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Bridging Theory and Practice: a Systematic Review of Work-Integrated Learning Frameworks in Vocational Education

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ABSTRACT

Work-Integrated Learning (WIL) has become essential in vocational education for bridging academic learning with workplace experience. This systematic review analyzes 61 articles on WIL frameworks published between 2019-2024 using the PRISMA protocol. The analysis identifies five main types of WIL frameworks: Competency-Based Framework (focusing on industry-relevant competencies), Integrated Evaluation Framework (emphasizing comprehensive assessment), Industry-Academic Collaborative Framework (developing effective institutional-industry partnerships), Technology-Enhanced WIL Framework (utilizing technology to expand learning experiences), and Field-Specific Pedagogical Framework (tailoring approaches to specific disciplines). Publication trends show significant growth in WIL framework research, with a peak of 17 articles in 2024, reflecting increasing recognition of work-based learning's importance. The review reveals several research gaps, including limited investigation of technology integration's long-term impact, need for multi-stakeholder evaluation approaches, frameworks that effectively combine various WIL modalities, limited understanding of cross-disciplinary framework transferability, and frameworks that systematically incorporate evolving workforce demands. These findings provide direction for future WIL framework development and implementation, contributing to more effective integration of academic learning with practical work experience in vocational education. These findings provide valuable direction for the future development and implementation of Work-Integrated Learning frameworks.

Introduction

Work-Integrated Learning (WIL) serves as a crucial educational methodology that bridges theoretical academic knowledge and practical professional experience, enhancing students' workplace readiness through the application of classroom concepts in real-world settings (Billett, 2009; Smith, 2012). The success of WIL initiatives depends fundamentally on collaborative relationships between educational institutions, students, employers, and industry professionals, facilitated through frameworks such as the Stakeholder Interaction Framework and electronic WIL Classification System (Jackson, 2015; Patrick et al., 2008; Ferns, Russell, & Kay, 2020). These approaches enable effective interaction based on mutual trust, clearly defined expectations, and operational coordination, while student engagement in reflective practice further enhances experiential learning quality (Smith, Ferns, & Russell, 2016; Jackson, 2017; Putra et al., 2022).

Despite its benefits, WIL implementation faces significant challenges, including adapting to evolving digital workforce requirements, effectively integrating theory with practice in academic-industry partnerships, and responding to disruptive events like the COVID-19 pandemic, which necessitates more adaptable frameworks supporting remote and blended learning environments (Bridgstock, 2009; Coll & Zegwaard, 2006; Narayan et al., 2021). To address these challenges, a holistic WIL framework must incorporate authentic experiences that mirror professional environments, comprehensive learning support systems, and coherent alignment between instructional approaches, learning activities, and assessment methods (Billett, 2009; Smith, 2012; Jackson, 2015; Ferns, Russell, & Kay, 2020).

Furthermore, effective WIL programs require access to qualified supervisors for guidance and comprehensive orientation processes to help students understand workplace norms (Patrick et al., 2008; Smith, Ferns, & Russell, 2016). Additional crucial elements include ensuring inclusivity for students from diverse backgrounds, implementing project-based and multidisciplinary learning approaches to enhance professional versatility, integrating comprehensive feedback mechanisms from both academic and industry supervisors, and progressively integrating WIL activities throughout educational programs to support incremental skill development (Bridgstock, 2009; Cooper, Orrell, & Bowden, 2010; Zegwaard & Rowe, 2019; Narayan et al., 2021). These components collectively create WIL frameworks that effectively prepare students for professional environments while meeting both educational outcomes and industry needs.

In recent years, research on Work-Integrated Learning (WIL) has grown rapidly. However, WIL implementation remains a major challenge in education. Therefore, education stakeholders need to

understand WIL methods and applications to optimize their implementation. This study aims to identify the potential and relevance of WIL learning models in educational institutions (Smith et al., 2020, Billett, 2021). This article will focus on:

1. What are Work Integrated Learning Frameworks?
2. What are the Research Trends in Work Integrated Learning Frameworks?

Method

This research uses a systematic literature review (SLR) approach by adopting the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to analyze Work Integrated Learning (WIL) frameworks in vocational education. PRISMA was chosen as it is an internationally recognized guideline for systematic review reporting (Page et al., 2021).

1. Search Strategy

Literature search was conducted on the Scopus database as one of the largest academic databases covering various disciplines, and 268 articles were obtained (Martín-Martín et al., 2021). Boolean search used the keywords ("Work Integrated Learning" OR "Work-Integrated Learning") AND "Framework". Restriction was placed on peer-reviewed articles published from January 2019 to December 2024.

2. Inclusion, Exclusion, and Eligibility Criteria

Article selection was conducted based on predetermined inclusion and exclusion criteria (Jackson & Collings, 2022). These criteria were developed to ensure that selected articles aligned with research objectives and had adequate methodological quality. Table 1 presents the details of inclusion and exclusion criteria used in this study. Each article identified through systematic search was evaluated based on these criteria. The evaluation process was conducted in stages, starting with title and abstract screening, followed by full-text examination for articles meeting initial criteria. Based on existing criteria, 61 articles meeting the inclusion criteria were obtained for analysis.

The selection process of the studies is illustrated in the PRISMA flow diagram presented in Figure 1. Initially, a total of 268 records were identified from the Scopus database. Following a systematic screening process where non-relevant records and unretrievable reports were excluded based on the established criteria, a final total of 61 studies were deemed eligible and included in this review.

Table 1. Inclusion and Exclusion Criteria

No	Inclusion Criteria	Exclusion Criteria
1	Peer-reviewed articles from international journals or conference proceedings	Non-peer-reviewed articles (magazine articles, newspapers)
2	Publications in English	Publications in languages other than English
3	Discusses WIL framework development or implementation	Articles only discussing work-based learning without integration components
4	Articles with accessible full text	Duplicate publications or identical articles
5	Scopus-indexed articles	Articles without substantial framework discussion
6	Articles published January 2019 - December 2024	Grey literature (technical reports, working papers)

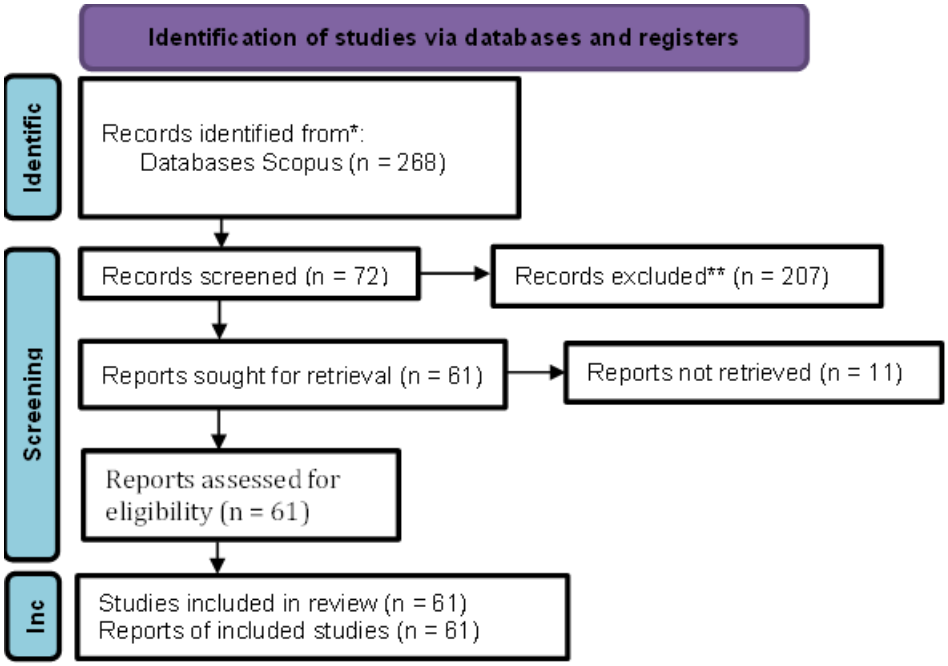

Fig 1: Stages of PRISMA: Data Extraction

This study used the visualization mapping method using the VOSviewer application to process bibliometric data for research publications. The articles retrieved were articles published in Google Scholar-indexed journals for the period 2012 to 2022. The use of Google Scholar as a source of data collection is due to its open-source nature and ability to index a broader range of publications. The

search keywords are "Gastronomy," OR " Gastrodiplomacy Culinary," OR "Gastrodiplomacy Tourism."

Search results are stored in two files, *.ris and *.csv. Data processing uses automatic analysis using the VOSviewer application and manual analysis using Microsoft Excel. Data mapping is done after the data selection process. Data mapping is analyzed to discover developments, research trends, and other fields and terms often associated with the study material in gastrodiplomacy culinary in Indonesian. The data that has been mapped is then analyzed to see how the development of research gastrodiplomacy culinary in Indonesia.

Result and Discussion

Work-Integrated Learning Framework

Work-Integrated Learning Framework is an educational approach that integrates academic learning with real work experience through collaboration between educational institutions and industry. The main objective of WIL is to enhance student work readiness by providing them opportunities to apply theory in practical contexts (Ortega-Sánchez et al., 2020). Academic and industry integration becomes a main component in this framework, where work experience gained by students must align with academic curriculum to support more applicable learning (Ortega-Sánchez et al., 2020). Thematic analysis identifies five main types of WIL frameworks:

A. Competency-Based Framework

a. Definition and Characteristics

The Competency-Based Framework focuses on developing and assessing specific competencies required for professional success. This framework identifies, defines, and measures industry-relevant competencies as the primary learning outcomes of WIL programs (Bisschoff & Massyn, 2024). The competency-based approach has gained increasing importance due to growing employer demands for work-ready graduates with demonstrable abilities (Janssens et al., 2024).

b. Key Components

Based on the analysis of articles in this category, the key components of the Competency-Based Framework include several aspects. First, Industry Competency Mapping involves identifying competencies relevant to industry needs through consultation with industry stakeholders (Bisschoff & Massyn, 2024). Second, Progressive Competency Development Structure encompasses a stepped approach to building competencies from basic to advanced levels (Fellner et al., 2024). Third, Standardized Assessment Rubrics establish measurable assessment criteria for each

identified competency (Makie et al., 2021). Fourth, Directed Reflection represents a reflection process that specifically analyzes competency development (Janssens et al., 2024). Fifth, Integration of Soft Skills and Hard Skills involves combining technical and non-technical skills within the competency development framework (Bisschoff & Massyn, 2024).

c. Implementation

The Competency-Based Framework is implemented through various strategies. These strategies include Employability Capital Development, which is a soft skills competency framework that enhances graduate employability through the development of psychological capital, social capital, identity capital, and human capital (Bisschoff and Massyn, 2024). Additionally, implementation also includes Profession-Based Competencies, which are requirements for competency development in health education, covering competency frameworks, reflection and feedback, assessment, and mentor involvement (Janssens et al., 2024). Another implementation is the Evidence-Based Development Model, which uses structural equation modeling to analyze the relationship between WIL and seven employability competencies in engineering students (Adegbite and Hoole, 2024).

d. Strengths and Challenges

The Competency-Based Framework has several strengths, including providing clarity on expected learning outcomes, facilitating alignment between education and industry needs, and providing a clear structure for professional development (Bisschoff & Massyn, 2024). Meanwhile, challenges faced include the risk of reductionism where complex competencies are simplified, difficulties in defining and measuring soft skills competencies, and the need to continuously update the framework according to changing industry needs (Janssens et al., 2023).

B. Integrated Evaluation Framework

a. Definition and Characteristics

The Integrated Evaluation Framework focuses on comprehensive and multi-perspective assessment approaches in WIL. This framework emphasizes the importance of integrating various evaluation methods to holistically measure WIL learning processes and outcomes (Young et al., 2024). This approach not only focuses on end results but also on the process of competency development and the impact of WIL on various stakeholders.

b. Key Components

Based on the analysis of articles in this category, the key components of the Integrated Evaluation Framework include several important aspects. First, Multi-Perspective Evaluation encompasses assessment from various stakeholders including students, academic supervisors,

industry mentors, and clients (Young et al., 2024). Second, Formative and Summative Assessment represents a combination of ongoing assessment during the process and final learning assessment (Young et al., 2024). Third, Impact Metrics are indicators that measure the impact of WIL on students, institutions, and industry partners (Mandal & Edwards, 2022). Fourth, Data Triangulation involves using various data sources to validate evaluation findings (Dlamini & Tsotetsi, 2024). Fifth, Continuous Improvement System includes feedback mechanisms for program improvement based on evaluation results (Young et al., 2024).

c. Implementation

The Integrated Evaluation Framework is implemented through various approaches, including the WIL Assessment Meta-Framework (WAM-F), which is the development of an assessment meta-framework that integrates three previously independent components: career development learning, transferable skills development, and reflection from theory-to-practice WIL experiences (Young et al., 2024). Another approach is the WIL Evaluation Framework (WEF), which is an approach to evaluating WIL with a focus on what, where, and how to evaluate WIL through case studies (Young et al., 2024). In addition, there is also the Engineering Employability Framework, which is the development of an assessment framework to measure the work readiness of engineering students through WIL with authentic assessment tasks (Mandal and Edwards, 2022).

d. Strengths and Challenges

The Integrated Evaluation Framework has several strengths, including providing comprehensive evidence on the impact of WIL, facilitating continuous improvement of WIL programs, and enabling holistic assessment of employability development (Young et al., 2024). Meanwhile, challenges faced include complexity in integrating various data sources, resource-intensive implementation requirements, and difficulties in measuring long-term impact (Young et al., 2024).

C. Industry-Academic Collaborative Framework

a. Definition and Characteristics

The Industry-Academic Collaborative Framework focuses on developing and managing effective partnerships between higher education institutions and industry. This framework emphasizes the importance of sustainable and mutually beneficial collaboration as the foundation for successful WIL programs (Ahmed et al., 2024). This approach views WIL as a bridge between academic and professional worlds that facilitates two-way knowledge exchange.

b. Key Components

Based on the analysis of articles in this category, the key components of the Industry-Academic Collaborative Framework include several important elements. First, Formal Partnership Structure encompasses agreements and processes that govern collaboration between educational institutions and industry (Bernhard & Olsson, 2020). Second, Shared Governance Model represents a joint decision-making mechanism between academics and industry practitioners (Mesuwini & Mokoena, 2023). Third, Two-Way Knowledge Exchange involves mutually beneficial flow of information and expertise between academia and industry (Bernhard & Olsson, 2020). Fourth, Curriculum Co-design includes active industry involvement in designing learning experiences (Ahmed et al., 2024). Fifth, Joint Capacity Development covers efforts to enhance the capabilities of industry mentors and academics in guiding students (Ha, 2022).

c. Implementation

The Industry-Academic Collaborative Framework is implemented through various strategies, including Industry-Informed Project-Based Learning, which is an exploration of industry perspectives on project-based learning as a form of WIL in science, with a focus on industry involvement in designing and evaluating projects (Ahmed et al., 2024). Another strategy is the Informing Flows Framework, which is an analysis of information flows in industrial PhD education, identifying benefits and challenges in university-industry collaboration (Bernhard and Olsson, 2020). In addition, there is also the HUMANE Framework, which is the development of a framework to facilitate collaboration during times of adversity (pandemic), with a focus on humanistic approaches (Lucas et al., 2021).

d. Strengths and Challenges

The Industry-Academic Collaborative Framework has several strengths, including enhancing the relevance of education to contemporary industry needs, facilitating the development of professional networks for students, and opening opportunities for innovation through knowledge exchange (Ahmed et al., 2024). Meanwhile, challenges faced include cultural differences and priorities between academia and industry, difficulties in maintaining long-term partnerships, and the need for time and resources for effective coordination (Ha, 2022).

D. Technology-Enhanced WIL Framework

a. Definition and Characteristics

The Technology-Enhanced WIL Framework focuses on using technology to expand and enrich WIL experiences. This framework explores how technology can overcome geographical limitations, increase accessibility, and create innovative learning experiences in the context of WIL (Yeo &

Rowley, 2020). The COVID-19 pandemic has accelerated the adoption and development of this framework as a response to the need for distance learning solutions.

b. Key Components

Based on the analysis of articles in this category, the key components of the Technology-Enhanced WIL Framework include several important aspects. First, Virtual/Hybrid WIL Experiences involve using technology to create WIL experiences that are not limited to physical locations (Mueller et al., 2022). Second, Digital Collaboration Platforms are tools for communication and collaboration between all stakeholders (Yeo & Rowley, 2020). Third, ePortfolio and Digital Reflection are technologies that support documentation and reflection on learning (Yeo & Rowley, 2020). Fourth, Simulation and Virtual Reality are technologies that create authentic experiences in safe environments (Mather, 2021). Fifth, Learning Analytics encompasses the use of data to monitor and enhance learning (Mueller et al., 2022).

c. Implementation

The Technology-Enhanced WIL Framework is implemented through various approaches, including ePortfolio for Narrative Reflection, explored by Yeo and Rowley (2020) regarding the use of experiential narrative ePortfolios as multimodal tools for reflective practice in the context of performing arts. Another approach is the Community of Inquiry Framework for eWIL, where Mueller et al. (2022) use the Community of Inquiry framework to analyze how to build a sense of belonging in online WIL environments during the pandemic. In addition, there is also the Digital Professionalism Framework, where Mather (2021) analyzes Australian and UK nursing education standards to identify how digital professionalism can be integrated into WIL.

d. Strengths and Challenges

The Technology-Enhanced WIL Framework has several strengths, including increasing the accessibility and flexibility of WIL experiences, enabling participation in professional contexts that might not be locally available, and preparing students for increasingly digital work environments (Mueller et al., 2022). Meanwhile, challenges faced include digital divides and technology accessibility issues, difficulties in creating social proximity and a sense of belonging in virtual environments, and limitations in developing skills that require face-to-face interaction (Yeo & Rowley, 2020).

E. Discipline-Specific Pedagogical Framework

a. Definition and Characteristics

The Discipline-Specific Pedagogical Framework focuses on pedagogical approaches tailored to

the needs and contexts of specific disciplines. This framework recognizes that various fields of study have different needs, traditions, and professional practices, which influence how WIL should be designed and implemented (Fellner et al., 2024). This approach emphasizes the importance of contextualization in learning and professional identity development.

b. Key Components

Based on the analysis of articles in this category, the key components of the Discipline-Specific Pedagogical Framework include several important aspects. First, Disciplinary Contextualization involves adapting WIL principles to specific disciplinary contexts (Kazantzidou et al., 2021). Second, Professional Identity Development represents processes to facilitate student socialization into professional communities of practice (Epstein et al., 2024). Third, Integration of Procedural and Conceptual Knowledge is an approach to connecting theory and practice in specific disciplines (Penman et al., 2023). Fourth, Threshold Concepts involve identifying and teaching key transformative concepts in disciplines (Fellner et al., 2024). Fifth, Specialized Pedagogical Practices are teaching methods tailored to learning approaches in specific disciplines (Brentnall et al., 2024).

c. Implementation

The Discipline-Specific Pedagogical Framework is implemented through various approaches, including Threshold Concepts in Anatomy, which are factors influencing the teaching of pelvic anatomy by clinicians, with emphasis on critical threshold concepts such as three-dimensional spatial relationships (Fellner et al., 2024). Another approach is Activity Theory for Engineering Education, which is the integration of activity theory and social learning theory as a theoretical framework for final-year research projects in engineering programs (Kazantzidou et al., 2021). In addition, there is also Immersive Pedagogy for Health, which is an interprofessional immersive simulation design framework to prepare health students for clinical placements (Brentnall et al., 2024).

d. Strengths and Challenges

The Discipline-Specific Pedagogical Framework has several strengths, including high contextual relevance for specific disciplines, facilitating the development of authentic professional identity, and accommodating the epistemological and methodological uniqueness of various disciplines (Fellner et al., 2024). Meanwhile, challenges faced include difficulties in transferring good practices between disciplines, risks of silofication and lack of interdisciplinary approaches, and the need to continuously update the framework according to developments (Penman et al., 2023).

Research Trends in Work-Integrated Learning Framework

A. Article Publications

Significant increase in WIL framework-related publications from 2019 to 2024 (as shown in Figure 2) reflects growing awareness of the importance of work-based learning integration in vocational education. Publication surge peaking in 2024 with 17 articles indicates that WIL frameworks continue to evolve in response to dynamic labor market needs. These findings align with emphasizing WIL's critical role in enhancing graduate employability (Jackson & Collings, 2022).

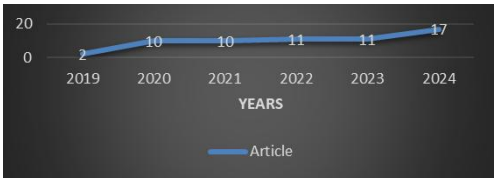

Fig 2: WIL Article Issues 2019-2024

B. Types of Work Integrated Learning Framework

Analysis of 61 reviewed articles identifies five main framework types in Work Integrated Learning (WIL). Competency-Based Framework becomes most dominant, applied in 34 articles, showing strong focus on skill development and competency achievement in work environment. Integrated Evaluation Framework, found in 19 articles, emphasizes importance of systematic assessment mechanisms in WIL implementation. Furthermore, Technology-Enhanced WIL Framework appears in 22 articles, reflecting technology's role in supporting work-based learning. Industry-Academic Collaborative Framework, identified in 12 articles, underlines synergy between educational institutions and industry in organizing WIL. Lastly, Field-Specific Pedagogical Framework is found in 15 articles, showing existence of discipline-specific learning approaches in WIL implementation. These findings indicate that WIL-related research has diverse focuses, ranging from competency aspects, evaluation, technology, industry-academic collaboration, to field-based pedagogical approaches that shown on figure 3.

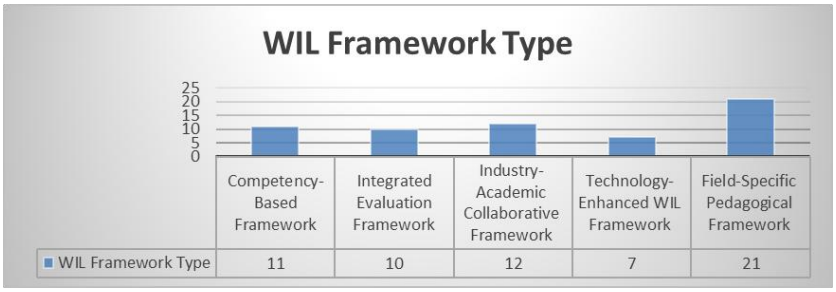

Fig 3: Framework Types

Conclusion

Work Integrated Learning (WIL) Frameworks integrate academic learning with practical work experience through educational institution-industry collaboration. The systematic review identifies five main framework types: Competency-Based (developing industry-relevant skills), Integrated Evaluation (comprehensive assessment), Industry-Academic Collaborative (institutional-industry partnerships), Technology-Enhanced (expanding learning through technology), and Field-Specific Pedagogical (discipline-tailored approaches). These frameworks enhance student work readiness by applying theory in practical contexts (Ortega-Sánchez et al., 2020). Key research gaps include: limited study of technology integration's long-term effectiveness (Yeo & Rowley, 2020; Mueller et al., 2022); insufficient multi-stakeholder evaluation methods (Young et al., 2024; Dlamini & Tsotetsi, 2024); lack of effective hybrid implementation models (Narayan et al., 2021); poor understanding of cross-disciplinary framework transferability (Penman et al., 2023; Fellner et al., 2024); and inadequate integration of emerging industry requirements (Xu, 2024). These gaps indicate critical directions for future WIL research.

Research trends in WIL Frameworks show a significant increase in publications from 2019 to 2024, with a peak of 17 articles in 2024, reflecting growing awareness of the importance of work-based learning integration in vocational education. Analysis of 61 reviewed articles revealed the Competency-Based Framework as the most dominant (34 articles), followed by Technology-Enhanced WIL Framework (22 articles), Integrated Evaluation Framework (19 articles), Industry-Academic Collaborative Framework (12 articles), and Field-Specific Pedagogical Framework (15 articles). The research also identified several gaps, including limited research on the long-term impact of technology integration, need for comprehensive multi-stakeholder evaluation approaches, gaps in frameworks combining various WIL modalities, limited understanding of cross-disciplinary framework transferability, and the need for frameworks that incorporate evolving workforce demands and technologies (Jackson & Collings, 2022).

References

Adegbite, W. M., & Hoole, C. (2024). The nexus of work integrated learning and skills among engineering students in Nigerian Universities: A structural equation model approach. Journal of Teaching and Learning for Graduate Employability, 15(1), Article 1824.

Ahmed, S., Grollo, L., & Czech, D. (2024). Industry perspectives on Project-Based Learning as a form of Work-Integrated Learning in Science. Journal of Teaching and Learning for Graduate

Employability, 15(1), Article 1879. https://doi.org/10.14221/ajte.1879

Arney, N. D., & Krygsman, H. P. (2022). Work-Integrated Learning Policy in Alberta: A Post-Structural Analysis. Canadian Journal of Educational Administration and Policy, 97–110.

Bernhard, I., & Olsson, A. K. (2020). University-Industry Collaboration in Higher Education: Exploring the Informing Flows Framework in Industrial PhD Education. Issues in Informing Science and Information Technology, 17, Article 4672. https://doi.org/10.28945/4672

Billett, S. (2009). Realising the educational worth of integrating work experiences in higher education. Studies in Higher Education, 34(7), 827-843.

Billett, S. (2021). Integrating practice-based experiences into higher education. Springer Nature.

Bilgin, A. A. B., Powell, A., & Richards, D. (2022). Work integrated learning in data science and a proposed assessment framework. Statistics Education Research Journal, 21(2), 1-22.

Bisschoff, Z. S., & Massyn, L. (2024). A conceptual soft skills competency framework for enhancing graduate intern employability. Higher Education, Skills and Work-based Learning, 66-81.

Botha, C., & Nel, C. (2022). Purposeful Collaboration through Professional Learning Communities: Teacher Educators' Challenges. International Journal of Learning, Teaching and Educational Research, 21(6), 210–225. https://doi.org/10.26803/ijlter.21.6.13

Brentnall, J., Rossiter, L., Judd, B., Cowley, E., McCormick, K., Turk, R., & Thackray, D. (2024). Educational design insights for interprofessional immersive simulation to prepare allied health students for clinical placements. Advances in Simulation, 9, Article 5.

Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. Higher Education Research & Development, 28(1), 31-44. https://doi.org/10.1080/07294360802444347

Choi-Lundberg, D., Douglas, T., Bird, M., Coleman, B., Greenwood, M., Martin, R., Prior, S., Saghafi, F., Roehrer, E., Waddingham, S., Wolsey, C., & Kelder, J. (2024). Employability Learning and Teaching Research: A Twenty Year Structured Narrative Review. Journal of University Teaching and Learning Practice, 21(5). https://doi.org/10.53761/g8mryt07

Coll, R. K., & Zegwaard, K. E. (2006). Perceptions of desirable graduate competencies for science and technology new graduates. Research in Science & Technological Education, 24(1), 29-58.

Cooper, L., Orrell, J., & Bowden, M. (2010). Work integrated learning: A guide to effective practice. Routledge. https://doi.org/10.4324/9780203854501

Crosbie, B., Gerhardt, T., & Montgomery, J. (2024). The use of problem-solving methodology to develop institutional and curricular change: work-integrated learning as a strategy of differentiation. Higher Education, Skills and Work-based Learning, 14(1), 1-15.

Dean, B. A., Tubridy, K., Eady, M. J., & Yanamandram, V. (2024). Implementing employability strategy: Inspiring change through significant conversations. Journal of Teaching and Learning for Graduate Employability, 15(2), 80–94.

Della Tamin, M., Du Plooy, D. M., Solms, S. V., & Meyer, J. (2019). A Proposed Modular Work Integrated Learning Framework for South Africa. IEEE Access, 7, 2559–2566.

Dlamini, M. E., & Tsotetsi, C. T. (2024). Engagement of Preservice Teachers in the Assessment of Their Work-Integrated Learning. Journal of Contemporary Vocational Education, 118-132.

Dollinger, M., & Brown, J. (2019). An institutional framework to guide the comparison of work-integrated learning types. Journal of Teaching and Learning for Graduate Employability, 10(1), 88-100. https://doi.org/10.21153/jtlge2019vol10no1art817

Epstein, I., Stephens, L., Baljko, M., Procknow, G., & Mastrilli, P. (2024). Ableism and the discourse of risk and safety in patient-facing work-integrated learning. Nursing Inquiry, 31(2), e12545.

Fellner, L. H., King, S. M., & Barry, C. M. (2024). "Pet things" and "penny drops"—Factors influencing clinicians' teaching of pelvic anatomy. Anatomical Sciences Education, 287-296.

Ferns, S., Russell, L., & Kay, J. (2020). Enhancing industry engagement with work-integrated learning: Capacity building for industry partners. International Journal of Work-Integrated Learning, 21(4), 313-330. https://www.ijwil.org/files/IJWIL_21_4_313_330.pdf

Gamage, A. (2022). An inclusive multifaceted approach for the development of electronic work-integrated learning (eWIL) curriculum. Studies in Higher Education, 47(7), 1357–1371.

Green, E., Hyde, S., Barry, R., Smith, B., Seaman, C. E., & Lawrence, J. (2022). Placement Architectures in Practice: An Exploration of Student Learning during Non-Traditional Work-Integrated Learning in Rural Communities. International Journal of Environmental Research and Public Health, 19(24), 16933. https://doi.org/10.3390/ijerph192416933

Ha, N. T. N. (2022). The involvement of industry professionals and barriers to involvement in work-integrated learning: the case of the profession-oriented higher education framework in Vietnam. Journal of Education and Work, 35(6-7), 708-724.

Hardin-Ramanan, S., Gopee, S., Rowtho, V., & Charoux, O. (2020). Graduate work-readiness in Mauritius: A multi-stakeholder approach. Journal of Teaching and Learning for Graduate

Employability, 11(1), 93–109. https://doi.org/10.21153/jtlge2020vol11no1art937

Harris-Reeves, B. (2023). From passion to profession: an employability framework in sport development. Journal of Teaching and Learning for Graduate Employability, 14(1), 237–247.

Huda, S., Alyahya, S., Pan, L., & Al-Dossari, H. (2022). Combining Innovative Technology and Context based Approaches in Teaching Software Engineering. International Journal of Advanced Computer Science and Applications, 13(10), 305–314.

Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. Studies in Higher Education, 40(2), 350-367.

Jackson, D. (2017). Developing pre-professional identity in undergraduates through work-integrated learning. Higher Education, 74(5), 833-853.

Jackson, D. (2020). Applying academic selection criterion to work-integrated learning programmes: risk management or perpetuating inequality?. Teaching in Higher Education, 25(1), 98–115. https://doi.org/10.1080/13562517.2018.1541884

Jackson, D., & Collings, D. (2022). Systematic literature review approaches for work-integrated learning research. International Journal of Work-Integrated Learning, 23(3), 321-336.

Janssens, O., Andreou, V., Embo, M., Valcke, M., De Ruyck, O., Robbrecht, M., & Haerens, L. (2024). The identification of requirements for competency development during work-integrated learning in healthcare education. BMC Medical Education, 24, Article 252.

Janssens, O., Embo, M., Valcke, M., & Haerens, L. (2023). When theory beats practice: the implementation of competency-based education at healthcare workplaces: Focus group interviews with students, mentors, and educators of six healthcare disciplines. BMC Medical Education, 23, Article 343. https://doi.org/10.1186/s12909-023-04315-z

Kazantzidou, C., Martinez-Marroquin, E., & Senadji, B. (2021). Framework for enhanced professional practice in engineering programs. Proceedings of the AAEE2021 Conference, The University of Western Australia, 780-787.

Kellerman, J., Evans, R., & Graham, M. A. (2021). Perceptions of isiZulu-speaking pre-service teachers' classroom English proficiency. South African Journal of Education, 41(4), 1-11.

Kenny, B., O'Connor, D., Sugden, E., Tang, C. Y., Tannous, C., & Thyer, E. (2023). Engaging Industry in Health Professions' Education: Benefits and Challenges. International Journal of Environmental Research and Public Health, 20(12), 6131.

Klinner, C., Dario, A. B., Bell, A., Nisbet, G., Penman, M., & Monrouxe, L. V. (2023). Beyond mere respect: new perspectives on dignity for healthcare workplace learning. Frontiers in Medicine, 10, 1181848. https://doi.org/10.3389/fmed.2023.1181848

Krishna, K. G. (2020). SLATE - A framework for systems learning and thinking enablement. Procedia Computer Science, 172, 540–544. https://doi.org/10.1016/j.procs.2020.05.066

Kumar, A., Sarkar, M., Davis, E., Morphet, J., Maloney, S., Ilic, D., & Palermo, C. (2021). Impact of the COVID-19 pandemic on teaching and learning in health professional education: a mixed methods study protocol. BMC Medical Education, 21, Article 439.

Lucas, P., Wilkinson, H., Rae, S., Dean, B., & Eady, M. (2021). Knowing me, knowing you: Humanitas in work-integrated learning during adversity. Journal of University Teaching and Learning Practice, 18(7), Article 10. https://doi.org/10.53761/1.18.7.10

Maake, T. N., Millar, B. T., Christopher, L. D., & Naidoo, N. (2021). A critical ethnographic study of discriminatory social practice during clinical practice in emergency medical care. BMC Health Services Research, 21, Article 787. https://doi.org/10.1186/s12913-021-06664-1

Makie, V., Jooste, K., Mabuda, T. B., Bock, T., Lourens, G. M., van As, M., & Chipps, J. (2021). Operational nurse managers' perceptions on the competence of community service nurses in public settings in the Western Cape. Curationis, 44(1), Article 2174.

Mandal, N. K., & Edwards, F. R. (2022). Student work readiness in Australian engineering workplaces through work integrated learning. Higher Education, Skills and Work-Based Learning, 12(1), 206-220. https://doi.org/10.1108/HESWBL-01-2021-0013

Mandal, N. K., Edwards, F., & Rasul, M. (2021). Work ready engineering graduates through WIL processes. 9th Research in Engineering Education Symposium and 32nd Australasian Association for Engineering Education Conference, REES AAEE 2021: Engineering Education Research Capability Development, 2, 605–612. https://doi.org/10.52202/066488-0067

Martín-Martín, A., Thelwall, M., Orduna-Malea, E., & Delgado López-Cózar, E. (2021). Google Scholar, Microsoft Academic, Scopus, Dimensions, Web of Science, and OpenCitations' COCI: A multidisciplinary comparison of coverage via citations. Scientometrics, 126(1), 871-906.

Mather, C. (2021). Enabling Digital Professionalism: Analysis of the Australian and United Kingdom Nursing Education Standards. Studies in Health Technology and Informatics, 284, 118–123. https://doi.org/10.3233/SHTI210682

Matook, S., Maggie Wang, Y., Koeppel, N., & Guerin, S. (2024). Metacognitive skills in low-code app

development: Work-integrated learning in information systems development. Journal of Information Technology, 39(1), 41–70. https://doi.org/10.1177/02683962231170238

Mesuwini, J., & Mokoena, S. P. (2023). TVET Lecturer Work-Integrated Learning: Opportunities and Challenges. International Journal of Learning, Teaching and Educational Research, 22(8), 388-406. https://doi.org/10.26803/ijlter.22.8.21

Msimanga, M. R. (2020). Curriculum structure and its influence on content knowledge of economics student teachers. International Journal of Learning, Teaching and Educational Research, 19(12), 190–207. https://doi.org/10.26803/ijlter.19.12.10

Mueller, B., Andrew, M. B., & Connor, M. (2022). Building belonging in online WIL environments – lessons (re)learnt in the pandemic age: a collaborative enquiry. Journal of University Teaching and Learning Practice, 19(4), Article 15. https://doi.org/10.53761/1.19.4.15

Narayan, J., Lieberman, L., & Mason, C. (2021). Building virtually: Synchronous online work-integrated learning during the COVID-19 pandemic. International Journal of Work-Integrated Learning, 22(2), 161-169. https://www.ijwil.org/files/IJWIL_22_2_161_169.pdf

Nuangpirom, P., Jewpanya, P., Pitjamit, S., Jaichomphu, P., & Chaithanu, K. (2023). The Educational Process of the Work-integrated Learning (WIL) Program: Case Study of Engineering Faculty, Rajamangala University of Technology Lanna, Thailand. Journal of Technical Education and Training, 15(1), 246–256. https://doi.org/10.30880/jtet.2023.15.01.021

Obe, I. P., Ezeama, O. A., Oguejiofor, I. V., Ezeama, N. R., & Akuchu, B. G. (2023). Engineering work-integrated learning in transmission system auto-diagnostic skills for graduation employability and economic growth. Indian Journal of Engineering, 20(53).

Ortega-Sánchez, D., Gómez-Trigueros, I. M., Trestini, M., & Pérez-González, C. (2020). Self-perception and training perceptions on teacher digital competence (TDC) in Spanish and French university students. Multimodal Technologies and Interaction, 4(4), 74.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. BMJ, 372, Article n71. https://doi.org/10.1136/bmj.n71

Patrick, C. J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). The WIL [Work Integrated Learning] report: A national scoping study. Australian Learning and Teaching Council. https://eprints.qut.edu.au/44065/

Penman, M., Raymond, J., Kumar, A., Liang, R. Y. R., Sundar, K., & Thomas, Y. (2023). Allied Health

Professions Accreditation Standards for Work Integrated Learning: A Document Analysis. International Journal of Environmental Research and Public Health, 20(15), Article 6478.

Persson, J., Svensson, A., Lindén, I. G., Kylén, S., & Hägglin, C. (2022). Aspects of Expansive Learning in the Context of Healthy Ageing—A Formative Intervention between Dental Care and Municipal Healthcare. International Journal of Environmental Research and Public Health, 19(3), 1089. https://doi.org/10.3390/ijerph19031089

Perusso, A., & Wagenaar, R. (2024). Electronic work-based learning (eWBL): a framework for trainers in companies and higher education. Studies in Higher Education, 49(11), 1805–1821.

Putra, R.C., Barliana, M.S., Komaro, M., & Hamdani, A. (2022). Work-Integrated Learning in Vocational Education. Proceedings of the 4th International Conference on Innovation in Engineering and Vocational Education (ICIEVE 2021).

Ranabahu, N., Almeida, S., & Kyriazis, E. (2020). University-led internships for innovative thinking: a theoretical framework. Education and Training, 62(3), 235–254.

Roberts, L. J., Neyland, P. J., Devine, A. P., Harris, W. E., Bull, J. C., Froyd, C. A., Eastwood, D. C., Forman, D. W., & Elias, O. H. (2023). You said, we did! Employer led work-simulated learning framework for enhancing ecology graduate employability. Journal of Biological Education, 57(4), 746–765. https://doi.org/10.1080/00219266.2021.1979624

Rouvrais, S., Remaud, B., & Saveuse, M. (2020). Work-based learning models in engineering curricula: insight from the French experience. European Journal of Engineering Education, 45(1), 89–102. https://doi.org/10.1080/03043797.2018.1450846

Smith, C. (2012). Evaluating the quality of work-integrated learning curricula: A comprehensive framework. Higher Education Research & Development, 31(2), 247-262.

Smith, C., Ferns, S., & Russell, L. (2016). Designing work-integrated learning placements that improve student employability: Six facets of the curriculum that matter. Asia-Pacific Journal of Cooperative Education, 17(2), 197-211.

Smith, M., Bell, K., Bennett, D., & McAlpine, A. (2020). Employability in a global context: Evolving policy and practice in employability, work integrated learning, and career development learning. Graduate Careers Australia.

Snepvangers, K., & Rourke, A. (2020). Creative practice as a catalyst for developing connectedness capabilities: A community building framework from the teaching international students project. Journal of International Students, 10(Special Issue 2), 17–35.

Synot, E., Graham, M., Graham, J., Valencia-Forrester, F., Longworth, C., & Backhaus, B. (2021). Weaving First Peoples' knowledge into a university course. Australian Journal of Indigenous Education, 50(2), 222–228. https://doi.org/10.1017/jie.2019.29

Vailasseri, P., Long, J. M., & Joordens, M. (2021). Embedding bachelor of engineering university education with enhanced work-integrated learning. Education Sciences, 11(11), 751.

Van Dam, P. J., Griffin, P., Peterson, G. M., Reeves, N. S., Kirkwood, L., & Prior, S. J. (2020). Organizational support in healthcare redesign education: A mixed-methods exploratory study of expert coach and executive sponsor experiences. International Journal of Environmental Research and Public Health, 17(15), 5308. https://doi.org/10.3390/ijerph17155308

Wang, J., Gill, C., & Lee, K. (2023). Effective mentoring in a work-integrated learning (WIL) program. Journal of Teaching in Travel and Tourism, 23(1), 20–38.

Winborg, J., & Hägg, G. (2023). The role of work-integrated learning in preparing students for a corporate entrepreneurial career. Education and Training, 65(4), 674–696.

Winchester-Seeto, T. M., Ferns, S. J., Lucas, P., Piggott, L., & Rowe, A. (2024). Intensive Work-Integrated Learning (WIL): The benefits and challenges of condensed and compressed WIL experiences. Journal of University Teaching and Learning Practice, 21(2), Article 06.

Xu, X. (2024). Navigating the AI Revolution: Implications for Business Education and Pedagogy. Journal of Curriculum and Teaching, 13(1), 371–383.

Yeo, N., & Rowley, J. (2020). 'Putting on a Show' Non-Placement WIL in the Performing Arts: Documenting Professional Rehearsal And Performance Using ePortfolio Reflections. Journal of University Teaching and Learning Practice, 17(4), Article 5.

Young, K., McKenzie, S., & Thomas, J. (2024b). A Work-Integrated Learning Framework: the what, where and how of evaluating WIL. Journal of Teaching and Learning for Graduate Employability, 15(1), Article 1986. https://doi.org/10.21153/jtlge2024vol15no1art1986

Young, K., Miller, K., Fontaine, S. L., Palmer, S., & Campbell, M. (2024a). A WIL assessment meta-framework for discipline-specific employability learning. Journal of Teaching and Learning for Graduate Employability, 15(1), Article 1949.

Zegwaard, K. E., & Rowe, A. D. (2019). Research-informed curriculum and advancing innovative practices in work-integrated learning. International Journal of Work-Integrated Learning, 20(4), 323-334. https://www.ijwil.org/files/IJWIL_20_4_323_334.pdf