

Enacting sustainability through work-integrated learning: Academic perspectives on benefits barriers and enablers

JULIA CALDICOTT¹

Southern Cross University, Coffs Harbour, Australia

CLARE POWER

Charles Sturt University, Bathurst, Australia

RACHAEL BARON

La Trobe University, Melbourne, Australia

Higher education institutions play a significant role in preparing graduates to tackle the complex challenges of the twenty-first century. As a widely recognized form of authentic learning, work-integrated learning (WIL) is commonly adopted in higher education, primarily focusing on employability. However, given the emerging global challenges facing employees, and citizens in general, it is timely to re-examine the role of WIL. This study explores how sustainability is enacted through WIL, considering that WIL immerses students in the realities of workplaces and their economic, social, and environmental impacts. A survey of WIL academics, representing a range of disciplines and types of WIL, identified various approaches to enacting sustainability principles in WIL programs. The findings reveal benefits of sustainability integration, barriers encountered, and enabling factors. This study contributes valuable insights to inform future curriculum design and pedagogical practice, supporting a broader educational purpose for WIL that includes sustainability literacy.

Keywords: Work-integrated learning, sustainability literacy, curriculum design, pedagogy, higher education

In the face of twenty-first-century societal challenges, higher education institutions (HEIs) play a pivotal role in equipping students with the skills and knowledge needed to thrive in an unpredictable world (Oliver & Jorre de St Jorre, 2018). The rise of information technology, widespread adoption of social media, concerns related to overconsumption, globalization, population expansion, climate change, and significant shifts in workplace dynamics and national economies have all contributed to this sense of uncertainty (Scott, 2019). Future professionals must not only be aware of environmental, social and economic challenges but also actively engage in finding solutions (Ivkovic & McRae, 2021). To meet these demands, graduates need to be sustainability-literate – that is, equipped with the knowledge, skills, and values to address the broad challenges of the twenty-first century (Décamps et al., 2017).

HEIs demonstrate their commitment to nurturing sustainability-literate graduates through active involvement in global and national platforms, such as declarations, charters, and policy initiatives (R. Lozano et al., 2013). The concept of sustainability literacy gained prominence during the United Nations' Decade of Sustainable Development and is now recognized as a core pillar for achieving the Sustainable Development Goals (SDGs) by 2030 (Perkins et al., 2019). Despite the acknowledged importance of sustainability education in HEIs, there is a notable lack of research focused on the integration of sustainability principles and practices into work-integrated learning (WIL) programs. This study adopts the widely recognized definition of sustainability articulated by the Brundtland Commission's (1987, p. 1) definition: "Meeting the needs of the present without compromising the ability of future generations to meet their own needs." Importantly, this definition differs from other

¹Corresponding author: Julia Caldicott, julia.caldicott@scu.edu.au

© 2026 The Authors. This article is licensed under [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

uses of ‘sustainability’ in WIL literature, where it often refers to program longevity or viability, often in relation to partnerships (Fleming et al., 2018) or WIL resourcing (Dean et al., 2023).

WIL is commonly viewed as a means of enhancing employability (Jackson, 2015; Zegwaard et al., 2023), but there have been calls for WIL to be recognized as a pedagogical strategy that extends beyond preparing students for the labour market (Caldicott et al., 2022; Fleming, 2014). Research indicates that WIL initiatives frequently prioritize the development of skills for immediate employability, often at the expense of a more comprehensive exploration of sustainability or broader social issues (Brabazon et al., 2020). By concentrating primarily on job readiness, these programs may miss the opportunity to cultivate a deeper understanding of the economic, social, and environmental impacts of professional practices. Integrating sustainability into WIL could enrich students’ educational experiences, equipping them with the knowledge and skills necessary to address the complex challenges of the 21st century. This broader approach would not only prepare students for the workforce but also foster a generation of professionals who are conscious of, and committed to, sustainable practices in their respective fields and lives in general.

WIL placements and projects embed students in real workplaces that inevitably have economic, social, and environmental dimensions to their operations. WIL could serve as a platform for students to learn about sustainability challenges first-hand and to contribute to sustainable practices while they learn. However, integrating sustainability into WIL is not straightforward. Aligning WIL experiences with sustainability learning outcomes may require changes in curriculum design, partnerships with different kinds of host organisations, and guidance for students to reflect on sustainability issues during their WIL experiences. To date, sustainability has seldom been an explicit focus in WIL programs, and literature on WIL has only recently begun to discuss its potential role in advancing sustainability literacy (Wall et al., 2017).

This paper presents a study that investigates how sustainability is enacted through WIL programs at Australian HEIs. The study was guided by two main research objectives:

- 1) to identify the ways in which WIL programs in Australia are integrating sustainability, and
- 2) explore the benefits, barriers, and enablers of integration.

Primary data was obtained via a survey of academics involved in the design and/or delivery of contemporary WIL programs. The paper begins by summarizing the existing literature on WIL, highlighting current knowledge about the incorporation of sustainability into WIL programs. It then presents the methodology and results of the study, followed by a discussion on the implications for WIL educators and practitioners.

LITERATURE REVIEW

The Role of Higher Education in Addressing Global Challenges

Higher education institutions (HEIs) are pivotal in preparing graduates to address the multi-faceted challenges of the 21st century, including economic, social and environmental issues. In response, many HEIs are integrating sustainability into their curricula, research and operations. A growing number of institutions are adopting the principles of the United Nations’ Sustainable Development Goals (SDGs), fostering a culture of sustainability among students and staff and equipping graduates with the skills and knowledge needed to navigate and address complex global issues. In this context, transversal competencies, such as critical thinking, collaboration, adaptability, and systems thinking, are

increasingly recognized as essential for empowering students to engage with sustainability in meaningful and transformative ways (Zamora-Polo et al., 2019).

The body of literature on sustainability education in higher education is extensive and outlines various approaches. Holdsworth and Thomas (2021) categorize sustainability education into different typologies. Education about sustainability, focuses on imparting knowledge without challenging the existing paradigm. Education for sustainability, on the other hand, views knowledge development as an adaptive response, promoting learning for change. Lastly, education as sustainability (sustainability education) not only encompasses understanding, but also emphasizes the process and quality of learning. This perspective aligns with the evolving approach taken by many HEIs, moving away from traditional education models, such as ‘sage on the stage’, to now incorporating WIL opportunities, global partnerships and interdisciplinary approaches that reflect the contemporary challenges graduates will face. Despite these efforts, integrating sustainability across all programs and disciplines remains challenging. Often, sustainability content in higher education has been concentrated in environmental or development studies, leading to calls for more innovative approaches to weave sustainability into various educational approaches (Strachan et al., 2023). WIL has been recognized as one such approach (Wall & Hindley, 2019).

The pedagogical foundations of WIL have evolved significantly in recent years, reflecting a shift from ad hoc placement models to more intentional curriculum design. Ferns et al. (2024) argue that WIL is not merely a mode of delivery but a distinct pedagogy that integrates theory with meaningful practice through structured engagement with external stakeholders. A range of learning theories underpin WIL, including experiential learning (Kolb, 1984), situated learning theory (Lave & Wenger, 1991), reflective practice (Gibbs, 1988; Schön, 1983) and transformative learning theory (Mezirow, 1990). These theories support context-rich learner-centred approaches that encourage learning through doing, ethical reasoning, deep engagement and transformative learning. Such approaches align closely with the goals of sustainability education, which seeks to empower students to address complex global challenges through adaptive and responsible action. WIL pedagogy is characterized by its flexibility and responsiveness to disciplinary contexts, while maintaining core principles such as authenticity, relevance and collaboration (Ferns et al., 2024). As such, WIL provides fertile ground for embedding sustainability not only as content but as a process of transformative learning.

Recognizing the pedagogical potential of WIL for advancing sustainability education, Wall and Hindley (2019) adapted a conceptual model originally developed by Painter-Morland et al. (2016) to outline four distinct strategies for integrating sustainability into WIL. The first, piggybacking, involves embedding sustainability content into existing curricula, such as through an additional module or topic within a current subject. Digging deep refers to the creation of new, discipline-specific curricula where sustainability is a central and intentional focus. Mainstreaming integrates sustainability into common core curricula, often through the assessment of broad graduate capabilities within authentic, work-based learning contexts. Finally, focusing involves the development of new cross-disciplinary curricula that draw on innovative pedagogies and experiential learning to address sustainability challenges. These strategies reflect the flexibility of WIL as a pedagogy where real-world engagement, collaboration with industry, and authentic learning experiences support the integration of sustainability principles. However, despite the well-defined structure of this model, there is a notable gap in empirical research that examines how these strategies are implemented in WIL programs.

Work-Integrated Learning and its Emphasis on Employability

WIL has become an integral component of contemporary higher education, primarily focused on enhancing student employability. By providing opportunities for students to engage directly with industry, WIL facilitates the development of crucial skills and competencies that are highly valued by employers (Smith et al., 2014). Studies indicate that students who participate in WIL programs report increased confidence and a better understanding of workplace expectations, attributing their success to the practical experiences gained during their placements (Jackson et al., 2022). This alignment with the needs of industry, makes WIL a central component of academic curricula aimed at producing job-ready graduates.

Rather than simply delivering immediate employment outcomes for participating students, WIL has been recognized for its capacity to foster graduate employability (Jackson, 2016). Employability, as defined by Yorke (2006), encompasses a blend of achievements—including skills, knowledge, and personal attributes—that improve graduates' ability to gain and sustain meaningful employment. These benefits not only support individual career success but also contribute to broader societal, economic, and workforce development. More recent perspectives on employability shift the focus from acquiring job-specific skills to a broader process that incorporates a graduate's human, social, and cultural capital as key enablers of labour market access (Tomlinson & Jackson, 2021). This expanded view includes elements such as career identity (Fugate et al., 2004), pre-professional identity (Jackson, 2016), workplace learning (Billett, 2011) and attitudes toward career pathways and labour market engagement (Bridgstock, 2009). Despite these broader interpretations, *employability*, by definition, remains fundamentally oriented toward *employment* (Caldicott et al., 2022).

Whilst employability remains a central focus of WIL, recent scholarship has begun to question its dominance as the primary goal of higher education, highlighting how this emphasis may overlook broader educational objectives like fostering critical thinking and sustainability awareness (Lacković, 2019; Tight, 2023). Some authors argue that a singular focus on employability can lead to a narrow educational experience that inadequately prepares students for the complexities of modern societal challenges (Arvanitakis & Hornsby, 2016; Caldicott et al., 2022). Others propose that it is essential to move beyond a singular focus on employability as the primary objective of higher education by also emphasizing the importance of graduates' engagement in social and political initiatives, as well as their personal development (Ivkovic & McRae, 2021; J. F. Lozano et al., 2012). This view is supported by others who advocate for a more integrated approach to education that balances employability with sustainability (Leal Filho et al., 2016). Thus, the current framework for WIL may inadvertently restrict the cultivation of a mindset oriented toward sustainability and responsible citizenship.

The call for a balanced approach that integrates employability with sustainability principles has become increasingly apparent. As society grapples with multifaceted issues requiring innovative solutions, education must evolve to prepare graduates not only for employment but also for their roles as informed and active participants in sustainable development (Alimehmeti et al., 2024; Leal Filho et al., 2016). WIL, with its authentic learning experiences and emphasis on reflection, presents an ideal platform to bridge this gap. It encourages students to critically examine the implications of their work, fostering a sense of responsibility and agency that is essential for addressing the challenges of the future. Despite this potential, in practice the intersection of WIL and sustainability remains an emerging area requiring further exploration.

Integration of Sustainability into Work-Integrated Learning Programs

Despite WIL's potential as a catalyst for sustainability literacy, there is minimal research in this area. Most existing literature stems from the UK, Europe, and North America, with few contributions from the Australian context. With the exception of Wall et al. (2017) and Wall and Hindley (2019) studies on WIL as a catalyst for sustainability, there is a noticeable gap in scholarship that explores how WIL can foster sustainability literacy. This lack of research presents a challenge for educators seeking evidence-based approaches to embed sustainability into WIL programs.

A small but growing body of literature has begun to explore the integration of sustainability into WIL, often using the UN SDGs as a guiding framework. For instance, research by Cordoba and Bando (2021), situated in the field of social work, examined a student placement at the Australian Association of Social Workers that was explicitly aligned with the SDGs. In the field of education and sustainability pedagogy, Rekalde-Rodríguez et al. (2021) investigated environmental internships addressing plastic pollution in the Basque region. Similarly, Argento et al. (2023) and Alm et al. (2022) based in business education, explored how WIL in a Master's program in business administration was reoriented around sustainability challenges to foster transformative competencies. Despite their disciplinary differences, these studies collectively demonstrate the potential of WIL to simultaneously advance employability outcomes and promote broader social and environmental objectives.

Overall, the existing literature highlights the significant potential of WIL to foster sustainability literacy; however practical challenges remain. Whilst many educators are intrinsically motivated to embed sustainability in their teaching, often guided by personal values and a commitment to social and environmental responsibility, this motivation alone is not sufficient to ensure effective integration (Argento et al., 2020). Further investigation is warranted to deepen our understanding of how sustainability can be purposely integrated into WIL across different settings. Building on the insights from prior studies, the present research explores the current state of sustainability integration in WIL programs within Australia HEIs from the perspective of WIL academics. It aims to identify strategies for overcoming barriers and to examine the conditions and practices that enable effective integration.

METHODS

Study Design

This study employed a pragmatic, cross-sectional survey design to investigate how sustainability principles and practices are enacted in WIL from the academic perspective. Rather than testing predictive hypotheses, the research explores current practices and perceptions. The descriptive nature of the data is consistent with the exploratory aims and pragmatic approach of the study. Focusing on academics is justified due to their critical role in curriculum design and the implementation of WIL programs. Academics not only influence the content and structure of these programs but also shape the pedagogical approaches employed, making their insights essential for understanding how sustainability can be effectively integrated into WIL. Guided by a pragmatic approach (Creswell & Creswell, 2017), the study aimed to generate practical insights into current academic practices by using a survey instrument that included both quantitative and qualitative items. The survey instrument was developed in Survey Monkey and peer reviewed by two current WIL academics external to the research team, to ensure relevance and clarity prior to distribution.

Participants

Academics involved in teaching and/or designing WIL programs from the 43 universities within Australia were invited to participate in the study. Some universities have centrally managed WIL programs, while others base their WIL programs in specific faculties/disciplines. The targeted participants were subject/unit convenors, lecturers/tutors, program coordinators and curriculum designers. A total of 81 participants attempted the survey, with participants asked to respond based on their professional practice across their WIL programs (courses/units). Incomplete responses were removed from the data set. Seven participants identified multiple programs, and their responses were combined with those of the primary WIL program respondents. WIL programs providing academic credit were the focus of the analysis, leading to the exclusion of four complete responses (two with no academic credit and two stated uncertainty).

Data Collection

After ethics approval was provided by the Human Research Ethics Committee of Charles Sturt University (H23576), the electronic survey was disseminated via the Australian Collaborative Education Network (ACEN) national newsletter and an email request to ACEN institutional representatives at member universities. ACEN (as known at the time), the national professional association for WIL in Australia, comprised 43 tertiary education institutional members during the data collection period. In recognition that not all WIL programs would be accessed through these approaches, the study also employed a purposive sampling strategy, seeking to gain rich responses from a sample of respondents most likely to yield appropriate and useful information (Campbell et al., 2020).

The survey comprised of a range of predominantly closed-ended questions, however some questions provided options for open-ended elaborations. This design choice acknowledged that WIL is a complex phenomenon with varied interpretations and terminology unique to institutions or faculties. The survey was accessible, written in clear and simple non-ambiguous language, with detailed instructions provided for participants. In WIL literature, sustainability is typically discussed in terms of whether WIL practices or programs can be maintained or are ongoing. However, in this project, the term is defined in the context of environmental, social, and economic sustainability, emphasizing the capacity to meet present needs without compromising future generations' ability to meet their own needs (Brundtland Commission, 1987). This definition was included in the survey's preamble to ensure a shared understanding among participants.

Participants were asked about the nature of their WIL program; whether and how their program integrates sustainability; the challenges and opportunities impacting sustainability integration in WIL; and their perspectives on WIL and sustainability. Closed-ended options were drawn from the literature, but participants were encouraged to elaborate further as desired. Wall and Hindley's (2019) sustainability in WIL framework was utilized, excluding the co-curricular aspect given this study's focus on WIL as a 'for-credit' pedagogy. Additionally, participants were invited to provide their contact details if they were willing to be interviewed to gain further insights. The findings from the interview stage will be the focus of a separate publication.

Data Analysis

This exploratory study utilized descriptive statistics to examine the main features of the survey data. Descriptive statistics are common in educational research to summarize and comprehend data

distributions, facilitating meaningful interpretations of trends and patterns (Loeb et al., 2017). For the analysis of ranked data, the main ranking was calculated for each enabler and stakeholder to determine their relative importance, with lower mean values indicating higher perceived importance. Standard deviations were also calculated to assess the level of consensus among respondents. The statistical analysis was complemented by content analysis of qualitative comments provided by participants in the survey. Content analysis is a widely utilized technique that enables the comprehensive examination of data, with themes identified throughout the dataset and organized using a coding system (Bengtsson, 2016). Rather than seeking statistical generalization, the project aimed to provide an understanding of the general landscape of the integration of sustainability into WIL across different institutions and disciplines. Notable exploratory studies of sustainability practices and WIL include those by Wall et al. (2017) and Ivkovic and McRae (2021). An analysis of sustainability principles and practices enacted specifically through WIL in Australian HEIs was previously lacking, underscoring the relevance of this study.

FINDINGS

The diversity of names for WIL adds to the complexity of understanding WIL programs, as different terminologies can lead to varied interpretations and practices across institutions. For example, some universities use the term 'placements', whilst others use the term 'internships.' Additionally, some WIL programs encompass multiple types of WIL (for example, simulation AND internship). In total 52 participants responded to the survey, recording 136 WIL activities. Among them, five respondents who completed the survey, repeated survey components for two WIL programs. Additionally, two respondents who completed the survey, repeated components for three WIL programs. Effectively, data for 59 programs were provided.

Characteristics

Table 1 below illustrates the characteristics of WIL, including its types, placement within the degree, related disciplines, and requirements. Placement-based WIL (including work placements, work-terms, internships, practicum, co-op) was the most common type. Of the 59 surveyed programs 49% included 'work placements' as the type of WIL. Furthermore, 39% of all programs used the term 'internships', and 29% used the term 'practicum.' 'Applied projects' and 'work-related projects' were also frequently used, with 29% and 25% of all programs respectively, using these types of WIL. Simulations (including virtual WIL) accounted for 15% of programs and 12% of programs categorized their WIL as fieldwork. Other types of WIL included service learning, entrepreneurship, student led enterprises, international mobility experiences, professional experience, research projects, career development learning activities. Typically, WIL programs were situated in the 3rd and 4th years of the degree. Some programs contained WIL in all years. Other programs noted that WIL occurred in terms/semesters between academic years or were part of postgraduate level qualifications.

WIL programs identified in the survey were categorized according to the Australian Government Fields of Education (Australian Bureau of Statistics, 2001). Disciplines most represented in this study were health, society and culture, and management and commerce. The results revealed that a significant majority, 66%, identified WIL programs as a core requirement. Meanwhile, 22% of respondents indicated that these programs are offered as electives. The remaining 12% categorized WIL programs under other requirements, such as a hurdle component.

TABLE 1: Characteristics of work-integrated learning.

WIL Type	% of programs
Work placements	49
Work-terms	3
Internships	39
Practicum	29
Cooperative education (Co-op)	14
Applied projects	29
Work-related projects/competitions	25
Simulations (including virtual WIL)	15
Fieldwork	12
Other	15
Situated in the degree	(n = 59 responses)
1st year	13
2nd year	23
3rd year	37
4th year	24
Other	9
Disciplines	(n = 59 responses)
Health	20
Society and Culture	10
Management and Commerce	8
Multi-discipline/university wide	5
Education	4
Creative Arts	3
Natural and Physical Sciences	2
Engineering and Related Technologies	2
Agriculture, Environmental and Related Studies	2
Information Technology	2
Architecture and Building	1
Requirement	(n =59 responses)
Core	66%
Elective	22%
Other	12%

Of the 59 WIL programs surveyed, 26 programs (44%) explicitly incorporated sustainability into their curriculum. However, 23 programs (39%) did not include sustainability as a specific component. Additionally, 10 programs (17%) had varied approaches, where sustainability was not explicitly mentioned but could be integrated depending on the specific placement or project. Of the 26 programs that explicitly incorporated sustainability, nine (35%) respondents confirmed that sustainability was incorporated in the degree prior to the WIL experience. A further nine responses (35%) acknowledged that sustainability practices and/or principles occurred concurrently with the WIL program. Others were unsure. At the university level, 48% of respondents were aware of their institution's graduate attribute related to sustainability, 25% were not aware, and 27% were unsure.

Integrating Sustainability in Work-Integrated Learning programs: Approaches, Methods, Instigators

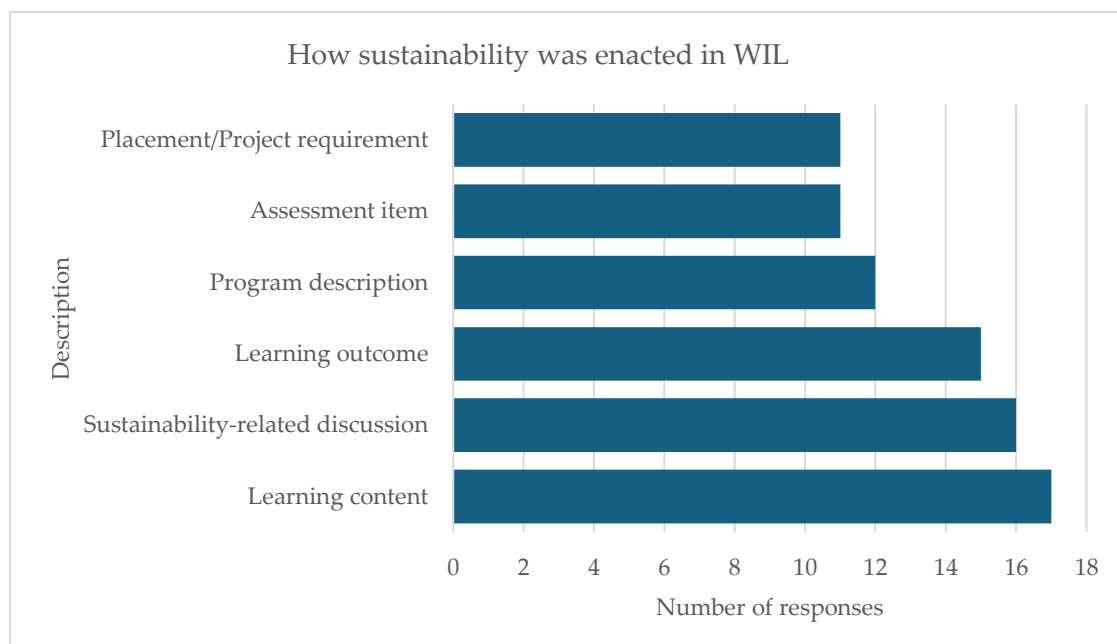
Table 2 illustrates the various approaches to integrating sustainability with WIL programs as conceptualized by Wall and Hindley (2019). The most common approach, with nine responses, is mainstreaming sustainability into the common core curricula. This is followed by piggybacking sustainability onto existing curricula, which received six responses. Focusing on new cross-disciplinary curricula ranked third with five responses. The digging deep approach to sustainability, with new disciplinary-specific curricula garnered four responses. Four respondents did not respond, and one chose 'other' citing the approach used was project dependent.

TABLE 2: Approach to sustainability in work-integrated learning programs.

Rank	Description	Number of responses
1	Into common core curricula (mainstreaming)	9
2	Into existing curricula (piggybacking)	6
3	New cross-disciplinary curricula (focusing)	5
4	New disciplinary-specific curricula (digging deep)	4
4	No response	4
5	Other	1

Sustainability principles and practices were enacted within WIL in various ways (see Figure 1 below). The most common method was inclusion in the learning content, followed by a sustainability-related discussion, and then learning outcomes relating to sustainability. Less common was the explicit inclusion of sustainability related terms in the program description, specific assessment items related to sustainability, or as a placement or project requirement. Respondents could select multiple options.

FIGURE 1: Ways that sustainability was enacted in work-integrated learning.



The survey responses indicated that the integration of sustainability into WIL programs was driven by various factors, with most respondents indicating multiple influences. The most common instigators, as shown in Table 3, included personal motivation, school/faculty sustainability orientation, collegial decisions, and industry partner willingness and initiatives. University champions and accreditation requirements were also significant factors. Management requirements were indicated by four respondents, while two respondents cited 'other' factors, such as meeting the interests of students and international peak bodies such as the United Nations.

TABLE 3: Factors instigating integration of sustainability in work-integrated learning programs.

Rank	Description	Number of responses
1	Personal motivation	20
2	School/faculty sustainability orientation	16
3	Collegial decision	10
4	Industry partner willingness	9
4	Industry partner initiatives	9
5	University champions	8
6	Accreditation requirements	7
7	Management requirements	4
8	Other	2

Work-Integrated Learning and Sustainability Integration: Benefits and Barriers

The survey results indicate that academics perceive numerous benefits to integrating sustainability with WIL programs. The most frequently cited benefit was an improved understanding and awareness of sustainability among participating students, with 19 responses. This was followed by an increased level of critical reflection (16 responses) and heightened interest in sustainability (15 responses). Additionally, there was notable interest in partnerships from industry and stakeholders, as well as increased collegial discussion and interest in sustainability, each receiving 12 responses. Improved employment opportunities for students in sustainability-related fields were also noted, with 8 responses. Three respondents selected 'other' benefits, citing university ranking improvements and increased enrolments, while two respondents indicated no perceived benefits.

Despite these benefits, WIL academics identified several barriers to integrating sustainability in WIL programs. Among the 26 programs that integrated sustainability, 8 encountered barriers, while 12 stated no barriers. Others did not respond to this question. The most frequently cited barriers were academic workload pressures (7 responses), crowded curriculum (5), limited resources (4), difficulty finding suitable placements (3), resistance from colleagues (2), the challenge of being a lone champion (2), other institutional barriers (1) and student background and expectations (1).

Future Integration: Importance, Preferred Strategies, Enablers and Key Stakeholders

The survey contained questions pertaining to the future of WIL and sustainability, including the importance of incorporating sustainability in WIL, the strategies of integration, what the enablers would be, and the key stakeholders.

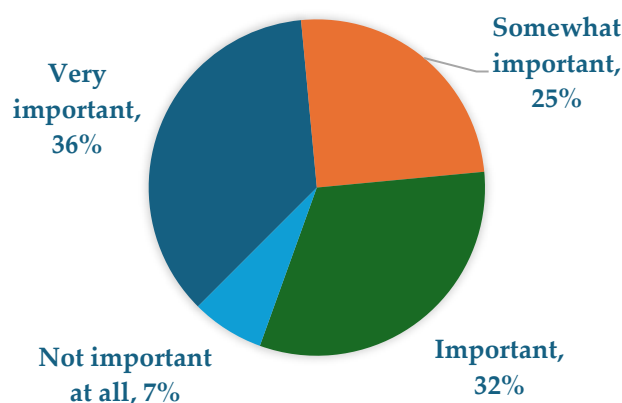
Importance

Forty-seven (47) respondents provided insights into their views on the importance of integrating sustainability principles and practices into WIL. As depicted in Figure 2, a significant majority of

respondents (93%) identified the integration of sustainability in WIL programs as important, with 36% deeming it to be 'very important'.

FIGURE 2: Importance of sustainability and work-integrated learning integration.

IMPORTANCE OF SUSTAINABILITY AND WIL INTEGRATION



Respondents were also asked for a justification for their response. Many respondents emphasized that sustainability is a fundamental aspect of education and professional practice, highlighting its critical role in preparing students for future challenges. They believe that sustainability should be a core value embedded in all forms of work and life, with a strong focus on social responsibility and the needs of future generations. This sentiment is captured in comments such as, "Sustainability is important in everything we do" and "The future of the planet and society relies on individuals embracing sustainability." Overall, while there is a strong consensus on the importance of sustainability, one respondent felt that sustainability is not directly relevant to WIL, as noted in the comment, "Sustainability is an important topic but has no particular relevance to WIL."

Preferred strategies

Respondents identified a range of strategies for integrating sustainability into WIL programs in the future, with clear preferences emerging (see Table 4). Notably, 61% (28/46) of respondents indicated three or more of the strategies should be used. The most popular strategy was encouraging students to think critically about sustainability within their disciplines, reflecting a strong emphasis on fostering reflective and context-specific awareness. Education and training on sustainable practices and principles were also widely supported, highlighting the importance of equipping students with foundational knowledge and skills. Integrating sustainable practices into WIL tasks and projects, along with collaboration with industry partners, were similarly valued as practical ways to align learning with real-world applications. Less frequently selected, but still notable, was the integration of sustainability into student evaluation and assessment processes.

TABLE 4: Strategies for integrating sustainability in work-integrated learning.

Rank	Description	Number of responses
1	Encouraging students to think critically about sustainability in their field	38
2	Offering education and training on sustainable practices and principles	27
3	Incorporating sustainable practices into the WIL tasks and projects	25
3	Through collaboration with industry partners	25
4	Incorporating sustainability into the evaluation and assessment of students	19
5	Other	8

In addition to the quantitative findings, qualitative comments provided further insight into respondents' perspectives on preferred strategies. A small number of responses in the 'other' category highlighted practical constraints and alternative approaches to integrating sustainability into WIL programs. These included limitations due to resource availability, embedding sustainability in learning prior to WIL, tailoring it to specific industry placements, and exploring a shift toward a regenerative mindset.

Suggestions for future integration emphasized the need for practical guidance and stronger collaboration. Respondents called for case study examples of how sustainability can be embedded across diverse WIL contexts. One respondent noted, "What would be best is concrete examples of how it is implemented in diverse kinds of WIL?" Another highlighted the need for alignment, stating, "There needs to be alignment between universities and industry partners to make meaningful change to current arrangements." Additional comments underscored the need for clear definitions of sustainability. One respondent commented that "Sustainability should be an LO [Learning Outcome] of every unit in every course, however there is a need to clarify the meaning as it is a very loaded word and like WIL can mean many different things across a range of applications."

Enablers

Respondents were asked to rank the factors that would enable the incorporation of sustainability principles in their WIL programs, on a scale from 1 to 7, with lower values indicating higher importance. Thirty-eight (38) respondents completed the ranking of enablers that would support the integration of sustainability principles into WIL programs. The findings, outlined in Table 5, indicate that institutional support, workload allocation, and industry engagement are the most important enablers, with strong consensus on their significance. In contrast, opinions on accreditation requirements were divided, suggesting varying perceptions of their influence on sustainability efforts, or some responses reflecting disciplines without accreditation requirements. Other factors, such as collegial support and university champions, were ranked as less critical compared to institutional and industry-focused facilitators.

TABLE 5: Factors enabling sustainability in work-integrated learning (n=38).

Enabler	Mean Ranking	Standard Deviation
	(Lower = More important)	(Lower = More consensus)
Institutional advocacy and support	3.00	1.76
Workload allocation	3.36	1.86
Industry partner willingness	3.79	1.69
Industry partner initiatives	4.15	1.81
Collegial support	4.10	1.90
Accreditation requirements	4.43	2.60
University champions	4.82	1.74

Key stakeholders

The survey asked respondents to rank key stakeholders in integrating sustainability in WIL on a scale from 1 to 6, with lower values indicating higher importance. A total of 36 respondents provided complete rankings of key stakeholders perceived to be important. Table 6 summarizes the results, showing that course coordinators are considered the most important stakeholders, followed by industry partners and institutional WIL leaders. Students, senior university executives such as DVC education, and heads of school/faculty are also important but ranked slightly lower. The standard deviation values indicate a moderate level of agreement among respondents.

TABLE 6: Key stakeholders in sustainability and work-integrated learning integration (n =36).

Stakeholder	Mean Ranking	Standard Deviation
	(Lower = More important)	(Lower = More consensus)
Course coordinators	3.03	1.64
Industry partners	3.21	1.74
Institutional WIL leaders	3.24	1.26
Students	3.73	1.99
Senior university executive	3.81	1.97
Heads of school/faculty	3.86	1.48

Qualitative comments provided additional context to the ranked enablers and key stakeholders, highlighting both the supports needed and the challenges faced in integrating sustainability into WIL programs. Respondents frequently mentioned workload constraints and the need for additional resources as significant barriers. They noted that while sustainability is important, the practicalities of incorporating it into already crowded curricula can be daunting. For instance, one respondent stated, "We have so much to do these days...I feel like taking on more without being allocated for that work does not make sense." Other comments pointed to key enablers, including institutional and industry support. One respondent stated, "The support and initiatives from Uni and industry partners is essential." Similarly, another noted that "If sustainability was an explicit undertaking/strategy of the university, more focus would be given to implementing principles in WIL units...Workload allocation would also be necessary to thoroughly scaffold sustainability principles." The role of students was also acknowledged, with one respondent noting, "Students are our number 1 clients, so it makes sense to include them and industry partners to enable application."

DISCUSSION

Expanding Work-Integrated Learning's Purpose by Embracing Sustainability

WIL continues to play a central role in higher education, offering students practical, hands-on experience. Despite differences in types, disciplinary contexts, and whether programs are core or elective, higher education institutions adopt diverse strategies to embed experiential learning opportunities. The distribution of WIL activities across different years of study, particularly concentrated in 3rd and 4th years, suggests that institutions frequently position WIL as a capstone experience, designed to consolidate disciplinary knowledge through real-world application. This capstone approach, offers a strategic opportunity to build sustainability literacy throughout the degree, leading to its practical application during WIL experiences.

The study's findings support a growing imperative to reframe WIL as more than a pathway to employment. Whilst employability remains a core outcome, the integration of sustainability principles within WIL programs enables a broader educational purpose. Notably, nearly half of the surveyed programs explicitly incorporate sustainability, indicating a shift toward preparing students for their roles as socially and environmentally responsible professionals. This trend aligns with calls in the literature for higher education to cultivate graduates who are not only work-ready but also sustainability literate and prepared to contribute positively to society (Alimehmeti et al., 2024; Leal Filho et al., 2016).

Pedagogical Value of Sustainability in Work-Integrated Learning

The objectives of the study were to identify the ways in which WIL programs in Australia are integrating sustainability, and explore the benefits, barriers, and enablers of integration. The range of approaches used by WIL academics to integrate sustainability into WIL programs highlights its value and relevance to student learning. The findings indicated that sustainability principles were most commonly embedded through learning content, followed by structured discussions and targeted learning outcomes. These methods support the development of sustainability literacy by encouraging students to critically examine the social, environmental and ethical dimensions through their thinking, problem solving and decision making (Sanchez et al., 2025). Strategies such as mainstreaming sustainability into core curricula and adapting existing content demonstrate flexible ways to embed sustainability without requiring complete curriculum redesign which may be time and resource intensive. Less common approaches, such as incorporating sustainability into assessment or making it a placement requirement, suggest further opportunities to align learning with real-world application and deepen student engagement.

The reported benefits of integrating sustainability into WIL further reinforce its pedagogical value. Some respondents also noted enhanced employment opportunities for students in sustainability-related fields, along with institutional gains such as improved university rankings and enrolments. These findings highlight the potential of sustainability literacy to enhance employability outcomes, as demonstrated by a recent study in which graduates with knowledge of the SDGs reported stronger alignment between their skills and job roles, as well as higher earnings (Alimehmeti et al., 2024). Survey respondents most frequently cited improved student understanding and awareness of sustainability, followed by enhanced critical reflection and increased interest in sustainability-related topics. These outcomes suggest that sustainability-focused WIL encourages deeper engagement and supports transformative learning, prompting students to consider the broader implications of their work beyond technical skills (Ferns et al., 2024). Additional benefits included stronger partnerships with industry

stakeholders, as well as discussions about sustainability among academic colleagues. Overall, integrating sustainability into WIL not only enriches student learning but also assists higher education institutions in meeting their dual agendas of employability and sustainability.

Structural and Cultural Barriers to Integration

Despite the clear benefits, the integration of sustainability into WIL is not without challenges. Academic workload pressures, crowded curricula, and limited resources were frequently cited barriers to integrating sustainability into WIL programs. These constraints reflect the realities faced by academics who often struggle to find time and space within existing programs to embed new content or approaches (Huss et al., 2021). Difficulty in securing suitable placements or projects that align with sustainability goals was also noted. These findings point to broader systemic issues within higher education, including bureaucratic constraints such as complex curriculum change processes (Weiss et al., 2021) and the substantial workload involved in negotiating and maintaining relevant industry partnerships (Bilgin et al., 2024). These factors can restrict innovation and responsiveness to emerging global priorities. Without targeted institutional support and strategic planning, sustainability is at risk of being sidelined despite its relevance to contemporary professional practice and active citizenship. Addressing these structural barriers is essential for enabling more consistent and meaningful integration of sustainability across WIL programs.

Beyond structural limitations, cultural and interpersonal dynamics also influence how sustainability is integrated with WIL. In many cases, progress relies on individual staff members who champion sustainability, often without formal recognition or institutional support. This reliance on personal initiative can lead to inconsistent implementation and staff burnout (R. Lozano, 2006). Furthermore, resistance from colleagues, whether due to differing disciplinary priorities or skepticism about the relevance of sustainability, can further hinder collaboration and curriculum innovation (Wood et al., 2016). Whilst most respondents acknowledged the importance of enacting sustainability through WIL, one commented, “sustainability is an important topic but has no particular relevance to WIL.” This view may reflect the dominant focus on employability and WIL, where preparing students for the labour market is prioritized over broader societal contributions.

Enablers and Strategic Opportunities

The findings of this study highlight several key enablers that support the integration of sustainability into WIL programs. Institutional support emerged as a critical factor, particularly in the form of workload allocation, leadership commitment, and alignment with broader university strategies. Respondents identified course/subject coordinators as the most influential stakeholders, followed closely by industry partners and institutional WIL leadership. These roles are pivotal in shaping curriculum, fostering partnerships, and embedding sustainability principles into learning experiences. Our findings support Leal Filho et al.’s (2015) acknowledgement that universities should support teaching staff in creating formal curriculum and career development resources that incorporate the issue of sustainability.

In addition to structural support, the presence of motivated individuals and sustainability-oriented faculties played a significant role in driving integration. Personal motivation, collegial decision-making, and faculty level sustainability commitments were frequently cited as enabling factors. While accreditation requirements received mixed responses, they were still noted as potential levers for embedding sustainability systematically, particularly in disciplines where professional standards are evolving. Collaboration with industry was also seen as essential, especially when partners were willing

to engage with sustainability initiatives or had existing sustainability practices in place. These findings suggest that successful integration depends not only on institutional frameworks but also on the collective efforts of academics, administrators, and industry stakeholders working toward shared sustainability goals.

CONCLUSION

The integration of sustainability in WIL programs is an emerging area of academic inquiry, reflecting a broader shift in higher education toward preparing graduates not only for professional practice but also for informed and responsible citizenship. This study provides valuable insights into how academics perceive and enact sustainability in WIL. The findings reveal clear benefits to integrating sustainability into WIL, including enhanced student engagement, critical reflection, and alignment with real-world challenges. At the same time, academics face notable barriers such as workload pressures, limited resources, and inconsistent institutional support. Despite these challenges, several key enablers were identified, including strategic alignment, senior leadership commitment, and collaboration with sustainability-oriented industry partners. The practical implications of this exploratory study suggest that targeted institutional strategies and stronger industry partnerships could support more consistent and impactful integration of sustainability in WIL. Together, these insights offer a foundation for rethinking the role of WIL in higher education.

Whilst employability remains a central outcome of WIL, the integration of sustainability principles reveals a broader educational purpose. The findings suggest that WIL can serve as a platform for transformative learning, where students not only develop professional skills but also engage with complex social and environmental issues. This expanded role aligns with calls for higher education to cultivate graduates who are not only work-ready but also sustainability-literate to enable them to navigate the complex challenges of the 21st century. To fully realize the potential of WIL in fostering sustainability literacy, institutions must embed sustainability principles into curriculum design and partnerships. This involves aligning WIL with broader strategic goals, acknowledging the workload demands of curriculum innovation, and collaborating with industry partners who support sustainability practices. Embedding sustainability across the curriculum can help scaffold student learning and progressively build sustainability literacy throughout the degree. Course coordinators and WIL leaders are well positioned to lead these efforts but require institutional support to do so effectively.

LIMITATIONS

As an exploratory study, several limitations are acknowledged. Whilst the survey included academics from a range of disciplines and universities across Australia, the findings are based on self-reported data and therefore reflect individual perspectives. The study offers a broad overview but lacks depth, as the survey format did not allow for detailed insights into curriculum design, partnership arrangements, or institutional policy frameworks. The survey did identify academics who were later interviewed for more in-depth insights, which will be presented in a separate publication. Future research may build on these findings by examining disciplinary differences, and by focusing on student and/or industry partner insights. Investigating how sustainability literacy can be effectively embedded and assessed across diverse WIL contexts may offer valuable guidance for future curriculum development and institutional practice.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge that this project was funded with the assistance of a Sustainability Research Grant from Charles Sturt University. Additionally, the authors appreciate the advice provided by colleagues who peer reviewed the research proposal and survey.

Disclosure of the Use of GenAI

We acknowledge the use of Microsoft CoPilot (GPT-4, July 2025 version), accessed in July 2025, for grammatical and formatting assistance.

REFERENCES

- Alimehmeti, G., Fia, M., & Paletta, A. (2024). The sustainability-to-employment pipeline: The impact of SDG-related curricula on graduates' employability. *Studies in Higher Education*, 49(12), 2328-2342.
- Alm, K., Beery, T. H., Eiblmeier, D., & Fahmy, T. (2022). Students' learning sustainability – Implicit, explicit or non-existent: A case study approach on students' key competencies addressing the SDGs in HEI program. *International Journal of Sustainability in Higher Education*, 23(8), 60–84. <https://doi.org/10.1108/IJSHE-12-2020-0484>
- Argento, D., Alm, K., & Pontoppidan, C. A. (2023). Transformative competencies for a sustainable future: Work-integrated learning (WIL) at a master's programme in business administration. *Högskolepedagogisk debatt*, 2023(2), 12–34.
- Argento, D., Einarsson, D., Mårtensson, L., Persson, C., Wendin, K., & Westergren, A. (2020). Integrating sustainability in higher education: A Swedish case. *International Journal of Sustainability in Higher Education*, 21(6), 1131-1150. <https://doi.org/10.1108/IJSHE-10-2019-0292>
- Arvanitakis, J., & Hornsby, D. J. (2016). *Universities, the citizen scholar, and the future of higher education*. Palgrave Macmillan.
- Australian Bureau of Statistics. (2001). *Broad fields*. <https://www.abs.gov.au/statistics/classifications/australian-standard-classification-education-asced/2001/field-education-structure-and-definitions/structure/broad-fields>
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 2, 8-14. <https://doi.org/10.1016/j.npls.2016.01.001>
- Bilgin, A. A., Rowe, A. D., & Clark, L. (2024). The impact of work-integrated learning on academic workload: Drivers, time and tasks involved. *Creative Education*, 15(9), 1796-1817. <https://doi.org/10.4236/ce.2024.159110>
- Billett, S. (2011). *Curriculum and pedagogic bases for effectively integrating practice-based experiences*. Final Report. Australian Learning and Teaching Council.
- Brabazon, H., Esmail, J., Locklin, R., & Stirling, A. (2020). Beyond employability: Defamiliarizing work-integrated learning with community-engaged learning. *Engaged Scholar Journal: Community-Engaged Research, Teaching, and Learning*, 5(3), 21–41. <https://doi.org/10.15402/esj.v5i3.70364>
- Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31–44.
- Brundtland Commission. (1987). *Our common future: Report of the World Commission on Environment and Development*. Oxford University Press.
- Caldicott, J., Wilson, E., Donnelly, J. F., & Edelman, J. R. (2022). Beyond employability: Work-integrated learning and self-authorship development. *International Journal of Work-Integrated Learning*, 23(3), 375-391.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652-661. <https://doi.org/10.1177/1744987120927206>
- Cordoba, P. S., & Bando, L. (2021). Social work and the Sustainable Development Goals: A student placement model. *Australian Social Work*, 75(4), 519–526. <https://doi.org/10.1080/0312407X.2021.1947335>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Dean, B. A., Mundy, T., Price, O., Kennedy, M., Wheeler, G., Sheridan, L., & Iskra, L. (2023). Resourcing and recognition: Academics' perceptions of challenges experienced embedding work-integrated learning in the curriculum. *International Journal of Work-Integrated Learning*, 24(1), 141-156
- Décamps, A., Barbat, G., Carteron, J.-C., Hands, V., & Parkes, C. (2017). Sulitest: A collaborative initiative to support and assess sustainability literacy in higher education. *The International Journal of Management Education*, 15(2), 138-152. <https://doi.org/10.1016/j.ijme.2017.02.006>
- Ferns, S. J., Zegwaard, K. E., Pretti, T. J., & Rowe, A. D. (2024). Defining and designing work-integrated learning curriculum. *Higher Education Research & Development*, 44(2), 371–385. <https://doi.org/10.1080/07294360.2024.2399072>

- Fleming, J. (2014). *Exploring stakeholders' perspectives of cooperative education in sport tertiary education* [Doctoral dissertation, Deakin University]. Deakin University Research Repository. <http://dro.deakin.edu.au/view/DU:30067431>
- Fleming, J., McLachlan, K., & Pretti, T. J. (2018). Successful work-integrated learning relationships: A framework for sustainability. *International Journal of Work-Integrated Learning*, 19(4), 321-335.
- Fugate, M., Kinicki, A., & Ashforth, B. (2004). Employability: A psycho-social construct, its dimensions and applications. *Journal of Vocational Behaviour*, 65(1), 14-38.
- Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Oxford Polytechnic, Oxford Further Education Unit.
- Holdsworth, S., & Thomas, I. (2021). Competencies or capabilities in the Australian higher education landscape and its implications for the development and delivery of sustainability education. *Higher Education Research & Development*, 40(7), 1466-1481. <https://doi.org/10.1080/07294360.2020.1830038>
- Huss, N. M., Huynen, M., Álvarez-Nieto, C., Richardson, J., & López-Medina, I. M. (2021). Embedding sustainability in the nursing curriculum. In I. Darmann-Finck & K. Reiber (Eds.), *Development, implementation and evaluation of curricula in nursing and midwifery education* (pp. 193-210). Springer. https://doi.org/10.1007/978-3-030-78181-1_11
- Ivkovic, S. S., & McRae, N. (2021). Improving engagement of interns and employers with the United Nation's Sustainable Development Goals. *International Journal of Work-Integrated Learning*, 22(3), 345-356.
- Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, 40(2), 350-367. <https://doi.org/10.1080/03075079.2013.842221>
- Jackson, D. (2016). Re-conceptualising graduate employability: The importance of pre-professional identity. *Higher Education Research & Development*, 35(5), 925-39.
- Jackson, D., Shan, H., & Meek, S. (2022). Enhancing graduates' enterprise capabilities through work-integrated learning in co-working spaces. *Higher Education*, 84(1), 101-120.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Lacković, N. (2019). Graduate employability (GE) paradigm shift: Towards greater socio-emotional and eco-technological relationalities of graduates' futures. In M. A. Peters, P. Jandrić, & A. Means (Eds.), *Education and technological unemployment* (pp. 263-283). Springer.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Leal Filho, W., Shiel, C., & Paço, A. (2015). Integrative approaches to environmental sustainability at universities: An overview of challenges and priorities. *Journal of Integrative Environmental Sciences*, 12(1), 1-14. <https://doi.org/10.1080/1943815X.2014.988273>
- Leal Filho, W., Shiel, C., & Paço, A. (2016). Implementing and operationalising integrative approaches to sustainability in higher education: The role of project-oriented learning. *Journal of Cleaner Production*, 133, 126-135.
- Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). *Descriptive analysis in education: A guide for researchers*. (NCEE 2017-4023). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. <https://ies.ed.gov/ncee/pubs/20174023/pdf/20174023.pdf>
- Lozano, J. F., Boni, A., Peris, J., & Hueso, A. (2012). Competencies in higher education: A critical analysis from the capabilities approach. *Journal of Philosophy of Education*, 46(1), 132-147. <https://doi.org/10.1111/j.1467-9752.2011.00839.x>
- Lozano, R. (2006). Incorporation and institutionalization of SD into universities: Breaking through barriers to change. *Journal of Cleaner Production*, 14(9-11), 787-796. <https://doi.org/10.1016/j.jclepro.2005.12.010>
- Lozano, R., Lukman, R., Lozano, F. J., Huisingh, D., & Lambrechts, W. (2013). Declarations for sustainability in higher education: Becoming better leaders, through addressing the university system. *Journal of Cleaner Production*, 48, 10-19.
- Mezirow, J. (1990). *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning*. Jossey-Bass.
- Oliver, B., & Jorre de St Jorre, T. (2018). Graduate attributes for 2020 and beyond: Recommendations for Australian higher education providers. *Higher Education Research & Development*, 37(4), 821-836.
- Painter-Morland, M., Sabet, E., Molthan-Hill, P., Goworek, H., & de Leeuw, S. (2016). Beyond the curriculum: Integrating sustainability into business schools. *Journal of Business Ethics*, 139(4), 737-754. <https://doi.org/10.1007/s10551-015-2886-6>
- Perkins, K. M., Zepeda Quintana, D. S., & Velazquez, L. (2019). Sustainable literacy. In W. Leal Filho (Ed.), *Encyclopedia of sustainability in higher education*. Springer. https://doi.org/10.1007/978-3-030-11352-0_231
- Rekalde-Rodríguez, I., Barrenechea, J., & Hernandez, Y. (2021). Ocean I3. Pedagogical innovation for sustainability. *Education Sciences*, 11(8), Article 396. <https://doi.org/10.3390/educsci11080396>
- Sanchez, S.-J., Piedrahita Guzman, Y., Sosa-Molano, J., Robertson, D., Ahern, S., & Garza, T. (2025). Systematic literature review: A typology of sustainability literacy and environmental literacy. *Frontiers in Education*, 10, Article 1490791. <https://doi.org/10.3389/feduc.2025.1490791>
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.
- Scott, G. (2019). Preparing work ready plus graduates for an uncertain future. In J. Higgs, G. Crisp, & W. Letts (Eds.), *Education for employability: Vol. 1. The employability agenda* (pp. 108-118). Brill.
- Smith, C., Ferns, S., & Russell, L. (2014). *The impact of WIL on student work-readiness. Final Report*. Curtin University of Technology, LSN Teaching Development Unit.

- Strachan, S., Logan, L., Willison, D., Bain, R., Roberts, J., Mitchell, I., & Yarr, R. (2023). Reflections on developing a collaborative multi-disciplinary approach to embedding education for sustainable development into higher education curricula. *Emerald Open Research*, 1(9). <https://doi.org/10.1108/EOR-09-2023-0007>
- Tight, M. (2023). Employability: A core role of higher education? *Research in Post-Compulsory Education*, 28(4), 551–571. <https://doi.org/10.1080/13596748.2023.2253649>
- Tomlinson, M., & Jackson, D. (2021). Professional identity formation in contemporary higher education students. *Studies in Higher Education*, 46(4), 885-900.
- Wall, T., & Hindley, A. (2019). Work-integrated learning for sustainability education. In W. Leal Filho (Ed.), *Encyclopedia of sustainability in higher education* (pp. 1-7). Springer. https://doi.org/10.1007/978-3-319-63951-2_37-1
- Wall, T., Hindley, A., Hunt, T., Peach, J., Preston, M., Hartley, C., & Fairbank, A. (2017). Work-based learning as a catalyst for sustainability: A review and prospects. *Higher Education, Skills and Work-Based Learning*, 7(2), 211–224.
- Weiss, M., Barth, M., & von Wehrden, H. (2021). The patterns of curriculum change processes that embed sustainability in higher education institutions. *Sustainability Science*, 16(5), 1579-1593.
- Wood, B. E., Cornforth, S., Beals, F., Taylor, M., & Tallon, R. (2016). Sustainability champions? Academic identities and sustainability curricula in higher education. *International Journal of Sustainability in Higher Education*, 17(3), 342-360. <https://doi.org/10.1108/IJSHE-12-2014-0171>
- Yorke, M. (2006). *Employability in higher education: What it is – what it is not*. The Higher Education Academy.
- Zamora-Polo, F., Sánchez-Martín, J., Corrales-Serrano, M., & Espejo-Antúnez, L. (2019). What do university students know about sustainable development goals? A realistic approach to the reception of this UN program amongst the youth population. *Sustainability*, 11(13), Article 3533.
- Zegwaard, K. E., Pretti, T. J., Rowe, A. D., & Ferns, S. J. (2023). Defining work-integrated learning. In K. E. Zegwaard, & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 29–48). Routledge.



About the Journal

The International Journal of Work-Integrated Learning (IJWIL) publishes double-blind peer-reviewed original research and topical issues related to Work-Integrated Learning (WIL). IJWIL first published in 2000 under the name of Asia-Pacific Journal of Cooperative Education (APJCE).

In this Journal, WIL is defined as:

An educational approach involving three parties – the student, educational institution, and an external stakeholder – consisting of authentic work-focused experiences as an intentional component of the curriculum. Students learn through active engagement in purposeful work tasks, which enable the integration of theory with meaningful practice that is relevant to the students' discipline of study and/or professional development (Zegwaard et al., 2023, p. 38).*

Examples of practice include off-campus workplace immersion activities such as work placements, internships, practicum, service learning, and cooperative education (co-op), and on-campus activities such as work-related projects/competitions, entrepreneurship, student-led enterprise, student consultancies, etc. WIL is related to, and overlaps with, the fields of experiential learning, work-based learning, and vocational education and training.

The Journal's aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, WIL practitioners, curricular designers, and researchers. The Journal encourages quality research and explorative critical discussion that leads to the advancement of quality practices, development of further understanding of WIL, and promote further research.

The Journal is financially supported by the [WILNZ](#), [WACE](#), [WIL Australia](#), and the [University of Waikato](#).

Types of Manuscripts Sought by the Journal

Types of manuscripts sought by IJWIL are primarily in two forms: 1) *research publications* describing research into aspects of WIL and, 2) *topical discussion* articles that review relevant literature and provide critical explorative discussion around a topical issue. The journal will, on occasions, consider good practice submissions.

Research publications should contain; an introduction that describes relevant literature and sets the context of the inquiry. A detailed description and justification for the methodology employed. A description of the research findings - tabulated as appropriate, a discussion of the importance of the findings including their significance to current established literature, implications for practitioners and researchers, whilst remaining mindful of the limitations of the data, and a conclusion including recommendations.

Topical discussion articles should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical and scholarly discussion on the importance of the issues, critical insights into how to advance the issue further, and implications for other researchers and practitioners.

Good practice and program description papers. On occasions, IJWIL seeks manuscripts describing an example of good practice, however, only if it presents a particularly unique or innovative practice or it was situated in an unusual context. There must be a clear contribution of new knowledge to the established literature. Manuscripts describing what is essentially 'typical', 'common' or 'known' practices will be encouraged to rewrite the focus of the manuscript to a significant educational issue or will be encouraged to publish their work via another avenue that seeks such content.

By negotiation with the Editor-in-Chief, the Journal also accepts a small number of *Book Reviews* of relevant and recently published books.

Reference

Zegwaard, K. E., Pretti, T. J., Rowe, A. D., & Ferns, S. J. (2023). Defining work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 29-48). Routledge. <https://doi.org/10.4324/9781003156420-4>

Supporters





International Journal of Work-Integrated Learning

ISSN: 2538-1032

www.ijwil.org

EDITORIAL BOARD

Editor-in-Chief

Assoc. Prof. Karsten Zegwaard

University of Waikato, New Zealand

Associate Editors

Dr. Craig Cameron

University of the Sunshine Coast, Australia

Dr. David Drewery

University of Waterloo, Canada

Assoc. Prof. Jenny Fleming

Auckland University of Technology, New Zealand

Assoc. Prof. Sonia Ferns

Curtin University, Australia

Dr. Judene Pretti

University of Waterloo, Canada

Dr. Anna Rowe

University of New South Wales, Australia

Senior Editorial Board Members

Assoc. Prof. Bonnie Dean

University of New South Wales, Australia

Dr. Phil Gardner

Michigan State University, United States

Assoc. Prof. Kathryn Hay

Massey University, New Zealand

Prof. Denise Jackson

Edith Cowan University, Australia

Assoc. Prof. Ashly Stirling

University of Toronto, Canada

Emeritus Prof. Janice Orrell

Flinders University, Australia

Emeritus Prof. Neil I. Ward

University of Surrey, United Kingdom

Dr. Theresa Winchester-Seeto

University of New South Wales, Australia

Copy Editors

Diana Bushell

International Journal of Work-Integrated Learning

Liz Shoostovian

Shoostov Communications

IT Support

Erik van der Gaag

International Journal of Work-Integrated Learning

REVIEW BOARD

Assoc. Prof. Erik Alanson, University of Cincinnati, United States

Prof. Andy Martin, Massey University, New Zealand

Assoc. Prof. Martin Andrew, Otago Polytechnic, New Zealand

Dr. Norah McRae, University of Waterloo, Canada

Dr. Roelien Brink, Tshwane University of Technology, South Africa

Dr. Katheryn Margaret Pascoe, University of Otago, New Zealand

Mr. Matthew Campbell, University of Queensland, Australia

Dr. Laura Rook, University of Wollongong, Australia

Assoc. Prof. Clare Dannenberg, University of Canterbury, New Zealand

Assoc. Prof. Philip Rose, Hannam University, South Korea

Dr. Julia Caldicott, Southern Cross University, Australia

Dr. Leoni Russell, RMIT, Australia

Prof. Leigh Deves, Charles Darwin University, Australia

Dr. Jen Ruskin, Macquarie University, Australia

Prof. Michelle Eady, University of Wollongong, Australia

Dr. Andrea Sator, Simon Fraser University, Canada

Dr. Alon Eisenstein, University of British Columbia, Canada

Dr. David Skelton, Eastern Institute of Technology, New Zealand

Assoc. Prof. Chris Eames, University of Waikato, New Zealand

Assoc. Prof. Calvin Smith, University of Queensland, Australia

Ms. Anne-Marie Fannon, University of Waterloo, Canada

Assoc. Prof. Judith Smith, Queensland University of Technology, Australia

Assoc. Prof. Wendy Fox-Turnbull, University of Waikato, New Zealand

Dr. Raymond Smith, Griffith University, Australia

Dr. Ainsley Goldman, University of Toronto, Canada

Prof. Roger Strasser, Simon Fraser University, Canada

Dr. Nigel Gribble, Curtin University, Australia

Dr. Kylie Taffard, University of Canterbury, New Zealand

Prof. Rachael Hains-Wesson, RMIT University, Australia

Prof. Yasushi Tanaka, Kyoto Sangyo University, Japan

Dr. Lynette Hodges, Massey University, New Zealand

Dr. Raewyn Tudor, University of Canterbury, New Zealand

Dr. Katharine Hoskyn, Auckland University of Technology, New Zealand

Dr. Faith Valencia-Forrester, Charles Sturt University, Australia

Dr. Gail Hutcheson, University of Waikato, New Zealand

Dr. Thai Vu, Curtin University, Australia

Dr. Nancy Johnston, Simon Fraser University, Canada

Ms. Genevieve Watson, Elysium Associates Pty, Australia

Dr. Katie Knapp, University of Waterloo, Canada

Dr. Nick Wempe, Primary Industry Training Organization, New Zealand

Dr. Julian Lee, RMIT University, Australia

Prof. Chris Winberg, Cape Peninsula University of Technology, South Africa

Dr. Patricia Lucas, Auckland University of Technology, New Zealand

Dr. Karen Young, Deakin University, Australia

Dr. Jaqueline Mackaway, Macquarie University, Australia

Publisher: Work-Integrated Learning New Zealand (WILNZ)

Copyright: CC BY 4.0