduates.

Work-Based Learning (WBL) is an educational approach designed to integrate learning processes in educational institutions with authentic workplace experiences in industrial settings. Through WBL, students are provided with opportunities to learn professional work procedures, organizational culture, the use of technology, and the practical application of competencies within real working environments. This approach is widely recognized as an effective means of reducing the gap between graduates' competencies and labor market requirements, thereby becoming one of the principal strategies for developing competency-based vocational education (Mahfud, Winnarko, & Kusuma, 2025).

Although the implementation of WBL has become increasingly widespread across vocational education institutions, its practice continues to face various challenges. In many cases, WBL is still understood merely as internships or industrial placements that primarily emphasize task completion and the acquisition of technical skills. Consequently, the workplace experiences gained by students are not yet fully integrated with processes of reflection, conceptualization, and the development of academic knowledge. As a result, practical experiences do not always evolve into comprehensive and sustainable professional competencies.

These challenges indicate that the effectiveness of Work-Based Learning (WBL) is determined not only by the availability of workplace experience but also by the quality of

the learning processes that accompany it. Workplace experience should be intentionally designed as a learning resource that enables students to engage in reflection, receive constructive feedback, connect their experiences with academic concepts, and apply their acquired knowledge to different contexts. However, numerous studies have shown that the absence of a systematic experience-based instructional design remains one of the major factors limiting the effectiveness of WBL implementation in vocational education (Rienties et al., 2023).

From a learning perspective, Experiential Learning provides one of the most relevant theoretical foundations for explaining how learning occurs within Work-Based Learning. This theory emphasizes that learning takes place through a continuous cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation, enabling students not only to gain workplace experience but also to develop conceptual understanding and professional competencies in a sustained manner. Therefore, strengthening the Experiential Learning perspective is essential for explaining the learning mechanisms that underpin the implementation of WBL in vocational education (Mayombe, 2024).

Previous studies have generally focused on the effectiveness of Work-Based Learning (WBL) implementation, graduate employability outcomes, or the development of industry-based curriculum models. However, there remains a limited body of research that systematically synthesizes the theoretical foundations underpinning Work-Based Learning in

vocational education. A comprehensive understanding of these conceptual foundations is essential for explaining how work-based learning processes contribute to the development of students' competencies and for informing the design of learning models that are more responsive to the dynamic demands of the workplace.

Based on this context, the present study aims to identify, map, and analyze the theoretical foundations of Work-Based Learning in vocational education through a Narrative Literature Review of publications published between 2021 and 2025. The study focuses not only on the implementation of WBL but also on the relationship between work-based learning practices and Experiential Learning theory as their underlying conceptual foundation.

The contribution of this study is to provide a conceptual synthesis of the theoretical foundations of Work-Based Learning in vocational education, identify existing research gaps, and propose a conceptual framework that can serve as a reference for the development of curricula, instructional design, and future research on Work-Based Learning that is more reflective, integrated, and aligned with the evolving needs of the workplace.

RESEARCH METHODS

This study employed a Narrative Literature Review (NLR) approach to identify, evaluate, and synthesize scientific studies related to Work-Based Learning (WBL) in vocational education. The NLR approach was selected because the topic of WBL encompasses a broad scope of inquiry and involves diverse contexts, including

industry-based learning, internships, teaching factories, work-based projects, and the integration of technology into vocational education. NLR enables researchers to provide a more comprehensive understanding of the development of concepts, variations in implementation, empirical findings, and research gaps that warrant further investigation. Although narrative in nature, the literature search and selection processes were conducted systematically to ensure the transparency, consistency, and traceability of the review. The review procedure was guided by the principles of literature review development, including defining the scope of the review, searching for relevant sources, organizing the information, conducting critical analysis, and developing an argumentative synthesis (Machi & McEvoy, 2021). The preparation of this NLR also considered the importance of clearly defining the review boundaries, providing a rationale for source selection, and explicitly describing the interpretation process to ensure that the review extends beyond merely summarizing previous studies (Byrne, 2016; Sukhera, 2022).

The literature search was conducted through the Scopus and Google Scholar databases in June 2026. Scopus was used to retrieve peer-reviewed international publications, while Google Scholar was employed to supplement the review with relevant national articles and publications that were not fully indexed in Scopus. The search was performed using combinations of English and Indonesian keywords. The primary search string was: (“work-based learning” OR “work integrated learning” OR “workplace learning”

OR “industry-based learning”) AND (“vocational education” OR “technical and vocational education and training” OR “TVET” OR “SMK”) AND (“work readiness” OR “employability” OR “competence” OR “career readiness”). These keywords were further refined according to the characteristics of the retrieved articles by incorporating additional terms such as “industry partnership,” “supervision,” “assessment,” “gamification,” “teaching factory,” and “vocational students.”

A total of 23 articles were identified and systematically documented in a literature matrix containing information on the authors, year of publication, country or research context, research objectives, methodology, participants or data sources, WBL focus, key findings, research limitations, and implications for future research.

The article selection process involved screening the titles, abstracts, and full texts of the retrieved publications. Articles were included in the review if they met the following inclusion criteria: (1) published between 2021 and 2025; (2) focused on Work-Based Learning (WBL) or equivalent concepts in vocational education; (3) available as full-text peer-reviewed journal articles; (4) written in either Indonesian or English; and (5) directly relevant to competencies, work readiness, industry-based learning, school–industry collaboration, supervision, assessment, learning technologies, or career development. Articles published in Scopus-indexed journals, reputable national journals, or journals with verifiable metadata and Digital Object Identifiers (DOIs) were given higher priority. Conversely, publications were

excluded if they consisted of non-scholarly materials, editorials, opinion pieces, news articles, theses, books, duplicate publications, conference proceedings without a clearly defined peer-review process, or studies that merely mentioned WBL without explicitly examining its implementation in vocational education. The quality of the selected studies was critically assessed by considering the clarity of the research objectives, the appropriateness of the research methods, the adequacy of the data or participants, the suitability of the analytical techniques, the consistency between the findings and conclusions, and the limitations acknowledged by the authors. The application of these criteria was intended to minimize the risk of subjective source selection and to ensure that the included articles genuinely supported the focus of the review (Ferrari, 2015; Green et al., 2006).

Following the screening process, 14 articles that met the inclusion criteria were analyzed using a narrative synthesis approach. The analysis involved a comprehensive reading of each article, identification of the main ideas, comparison of research methods and findings, and categorization of the findings into conceptually related themes. The synthesis process included coding the extracted information, grouping the findings, identifying patterns of similarities and differences, evaluating the strengths and limitations of the studies, and identifying existing research gaps.

Based on this process, the findings were organized into five major themes: (1) competency- and work-readiness-based frameworks; (2) integrated assessment and

supervision; (3) industry–academia collaboration; (4) the integration of technology in Work-Based Learning (WBL); and (5) discipline-specific pedagogy and future research agendas. The synthesized findings were subsequently presented in the form of an analytical narrative accompanied by summary tables to provide a clearer understanding of the relationships among previous studies, key findings, study limitations, and existing research gaps. Through this procedure, the present study is expected to provide a systematic overview of the development of Work-Based Learning (WBL) research in vocational education while also enabling other researchers to replicate the literature search, selection, and synthesis strategies for similar research topics.

RESULTS OF RESEARCH AND DISCUSSION

The narrative review identified 14 articles that were included in this study. These articles were published between 2021 and 2025, with the highest number of publications recorded in 2025, comprising five articles. Publications from 2022 and 2023 each accounted for three articles, while 2021 and 2024 contributed one to two articles, respectively. Overall, the analyzed studies were conducted within the context of vocational education in Indonesia, Malaysia, Norway, Zimbabwe, Türkiye, Australia, and the United States.

The studies focused on diverse participant groups, including vocational high school students, vocational education students, interns, early-career workers, and small business

practitioners. This diversity of contexts demonstrates that Work-Based Learning (WBL) has been implemented across various educational levels and fields of specialization, including automotive technology, construction, programming, business, engineering, and vocational school-based productive learning.

The methodological approaches employed across the reviewed studies were highly diverse. Several studies adopted quantitative, survey, quasi-experimental, and research and development (R&D) designs to examine the effects of Work-Based Learning (WBL) on competency development and work readiness. Qualitative studies were conducted to explore the experiences of interns, workplace support, and career resource development. In addition, the review identified studies employing mixed-methods approaches, literature reviews, systematic reviews, and scientometric analyses. The dominant themes identified in the literature included the enhancement of occupational competencies and work readiness, the quality of supervision and assessment, school–industry partnerships, the integration of learning technologies, gamification, and the development of Work-Based Learning (WBL) frameworks for vocational education.

The first theme indicates that the majority of the reviewed studies position Work-Based Learning (WBL) as an instructional approach for enhancing students' technical competencies, non-technical competencies, and work readiness. Sudarsono (2022), through the development of the WBL-WoRe model, found that work-based learning significantly improved the work readiness of vocational high school

students in automotive programs across the domains of attitudes, knowledge, and skills. Similar findings were reported by Ramanda et al. (2025), who demonstrated that the implementation of WBL in the Building Information Modeling and Design program enhanced both students' technical and non-technical competencies while strengthening partnerships between vocational schools and industry partners.

The quasi-experimental study demonstrated that work-based project learning enhances vocational high school students' technical skills, problem-solving abilities, collaboration and communication skills, as well as their capacity for self-directed learning. Furthermore, Jackson et al. (2022) found that industry employers regard teamwork, communication, initiative, creativity, problem-solving, and adaptability as essential professional capabilities for early-career employees. Overall, the studies within this theme indicate that Work-Based Learning (WBL) is widely employed as a means of connecting learning experiences with the development of the competencies required in the workplace.

The second theme concerns the quality of supervision, assessment, learning experiences, and career development within the implementation of Work-Based Learning (WBL). Phuthi & Mpofu (2021) found that the supervision and assessment practices associated with industry-based learning across five universities in Zimbabwe continued to face challenges related to supervisors' competencies, the clarity of assessment procedures, faculty

supervision visits, and student mentoring in the workplace. These findings suggest that the effectiveness of WBL is determined not only by students' placement in industry but also by the quality of supervision and assessment provided throughout the learning process.

Rohanai et al. (2025) demonstrated that learning and teaching experiences are positively associated with the effectiveness of Work-Based Learning (WBL) within the context of Technical and Vocational Education and Training (TVET). Meanwhile, Gerçek & Özveren (2024) found that internship experiences contribute to the development of students' career resources, particularly by expanding professional networks, enhancing communication skills, improving job-search competencies, and facilitating the application of theoretical knowledge to professional practice. Hanssen & Utvær (2022) also reported that emotional, social, professional, relational, and material resources play significant roles in shaping interns' learning experiences. Collectively, the reviewed literature indicates that supervision, learning experiences, social support, and the quality of workplace interactions constitute key areas of focus in Work-Based Learning (WBL) research.

The third theme demonstrates that partnerships between educational institutions and industry are among the most frequently discussed elements in Work-Based Learning (WBL) research. Through a literature review, Jalinus et al. (2023) identified three principal forms of WBL in vocational engineering education: integrated student work, teaching factory, and industrial internships. These three

models illustrate that WBL can be implemented through a variety of learning activities that connect educational processes with production activities, authentic workplace tasks, and real-world industrial experiences.

The third theme highlights that partnerships between educational institutions and industry constitute a recurring element in Work-Based Learning (WBL) research.

Anwar et al. (2023) demonstrated that industry-based learning enhances vocational high school students' conceptual understanding of thermodynamics while helping them connect theoretical knowledge with its practical applications in industrial settings. In a different context, Ramanda et al. (2025) reported that industry involvement in the learning process enhances the relevance of students' competencies to the needs of the construction sector. Jackson et al. (2022) also found that industry sector characteristics and organizational size influence how companies develop the capabilities of early-career employees. Overall, the studies within this theme indicate that collaboration among schools, higher education institutions, supervisors, and industry partners constitutes a fundamental component of effective Work-Based Learning (WBL) implementation.

The fourth theme reflects the growing body of Work-Based Learning (WBL) research that integrates technology and innovative instructional design. Zhao & Fang (2023) compared lecture-based website development training with gamification-based training among small business owners. Their findings revealed that the gamification-based approach produced

higher learning outcomes, greater learner engagement, longer learning duration, and higher levels of participant satisfaction than the conventional lecture-based method. These findings suggest that game-based elements can be effectively incorporated into work-based learning to enhance learner participation and engagement.

Jalinus et al. (2023) also found that the implementation of gamification within Work-Based Learning (WBL) enhanced the coding skills of vocational education students. The use of points, badges, leaderboards, and challenges encouraged students to engage more actively in completing programming tasks designed to simulate authentic workplace situations. In addition to gamification, Hafid & Kamaludin (2024) identified literacy and numeracy as essential components of WBL instructional materials for automotive vocational education. Their study demonstrated that technical literacy is required for understanding work manuals and safety instructions, whereas numeracy is essential for performing calculations, processing data, and solving technical problems. This pattern suggests that Work-Based Learning (WBL) is increasingly being developed through the integration of technology, digital competencies, and the strengthening of foundational skills that are directly relevant to workplace demands.

The fifth theme encompasses studies that map the development of Work-Based Learning (WBL) and propose implementation frameworks for vocational education. Mahfud, Winnarko, & Kasuma (2025) conducted a scientometric analysis of 2,570 publications on WBL and

identified six major research clusters: recognition of prior learning, professional competencies, workplace problem-based learning, WBL curriculum, quality management, and task performance evaluation. These findings indicate that WBL research has evolved from a primary focus on occupational skills toward broader issues related to curriculum development, evaluation, and the quality of program implementation.

Putra et al. (2025), through a systematic review of 61 articles, identified five principal Work-Integrated Learning (WIL) frameworks in vocational education: competency-based frameworks, integrated assessment, industry–academia collaboration, technology enhancement, and discipline-specific pedagogy. These frameworks are consistent with the patterns identified in the studies analyzed in the present review. Descriptively, these two studies indicate that WBL research in vocational education has expanded to encompass competencies, curriculum development, industry partnerships, technology integration, assessment, and contextualized learning.

Based on the synthesis of the reviewed literature, research on Work-Based Learning (WBL) in vocational education demonstrates a strong emphasis on the development of students' occupational competencies and work readiness. In addition, the literature reveals increasing attention to the quality of supervision and assessment, partnerships between educational institutions and industry, technology integration, and the development of WBL models and conceptual frameworks. These findings suggest that WBL extends beyond workplace practice

alone, encompassing learning processes, assessment, environmental support, and industry engagement as integral components of vocational education.

Table 1. Summary of the Reviewed Articles

No.	Author(s) and Year	Key Findings
1	Phuthi and Mpofu (2021)	WBL supervision and assessment faced challenges related to supervisor quality, faculty supervision visits, and assessment procedures.
2	Sударsono (2022)	The WBL-WoRe model was effective in improving the work readiness of automotive vocational high school students.
3	Jackson et al. (2022)	The professional capabilities of early-career employees were influenced by industry sector, organizational size, and workplace development strategies.
4	Hanssen and Utvær (2022)	Emotional, social, professional, and material resources supported interns' Work-Based Learning experiences.
5	Zhao and Fang (2023)	Gamification enhanced learning outcomes, learner engagement,

No.	Author(s) and Year	Key Findings
		learning duration, and participant satisfaction.
6	Anwar et al. (2023)	Industry-based learning improved vocational high school students' conceptual understanding and learning engagement.
7	Jalinus et al. (2023)	The principal forms of WBL in engineering vocational education included integrated student work, teaching factory, and industrial internships.
8	Hafid and Kamaludin (2024)	WBL can integrate literacy and numeracy into productive learning in vocational high schools.
9	Gerçek and Özveren (2024)	Internship experiences supported the development of professional networks, communication skills, job-search competencies, and the application of theory to practice.
10	Mahfud et al. (2025)	WBL research has expanded to encompass competencies, curriculum development, quality management, and

No.	Author(s) and Year	Key Findings
		task performance evaluation.
11	Rohanai et al. (2025)	Teaching and learning experiences were positively associated with the effectiveness of WBL in Technical and Vocational Education and Training (TVET).
12	Ramanda et al. (2025)	WBL enhanced students' technical and non-technical competencies while strengthening school–industry partnerships.
13	Jalinus et al. (2025)	Gamification in WBL improved the coding skills of vocational education students.
14	Putra et al. (2025)	Five major Work-Integrated Learning (WIL) frameworks were identified: competency-based frameworks, integrated assessment, industry–academia collaboration, technology enhancement, and discipline-specific pedagogy.

The synthesis of the literature indicates that Work-Based Learning (WBL) should not be understood merely as workplace practice or the

placement of students in industrial settings. Rather, the effectiveness of WBL emerges when workplace experience is intentionally designed as an authentic learning process that integrates theoretical knowledge, real-world problem solving, reflection, and the development of professional competencies. The findings of Sudarsono (2022) and Ramanda et al. (2025) demonstrate that WBL contributes to the enhancement of students' technical competencies, non-technical skills, and work readiness. This pattern is consistent with Constructivist Learning Theory, which conceptualizes learning as an active process through which individuals construct understanding by interacting with meaningful tasks, environments, and experiences. Within the context of vocational education, the workplace provides authentic problems that enable students to test theoretical concepts, make informed decisions, and adapt their actions to meet industry standards. Accordingly, the primary contribution of WBL extends beyond the transfer of technical skills to the development of learners' ability to integrate knowledge, practical experience, and professional attitudes simultaneously. This emphasis on active, contextualized, and reflective learning is also consistent with studies on the gamification of WBL, which position students as active participants in learning through the completion of challenges based on authentic workplace situations (Jalinus et al., 2023).

Workplace experience does not automatically result in high-quality learning. The findings of (Phuthi & Mpofu, 2021) indicate that inadequate supervision, unclear assessment

procedures, and limited workplace mentoring may diminish students' confidence in industry-based learning processes. These findings extend the competency-based perspective by emphasizing that the quality of Work-Based Learning (WBL) is also determined by the relational system among students, teachers, industry mentors, and educational institutions.

From the perspective of Social Cognitive Career Theory, workplace experience can foster the development of career resources when students receive social support, opportunities to build self-efficacy, and authentic exposure to workplace demands. This interpretation is consistent with the findings of Gerçek & Özveren (2024), who reported that internship experiences facilitate the development of professional networks, communication skills, and job-search competencies. Furthermore, Hanssen & Utvær (2022) emphasized that emotional, social, professional, and material resources shape the meaningfulness of interns' learning experiences. From a theoretical standpoint, these findings suggest that Work-Based Learning (WBL) should be conceptualized as a social learning ecosystem, rather than merely as a mechanism for providing workplace experience.

The advancement of technology and gamification has further expanded the implementation of Work-Based Learning (WBL) in vocational education. Zhao & Fang (2023) and (Jalinus et al., 2023) demonstrated that the use of game elements, such as challenges, feedback, points, badges, and leaderboards, can enhance students' engagement, persistence, and learning outcomes. These

findings can be interpreted through the lens of Experiential Learning, as gamification enables learners to engage in iterative cycles of experience, experimentation, reflection on outcomes, and strategy refinement. Nevertheless, technology should not be regarded as a substitute for authentic industry experience. Rather, its pedagogical value lies in its capacity to reinforce skill development, provide timely feedback, and create simulated learning environments before students encounter real workplace situations. In this regard, the integration of technical literacy and numeracy, as proposed by Hafid & Kamaludin (2024), becomes particularly important. Students are expected not only to use technology effectively but also to interpret technical manuals, analyze data, perform technical calculations, and make informed decisions based on available information.

From a theoretical perspective, the findings of this synthesis enrich the understanding that effective Work-Based Learning (WBL) is built upon the integration of contextual learning, industry engagement, adequate supervision, authentic assessment, and technological support. From a practical perspective, vocational education institutions should collaboratively design curricula with industry partners, clearly define the roles of workplace mentors, employ multi-stakeholder assessment approaches, and incorporate reflective learning activities that connect workplace experiences with intended learning outcomes.

The framework identified by Putra et al. (2025) and the mapping of research trends

conducted by (Mahfud, Winnarko, & Kusuma, 2025) indicate that WBL research has evolved toward a broader focus on competencies, assessment, industry partnerships, technology integration, and discipline-specific pedagogy. Future research should examine WBL models through longitudinal and cross-disciplinary studies, particularly to evaluate their sustained impact on work readiness, career adaptability, and graduates' successful transition into the workforce. Furthermore, future studies should develop comprehensive evaluation models that integrate assessments from students, teachers, and industry mentors, together with project portfolios and graduate performance data, to provide a more holistic measurement of the effectiveness of Work-Based Learning (WBL).

CONCLUSIONS AND SUGGESTIONS

Conclusions

This Narrative Literature Review demonstrates that Work-Based Learning (WBL) in vocational education has evolved into an instructional approach that integrates authentic workplace experiences, the development of technical and non-technical competencies, industry engagement, supervision, assessment, and technological support to enhance students' work readiness. Conceptually, this review contributes by identifying five major directions in WBL research: (1) competency development and work readiness; (2) supervision and assessment; (3) education–industry collaboration; (4) technology integration and gamification; and (5) discipline-specific pedagogy. These findings confirm that the effectiveness of WBL is determined not merely

by the provision of workplace practice but also by the quality of instructional design, mentor involvement, the alignment of workplace tasks with industry needs, and students' reflective learning processes.

From a theoretical perspective, the findings reinforce the understanding of WBL as a constructive and contextual learning ecosystem. From a practical perspective, vocational education institutions should establish more structured partnerships with industry, implement authentic multi-stakeholder assessment practices, and integrate technology appropriately to support meaningful workplace learning experiences.

This review is subject to several limitations. First, it included only articles published between 2021 and 2025. Second, the literature search was limited to publications indexed in Scopus and Google Scholar, meaning that relevant studies from other academic databases may not have been identified. Therefore, future research should undertake longitudinal, cross-disciplinary, and cross-regional empirical studies to examine the long-term impact of Work-Based Learning (WBL) on students' work readiness, career adaptability, and successful transition into the workforce.

Suggestions

This study is subject to limitations inherent in the Narrative Literature Review (NLR) approach, particularly due to its interpretative nature and its lack of full adherence to the rigorous literature selection procedures typically employed in systematic reviews. Consequently, variations in the

interpretation of the reviewed literature may occur, meaning that the findings should be understood primarily as a conceptual mapping and thematic synthesis rather than as empirical generalizations.

Accordingly, future research is recommended to adopt systematic literature review (SLR) or mixed-method review approaches to enhance the methodological rigor and empirical validity of the findings. In addition, subsequent studies should empirically examine the implementation of Experiential Learning integration within Work-Based Learning (WBL) through field-based research or pedagogical experiments in vocational education settings.

Therefore, the findings of the present review should be regarded as an initial conceptual foundation that remains open to further refinement, validation, and extension through broader empirical investigations.

REFERENCE

- Anwar, Moh. S., Shaleh, M., & Triono, B. (2023). Pelatihan Program Pembelajaran Berbasis Industri di SMK Bhakti 1 Jombang. *ALKHIDMAH: Jurnal Pengabdian Dan Kemitraan Masyarakat*, 1(4), 233–242. <https://doi.org/https://doi.org/10.59246/j8n8vy31>
- Byrne, J. A. (2016). Improving the Peer Review of Narrative Literature Reviews. *Research Integrity and Peer Review*, 1(1), 12. <https://doi.org/10.1186/s41073-016-0019-2>
- Ferrari, R. (2015). Writing Narrative Style Literature Reviews. *Medical Writing*, 24(4), 230–235. <https://doi.org/10.1179/2047480615Z.00000000329>

- Gerçek, M., & Özveren, C. G. (2024). Developing Career Resources Through Work-Based Learning: A Qualitative Study on Internship Experiences. *Business and Economics Research Journal*, 15(3), 291–307. <https://doi.org/10.20409/berj.2024.446>
- Green, B. N., Johnson, C. D., & Adams, A. (2006). Writing Narrative Literature Reviews for Peer-Reviewed Journals: Secrets of the Trade. *Journal of Chiropractic Medicine*, 5(3), 101–117. [https://doi.org/10.1016/S0899-3467\(07\)60142-6](https://doi.org/10.1016/S0899-3467(07)60142-6)
- Hafid, D., & Kamaludin, M. (2024). Literasi Numerasi pada Perangkat Pembelajaran di SMK. *Jurnal Pendidikan Indonesia*, 5(8), 613–619.
- Hanssen, G., & Utvær, B. K. (2022). Sense of Coherence Among Apprentices in Vocational Education and Training in Norway: Exploring General Resistance Resources in Work-Based Learning. *International Journal for Research in Vocational Education and Training*, 9(3), 363–389. <https://doi.org/10.13152/IJRVET.9.3.4>
- Jackson, D., Shan, H., & Meek, S. (2022). Employer Development of Professional Capabilities Among Early Career Workers and Implications for the Design of Work-Based Learning. *The International Journal of Management Education*, 20, 100692. <https://doi.org/10.1016/j.ijme.2022.100692>
- Jalinus, N., Haq, S., & Kassymova, G. K. (2023). Work-based learning for engineering vocational education. *Journal of Engineering Education*. <https://doi.org/10.58712/jerel.v2i1.22>
- Machi, L. A., & McEvoy, B. T. (2021). *The Literature Review: Six Steps to Success* (4th ed.). Corwin.
- Mahfud, T., Winnarko, H., & Kasuma, J. (2025). Work-based learning in vocational education over past two decades: A scientometric analysis. *SCT Proceedings*. <https://dialnet.unirioja.es/servlet/articulo?codigo=10045026>
- Mahfud, T., Winnarko, H., & Kusuma, B. J. (2025). Work-Based Learning in Vocational Education over Past Two Decades: A Scientometric and Future Research Agenda. *SCT Proceedings in Interdisciplinary Insights and Innovations*, 3, 529. <https://doi.org/10.56294/piii2025529>
- Mayombe, C. (2024). Applying experiential learning theory in TVET. *Journal of Education*. <https://www.scielo.org.za/pdf/jed/n96/13.pdf>
- Phuthi, N., & Mpofu, L. (2021). The Quality of Supervision and Assessment in Industry-Based Learning. *International Journal of Social Learning*, 2(1), 128–143. <https://doi.org/10.47134/ijsl.v2i1.98>
- Putra, R., Nugroho, A., & Santoso, B. (2025). Work-integrated learning framework in vocational and higher education. *Journal of Work-Integrated Learning*.
- Ramanda, D., Prima, F. K., Arifin, A. S. R., & Rifwan, F. (2025). Analisis Penerapan Model Work Based Learning pada Program Keahlian Desain Pemodelan Informasi Bangunan di SMK Negeri 1 Padang. *Jurnal Applied Science in Civil Engineering*, 6(4), 495–500. <https://doi.org/10.24036/asce.v6i4.139183>
- Rienties, B., Divjak, B., Iniesto, F., & Pažur Aničić, K. (2023). Online work-based learning: A systematic literature review. *Springer*. <https://link.springer.com/article/10.1007/s11159-023-10008-y>

- Rohanai, R., Othman, H., Ahmad, M. F., Razali, S. S., & Sulaiman, J. (2025). Work-Based Learning in TVET: A Perspective on Students' Experiences. *Journal of Engineering Education Transformations*, 39(1).
<https://doi.org/10.16920/jeet/2025/v39i1/25111>
- Sudarsono, B. (2022). Development of Work-Based Learning Models Based on Work Readiness (WBL-WoRe). *Jurnal Iqra': Kajian Ilmu Pendidikan*, 7(1), 44–62.
<https://doi.org/10.25217/ji.v7i1.2118>
- Sukhera, J. (2022). Narrative Reviews: Flexible, Rigorous, and Practical. *Journal of Graduate Medical Education*, 14(4), 414–417. <https://doi.org/10.4300/JGME-D-22-00480.1>
- Zhao, F., & Fang, X. (2023). Gamification Supporting Small Business Owners' Work-Based Learning. *Journal of Information Technology Education: Research*, 22, 177–197.
<https://doi.org/10.28945/5095>