



Embedding non-placement, community-engaged work-integrated learning in the first year: A curriculum model for vocational identity and belonging

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Abstract

Work-integrated learning (WIL) is increasingly conceptualised as a curriculum-embedded process that may include non-placement activities designed to make professional practice visible early in a degree. This study evaluates a first-year, community-engaged WIL model embedded within a sport development degree. The curriculum integrated practitioner interaction, site visits, applied learning tasks, and structured reflection to support students' early engagement with professional and community contexts. Using a convergent mixed-methods design (n = 89), the study examined whether participation in this curriculum was associated with students' vocational identity and sense of belonging during transition to university. Health-related degrees, in which professional exposure is typically deferred, were used as a contextual comparison. Students who experienced the first-year WIL curriculum reported stronger vocational identity, particularly in relation to professional belonging and identification with a future profession. Qualitative findings indicated that practitioner interaction, authentic tasks, and guided reflection helped students visualise professional roles and develop clearer understandings of career pathways, whereas students without structured early exposure described a more exploratory first-year experience centred on disciplinary learning and peer connection. The study contributes to WIL scholarship by positioning first-year, non-placement, community-engaged WIL as an identity-forming process rather than solely a late-stage employability intervention. It proposes a scalable curriculum model for supporting transition, belonging, and career development through practice-visible learning.

Keywords

work-integrated learning, community-engaged learning, vocational identity, student belonging, first-year transition, curriculum design, employability

Introduction

Work-integrated learning (WIL) has evolved from a predominantly placement-based model toward a broader set of curriculum-embedded approaches that emphasise the intentional integration of theory and practice, regardless of physical workplace location (Ferns et al., 2025; Dean et al., 2020). Early Australian scholarship established WIL as a pedagogical strategy that may, but does not necessarily, involve formal workplace placements, instead encompassing a range of authentic learning activities designed to connect disciplinary knowledge with professional practice, civic contexts, and the world of

work (Peach & Gamble, 2011). Subsequent typologies expanded this definition to include simulations, virtual projects, applied assignments, job-readiness activities, and community-based engagements, reflecting growing recognition that professional learning can occur through multiple practice-visible forms beyond traditional placements (Rowe et al., 2012). More recently, institutional frameworks have sought to make both placement and non-placement WIL more visible across degrees by scaffolding diverse experiences throughout the curriculum, while acknowledging that non-placement forms of WIL often remain less recognised despite their increasing prevalence (Dean et al., 2020).

Alongside this expansion, WIL is increasingly conceptualised as a relational and multi-stakeholder process involving students, educators, industry, communities, and, in some models, government partners (Wait & Govender, 2016). This shift foregrounds the social, negotiated, and contextual nature of learning, moving beyond individual student outcomes to consider partnerships, reciprocity, and shared responsibility for learning design and impact. However, while community-engaged approaches have been identified within WIL frameworks, often under the banner of social engagement, citizenship, or community-focused learning, they have frequently remained conceptually undifferentiated from industry-based models in the WIL literature (Peach & Gamble, 2011). As a result, explicit theorisation of community-engaged WIL as a relational process, distinct in purpose and structure from employability-driven industry placements, remains comparatively underdeveloped.

Community-engaged WIL draws on traditions of community-engaged learning (CEL) and service-learning, where reciprocity, openness, and mutual benefit between universities and communities are central to educational value (Sandy & Holland, 2006; Crane et al., 2019). CEL scholarship has argued that these approaches introduce forms of structural self-critique largely absent in traditional WIL models by emphasising learning objectives beyond employability, including civic responsibility, social capital, and ethical engagement (Brabazon et al., 2020). Empirical studies highlight that community partners prioritise shared values, long-term relationships, and meaningful contributions to organisational capacity, and that these relational conditions shape the quality of student learning (Harris et al., 2010; Sandy & Holland, 2006). Previous work has proposed degree-wide employability frameworks within a sport development program that integrate curricular and co-curricular professional learning opportunities across the student lifecycle (Harris-Reeves, 2023). These approaches suggest that community-engaged and practice-visible learning can be scaffolded longitudinally across a degree rather than confined to isolated placement experiences. Although several WIL initiatives have successfully implemented partnership-based community placements and projects, comparative analysis between community-engaged and industry-focused WIL remains limited, particularly in relation to student identity development and belonging (Peach & Gamble, 2011; Mason O'Connor et al., 2011).

Within this broader reconceptualisation of WIL, increasing attention has been given to how curriculum design can intentionally integrate authentic, practice-visible experiences to support students' employability, professional identity formation, and transition into higher education (Billett, 2015; Bowen, 2018; Ferns et al., 2025). While much of the WIL literature has focused on placements and later-stage experiences, recent scholarship has highlighted the potential of earlier, scaffolded forms of WIL such as practitioner interaction, applied projects, and community-based tasks, to provide accessible and scalable opportunities for first-year students to engage with professional practice (Zegwaard et al., 2023; Dean et al., 2020; Dollinger et al., 2024). Curriculum-embedded employability activities have similarly been identified as scalable mechanisms through which students can engage with professional learning and career development early in their degree (Harris-Reeves et al., 2024). Empirical evidence, though limited in scale, suggests that even short, early-stage exposures to authentic professional contexts can positively influence students' perceptions of employability, self-efficacy, and academic engagement (Freudenberg et al., 2010; Harris-Reeves & Mahoney, 2017). However, large-scale comparative studies examining the timing of WIL experiences remain scarce, and little is known about how early-stage, community-engaged WIL specifically shapes students' vocational identity and sense of belonging during the transition to university.

The importance of examining early-stage WIL is underscored by research on professional identity formation and belonging in higher education. Professional identity, the developing sense of oneself as a future practitioner, is widely regarded as a critical bridge between university study and future employment and is shaped by social experience, educational context, and exposure to professional practice (Trede et al., 2012; Tomlinson & Jackson, 2021). Identity formation is fundamentally relational in nature, emerging through authentic participation, interaction with practitioners, and structured reflection rather than through disciplinary knowledge acquisition alone (Goldie, 2012; Trede et al., 2012). Early exposure to practice-visible learning environments can provide apprentice-like experiences that support students in imagining themselves within a profession and in aligning personal values with occupational cultures (Virtanen et al., 2008; Spencer et al., 2018).

Sense of belonging has similarly been identified as a key determinant of student success, wellbeing, and persistence, particularly during the first year of university (Pedler et al., 2022; van Kessel et al., 2025). Belonging encompasses interpersonal, academic, and disciplinary dimensions, with academic belonging, feeling that a field of study is 'right' for oneself, playing a critical role in student continuation (Kahu et al., 2022). Experiential and relational learning environments have been shown to support belonging development, yet early-year belonging trajectories remain uneven across disciplines and curricular structures (Gilani & Thomas, 2025). Importantly, WIL experiences that foreground authentic engagement and reflection have been identified as particularly effective in supporting both identity formation and belonging, though most evidence is drawn from later-stage or placement-based contexts (Ferns & Lilly, 2015; Helyer, 2015).

Despite growing interest in first-year WIL, its implementation remains uneven across disciplines. Degrees with strong applied or industry-facing orientations are more likely to embed practice-visible and community-engaged experiences early in the curriculum, whereas science-based and professionally accredited degrees often prioritise foundational knowledge in first-year, with substantive professional exposure deferred to later stages (Jackson, 2017; Snell et al., 2020). This structural variation shapes students' access to professional contexts, community partnerships, and opportunities to develop vocational identity and belonging during the critical transition into university. As a result, students in some degrees encounter early opportunities to engage with professional practice and reflect on career pathways, while others remain in an extended exploratory phase with limited exposure to the realities of practice (Trede et al., 2012; Pedler et al., 2022).

In response to these gaps, this study evaluates a first-year, community-engaged WIL curriculum embedded within a sport development degree that intentionally foregrounds relational, practice-visible learning. The study examines whether participation in early-stage, curriculum-embedded, community-engaged WIL is associated with differences in students' vocational identity and sense of belonging during transition to university, using a contextual comparison with health degrees in which professional exposure is typically deferred. Employing a convergent mixed-methods design, the study integrates quantitative and qualitative data across cohorts. By conceptualising first-year, community-engaged WIL as an identity-forming and belonging-supportive process, this research contributes empirical evidence to an underexplored area of WIL scholarship and advances curriculum models capable of supporting equitable, scalable transitions into professional learning across disciplines.

Method

Study design and context

A convergent mixed-methods design was used to examine how participation in a first-year, non-placement, community-engaged WIL curriculum was associated with students' vocational identity and sense of belonging during transition to university. Quantitative and qualitative data were collected

concurrently and integrated during interpretation to provide both overall and contextualised understandings of students' experiences.

The study was conducted within the Bachelor of Sport Development at Griffith University, in which community-engaged WIL was embedded from first year through curriculum-embedded, practice-visible learning activities (Harris-Reeves, 2023). Students enrolled in this degree are referred to hereafter as the sport development cohort. These activities were designed to support early engagement with professional and community contexts, vocational identity development, and career exploration during transition into higher education (Harris-Reeves et al., 2025). In contrast to traditional placement-based models, the curriculum used non-placement WIL approaches embedded within regular teaching and assessment activities.

Participants were undergraduate students enrolled either in the sport development degree (community-engaged WIL cohort; $n = 61$) or in one of eight health-related degrees at the same institution (comparison cohort; $n = 28$). The comparison cohort represented programs in which professional exposure and placement experiences are typically introduced later in the degree. The study therefore used a contextual comparison between programs with differing approaches to the timing and visibility of professional learning experiences.

Summary of first-year embedded community-engaged WIL curriculum

In this study, community-engaged WIL refers to curriculum-embedded learning activities that connected students with external practitioners, organisations, and authentic professional contexts through non-placement approaches. The curriculum emphasised relational engagement, authentic practice visibility, and structured reflection rather than formal workplace placement hours. Key curriculum components included:

- Professional and community engagement: practitioner-led sessions, interaction with external partners, and site visits to community and industry organisations.
- Applied and authentic learning: practice-informed learning activities and assessment tasks designed to connect disciplinary content with professional contexts.
- Career development and reflection: structured career exploration, guided reflection, and activities supporting students' understanding of professional roles and pathways.
- Collaborative learning: discussion-based and peer learning activities linked to authentic practice contexts.

Collectively, these activities were designed to support vocational identity development, professional belonging, career exploration, and engagement with study during transition to university.

Participants and recruitment

Participants were undergraduate students enrolled either in a sport development degree in which community-engaged WIL was embedded from first year (community-engaged WIL cohort; $n = 61$), or in one of eight health-related degrees at the same institution (comparison cohort; $n = 28$). Participants were typically within the first year of their degree, aligning with the study's focus on transition to university, vocational identity development, and sense of belonging during early engagement with higher education.

Recruitment procedures differed across cohorts due to differences in curriculum structure and degree organisation. Students in the sport development degree were recruited through a single core first-year subject in which the community-engaged WIL curriculum was delivered, providing a consistent learning and communication context. In contrast, students in the health-related degrees were recruited across multiple programs via course announcements and learning management system messages within a shared first-year course. This reflected a more distributed curricular structure in

which professional and community engagement was not embedded within a single cohesive first-year learning experience.

Participation was voluntary, anonymous, and unrelated to assessment or subject requirements. Surveys were completed outside scheduled class time, and students were informed that responses would not be shared with teaching staff in identifiable form. Once participants accessed the survey, administration procedures were standardised across cohorts. Identical survey instruments, timing, and delivery procedures were used to support comparability of measures.

The comparison cohort was used as a contextual reference point rather than as an experimental control group. Accordingly, the study does not claim causal effects of curriculum design, but instead examines how differing levels of early, curriculum-embedded engagement with professional and community contexts are associated with students' reported experiences of vocational identity and belonging during transition to university.

Researcher positionality and reflexivity

The researchers were involved in the design and delivery of the sport development curriculum under investigation. This positioned the research team as insiders to the curricular context, with direct experience of the community-engaged WIL model, its pedagogical intentions, and its relational design. While this proximity enabled contextually informed interpretation of student experiences, it also introduced the potential for bias, including assumptions about curriculum effectiveness and students' engagement with professional practice.

Reflexivity was embedded throughout the research process to support interpretive rigour and transparency. The dual roles of educator and researcher were explicitly acknowledged, and analytic decisions were approached with attention to how researcher positioning might shape interpretation, particularly in relation to constructs of vocational identity and belonging. Qualitative analysis was conducted independently by two researchers, with coding discussions used to surface alternative interpretations and challenge researcher assumptions.

Reflexive memos were maintained throughout analysis to document emerging interpretations, assumptions, and analytic decision-making. Consistent with interpretive traditions in WIL and identity research, researcher positioning was treated as integral to understanding how students interpreted and made meaning of practice-visible learning experiences within specific curricular contexts.

Data collection

Data were collected via an online survey administered during Weeks 11–13 of Trimester 2 (2023–2024), after students had completed a substantial portion of their first-year learning activities and assessments and had been exposed to first-year curriculum experiences, including community-engaged WIL activities where applicable. This timing was selected to capture students' reflective perspectives on vocational identity and belonging after initial exposure to professional and disciplinary learning, while these experiences remained formative.

The survey included quantitative and qualitative items examining vocational identity, professional learning experiences, and belonging during transition to university. The quantitative component assessed vocational identity, while two open-ended questions explored students' perceptions of learning experiences that supported career understanding, professional identification, and engagement with their field of study.

Students were invited to participate via course announcements and learning management system messages. An information sheet outlined the study purpose, voluntary nature of participation, and anonymity of responses. No incentives were offered, and participation had no impact on grades or progression. Ethics approval for the study was granted by the university's Human Research Ethics Committee (Approval No. 2023/479).

Measures

Vocational identity

Vocational identity was measured using nine items adapted from the Macleod Clark Professional Identity Scale (MCPIS-9) (Adams et al., 2006), which assesses dimensions of professional belonging, identification, and perceived alignment with a future profession. The MCPIS-9 was selected due to its established use in higher education research examining emerging professional identity. Items were slightly reworded to reflect anticipatory identity formation appropriate to first-year students (e.g., references to 'my future profession').

Responses were recorded on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Reverse-scored items were recoded prior to analysis. Composite vocational identity scores were calculated as the mean of available item responses, consistent with prior applications of the scale in student populations.

Qualitative items

Two open-ended questions were used to explore students' perceptions of meaningful learning experiences and professional understanding:

- What was the best part of studying your degree this year?
- Which experience provided you with the best understanding of a career in your chosen field?

These questions were designed to elicit reflections on learning experiences that supported career understanding, professional identification, and engagement with study during transition to university.

Data analysis

Quantitative analysis

Data were screened for completeness and valid response ranges prior to analysis. Participants with at least seven valid responses across the nine vocational identity items were retained. Reverse-scored items were recoded before composite scores were calculated.

Descriptive statistics (means and standard deviations) were calculated for each cohort. Group differences in composite vocational identity scores were examined using Welch's independent-samples *t*-tests, selected for robustness to unequal variances and sample sizes. Effect sizes were reported using Hedges' *g*. Composite, item-level, and multivariate analyses were used in combination to examine vocational identity at multiple levels. Composite analyses provided an overall measure of vocational identity, item-level analyses identified specific dimensions contributing to group differences, and MANOVA examined whether overall response profiles differed systematically across the nine identity items. Item-level comparisons were conducted using Welch's *t*-tests, with Holm's sequential adjustment applied to control for familywise error across multiple comparisons.

Qualitative analysis

Qualitative responses were analysed using reflexive thematic analysis following Braun and Clarke (2006, 2021). Analysis involved repeated reading of responses, inductive coding, development of preliminary themes, and iterative refinement of thematic interpretations across the dataset.

Coding was conducted independently by two researchers before themes were discussed and refined collaboratively. The analysis focused on how students described experiences that contributed to vocational understanding, professional identification, and belonging during transition to university.

Consistent with reflexive thematic analysis, themes were interpreted as situated and co-constructed rather than as objective categories independent of researcher interpretation.

Integration of findings

Quantitative and qualitative findings were integrated during interpretation to examine convergence and divergence across the datasets. This approach enabled statistical patterns in vocational identity to be contextualised through students' descriptions of learning experiences, professional engagement, and transition to university.

Methodological considerations

Given the study's contextual and curriculum-focused design, several methodological considerations should be acknowledged. The study adopted a non-equivalent group design comparing students from programs with differing approaches to the timing and visibility of professional learning experiences. As a result, findings should be interpreted as identifying associations rather than causal effects of curriculum design.

The cohorts also differed in recruitment context and program structure. The sport development cohort was drawn from a single first-year subject with embedded community-engaged WIL activities, whereas the comparison cohort was recruited across multiple health-related programs. While this reflects authentic differences in curricular organisation, it may also introduce variation in student experience and engagement independent of WIL exposure.

The study focused on students' self-reported perceptions of vocational identity and belonging during transition to university. Although these constructs are important indicators of early professional development, the study did not examine longer-term outcomes such as retention, employability, or professional progression. Future longitudinal research could examine how early, curriculum-embedded WIL experiences influence students' ongoing professional identity development and engagement across the student lifecycle.

Consistent with interpretive approaches to WIL and identity research, the study prioritised contextual understanding over broad generalisability. Nevertheless, the findings may provide transferable insights for curriculum designers seeking scalable, non-placement approaches to supporting vocational identity, belonging, and early professional engagement in higher education.

Results

Participant characteristics

Eighty-nine students participated in the study, including 61 enrolled in the sport development degree with first-year, curriculum-embedded, community-engaged WIL and 28 enrolled across eight health-related degrees serving as a contextual comparison cohort. All participants were in their first year of study (within the first 80 of 240 credit points completed), consistent with the study's focus on early transition into university.

Participants were predominantly aged 20 years or younger. Gender distributions reflected disciplinary trends, with the health-related cohort predominantly female (75%) and the sport development cohort more evenly distributed (52% female). A chi-square test indicated no statistically significant difference in gender distribution between cohorts, $\chi^2(1, N = 89) = 2.78, p = .096$.

Overall, the cohorts were broadly comparable in stage of study, while differing in disciplinary context and curriculum structure relevant to the study design. Demographic characteristics are summarised in Table 1.

Table 1: Demographic characteristics of participants by cohort

Participant demographic		Sport Development	Health	Total
<i>n</i>		61	28	89
Gender	Female	32 (52%)	21 (75%)	53 (60%)
	Male	29 (48%)	7 (25%)	36 (40%)
Age	≤18	28 (46%)	7 (25%)	35 (39%)
	19-20	24 (39%)	13 (48%)	37 (42%)
	21-24	7 (11%)	3 (11%)	10 (11%)
	≥25	2 (3%)	5 (18%)	7 (8%)

Quantitative findings

Vocational identity (composite scores)

As shown in Table 2, students enrolled in the community-engaged WIL curriculum reported higher vocational identity scores ($M = 3.68$, $SD = 0.34$) than students in the health comparison cohort ($M = 3.06$, $SD = 0.42$). This difference was statistically significant, $t(74.10) = 6.70$, $p < .001$, with a large effect size (Hedges' $g = 1.66$). Given the contextual comparison design, this finding is interpreted as an association between participation in first-year, community-engaged WIL and stronger reported vocational identity rather than evidence of a causal effect.

Item-level patterns

Item-level analysis (Table 2) of the nine vocational identity statements showed a consistent pattern in which students in the community-engaged WIL cohort reported higher agreement on positively worded items relating to belonging, identification and perceived alignment with a future profession.

After applying Holm's adjustment for multiple comparisons, statistically significant differences were retained for two items capturing early vocational belonging (e.g., I feel like a member of my future profession and I have strong ties with members of my future profession), both with large effect sizes ($g \geq 1.10$). Differences on other positively worded items were statistically significant at the unadjusted level but did not remain significant following correction. No statistically significant differences were observed for negatively worded items reflecting uncertainty or doubt. These findings suggest that differences between cohorts were most pronounced in relation to early professional belonging and identification, rather than in reduced uncertainty about future pathways

Table 2: Item-level comparisons of vocational identity (MCPIS-9)

Item	Sport Development <i>M</i> (<i>SD</i>), <i>n</i>	Health <i>M</i> (<i>SD</i>), <i>n</i>	<i>t</i> (<i>df</i>)	<i>p</i> (raw)	<i>p</i> (Holm)	Hedges' <i>g</i>
I feel like I am a member of my future profession	4.25 (0.62), 61	3.18 (1.09), 28	$t(35.35)=4.83$	< .001	< .001	1.33
I feel I have strong ties with members of my future profession	3.98 (0.67), 61	3.04 (1.17), 28	$t(35.39)=4.00$	< .001	.002	1.10
I am often ashamed to admit that I am studying for my future profession	1.77 (1.04), 61	1.68 (1.22), 28	$t(45.73)=0.35$	.731	1.000	0.08
I find myself making excuses for belonging to my future profession	1.69 (0.92), 61	2.04 (1.23), 28	$t(41.46)=-1.33$	.191	.754	-0.33
I try to hide that I am studying to be part of my future profession	1.59 (0.82), 61	1.54 (1.00), 28	$t(44.54)=0.25$	.802	1.000	0.06

I am pleased to belong to my future profession	4.69 (0.50), 61	4.18 (0.94), 28	$t(34.17)=2.69$	.011	.077	0.75
I can identify positively with members of my future profession	4.36 (0.52), 61	3.89 (0.96), 28	$t(34.47)=2.43$	.020	.106	0.68
Being a member of my future profession is important to me	4.48 (0.57), 61	4.21 (0.96), 28	$t(35.95)=1.34$	.188	.754	0.36
I feel I share characteristics with other members of my future profession	4.36 (0.58), 61	3.89 (0.92), 28	$t(37.21)=2.48$	.018	.106	0.66

Note: Items reflect adapted MCPIIS-9 wording for anticipatory professional identity. Reverse-scored items are presented in original orientation for interpretive clarity.

Multivariate profile

A multivariate analysis of variance (MANOVA) indicated a significant overall difference in response profiles across the nine items, Wilks' $\Lambda = .63$, $F(9, 73) = 4.79$, $p < .001$. This result supports the interpretation that patterns of vocational identity responses differed systematically between cohorts, consistent with the composite and item-level analyses.

Qualitative findings

Qualitative findings are presented to complement and contextualise the quantitative results by examining how students described learning experiences that supported career understanding, professional identification, and belonging during transition to university.

Community-engaged WIL cohort (sport development degree)

In this context, community engagement is understood not solely as placement-based activity, but as structured interaction with professional and community contexts embedded within the curriculum. Analysis of responses from students in the sport development degree identified three interrelated themes: industry and community engagement, applied and practice-oriented learning, and career clarity and pathway development.

The most prominent theme was industry and community engagement. Students emphasised the value of interacting with practitioners, visiting workplaces, and gaining insight into real-world roles. These experiences were frequently described as making career pathways more tangible and accessible. For example, one student reflected that a field trip 'made it feel real - I could actually see myself working there one day,' while another noted it 'gave me a clearer picture of what people actually do in sports jobs day to day'. These accounts illustrate how firsthand exposure helped students visualise professional environments and begin positioning themselves within them.

The second theme, applied and practice-oriented learning, reflected students' emphasis on hands-on activities, practical sessions, and collaborative tasks. These experiences supported engagement and helped connect theoretical content to real-world application. Students emphasised the value of active participation, with one describing practical learning as 'where it really clicked for me,' and another stating 'you understand it more when you're actually doing it, not just sitting and listening.' Such experiences appear to facilitate deeper conceptual understanding through active engagement.

The third theme, career clarity and pathway development, captured students' reflections on structured activities such as career planning tasks and reflective assessments. These were described as helping students articulate career goals, understand required skills, and identify potential pathways. For example, one student shared that 'it helped me figure out what I'm actually interested in and what suits me,' while another explained 'I've got a better idea now of what I want to do and the steps to get there,' highlighting the role of structured activities in supporting career direction.

Across these themes, students consistently described learning experiences as relational, practice-visible, and closely aligned with professional contexts, reinforcing the role of first-year, authentic engagement in shaping emerging vocational identity.

Comparison cohort (health degrees)

Analysis of responses from students in health-related degrees identified three themes: laboratory and foundational learning experiences; peer connection and social belonging; and limited or episodic exposure to professional contexts.

The dominant theme was laboratory and foundational learning, with students emphasising the importance of practical classes, experiments, and discipline-specific knowledge development. These experiences were consistently described as engaging and valuable for understanding course content. Students highlighted practical components such as lab work and applied sessions, with one noting that ‘the labs are where everything actually starts to make sense,’ while another emphasised ‘working with real specimens like in the cadaver lab, made it stick in a way lectures don’t,’ underscoring how hands-on learning deepened conceptual understanding.

The second theme, peer connection and social belonging, highlighted the importance of friendships, shared learning experiences, and cohort support in facilitating transition to university. Students described ‘meeting new people and studying with friends’ and valued ‘friendships in the degree and practical classes,’ emphasising the importance of social belonging in first-year university experiences.

A third theme, limited or episodic professional exposure, captured students’ appreciation of discrete professional encounters, such as hospital visits or introductory clinical content. While these experiences were valued as providing initial insight into professional settings, they were frequently characterised as sporadic and loosely connected to the broader curriculum. Students described these encounters as isolated events rather than as part of a coherent learning trajectory. For example, one student referred to ‘a field trip to a hospital,’ and another noting ‘we had a brief introduction to clinical work,’ indicating that professional exposure was present but was not accompanied by sustained engagement or structured follow-up.

Overall, students in this cohort described their first-year experience as focused on disciplinary learning and social adjustment, with less consistent connection to professional or community contexts.

Integration of findings

Taken together, the quantitative and qualitative findings present a coherent and convergent pattern. Students exposed to the first-year, curriculum-embedded, community-engaged WIL curriculum reported stronger vocational identity, particularly in relation to professional belonging and identification with a future profession. Qualitative accounts from this cohort further illuminated these outcomes, describing learning experiences characterised by early, structured, and relational engagement with community and industry contexts that made professional practice visible and meaningful.

In contrast, students in disciplines where professional exposure is typically deferred described first-year experiences that centred on foundational disciplinary knowledge and peer connection, alongside more limited, episodic engagement with professional practice. These qualitative accounts align with the quantitative pattern of weaker professional identification, suggesting that differences in curricular design and practice visibility, rather than discipline alone, shape how students begin to understand and relate to future professional pathways during the transition into university.

This distinction highlights two complementary but conceptually distinct forms of experiential learning: discipline-based laboratory learning, which supports conceptual understanding through structured and technical environments, and practice-visible, community-engaged learning, which supports early professional identification through relational, applied, and context-rich experiences. The findings

suggest that it is not the presence of ‘hands-on’ learning alone, but the nature and orientation of that learning, particularly its connection to professional contexts, that shapes how students begin to understand and relate to future careers.

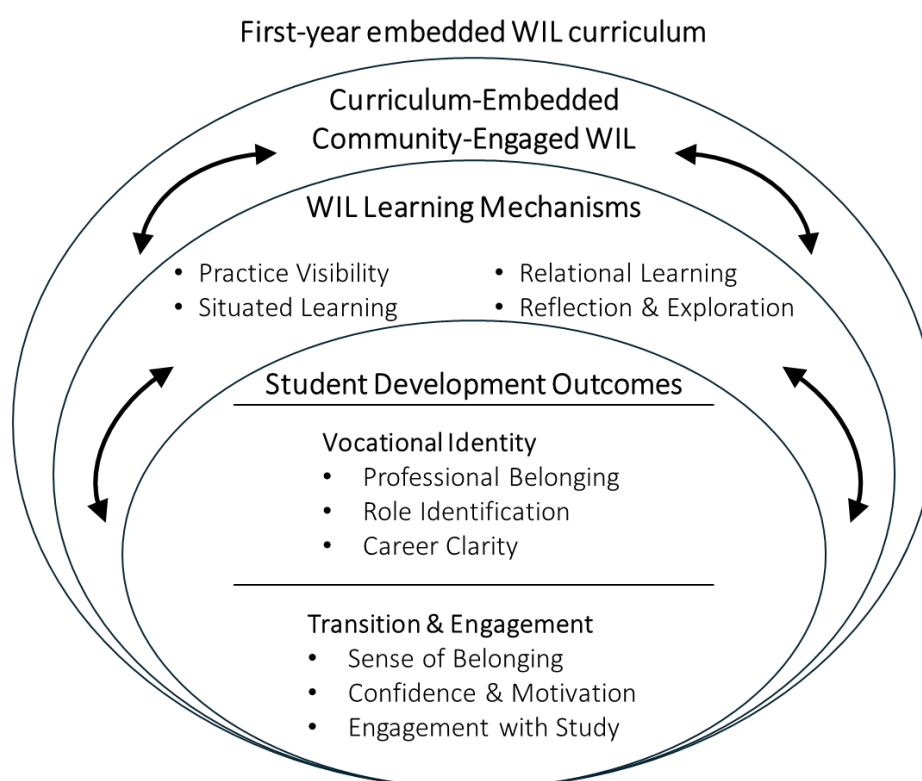
This convergence of findings supports the interpretation that first-year, curriculum-embedded, community-engaged WIL is associated with differences in how students develop vocational identity and professional belonging early in their degree. These integrated insights informed the development of the conceptual model presented in Figure 1, which synthesises the key curriculum inputs, relational learning mechanisms, and developmental student outcomes identified across data sources.

Discussion

This study examined how first-year, curriculum-embedded, community-engaged WIL is associated with students’ vocational identity and sense of belonging during the transition to university. Across quantitative and qualitative findings, a consistent pattern emerged: students who experienced early, intentional, relational, and practice-visible engagement through curriculum-embedded interaction with community and industry reported stronger identification with a future profession, particularly in relation to professional belonging and perceived alignment with professional roles. These findings align with contemporary definitions of WIL that emphasise intentional theory–practice integration and multi-stakeholder engagement rather than placement participation alone (Orrell, 2011; Dean et al., 2020; Zegwaard et al., 2023).

The findings are synthesised in the conceptual model presented in Figure 1, which conceptualises first-year, embedded, community-engaged WIL as a curricular context that shapes how students encounter and make sense of professional learning opportunities early in their degree. Consistent with relational models of WIL, the model positions learning not as a direct outcome of participation alone, but as mediated through a set of interrelated learning mechanisms that structure how students engage with practice, with others, and with themselves as emerging professionals (Wait & Govender, 2016; Ferns et al., 2025).

Figure 1: Conceptual model illustrating relationships within a first-year embedded WIL curriculum



The primary contribution of this study is to extend WIL scholarship by conceptualising first-year, community-engaged WIL as an identity-forming and belonging-supportive process, rather than positioning WIL solely as a later-stage employability or capstone intervention. While traditional WIL models have been dominated by placements and final-year experiences, particularly within professionally accredited degrees (Rowe et al., 2012; Jackson, 2017), the conceptual model highlights how earlier, curriculum-embedded engagement with community and professional contexts may play a formative role in shaping how students begin to understand, relate to, and envision future professional identities from the outset of university study (Peach & Gamble, 2011; Billett, 2015).

As articulated in the model, learning occurs through a set of learning mechanisms that operate relationally and concurrently. These mechanisms support students to observe professional practice, participate in authentic contexts, develop relationships with practitioners and peers, and engage in structured reflection and exploration. Together, they create conditions through which students can begin to interpret disciplinary knowledge, professional roles, and their own place within emerging fields of practice. Importantly, these mechanisms are not sequential or discrete; rather, they reinforce one another as students move iteratively between experience, reflection, and meaning-making, consistent with socio-cultural and practice-based theories of learning and identity formation (Lave & Wenger, 1991; Trede et al., 2012).

Consistent with this interpretation, observed differences in vocational identity were most pronounced in items relating to professional belonging and identification, rather than reduced uncertainty about career pathways. This pattern aligns with theoretical perspectives that conceptualise identity formation as a relational and situated process, shaped through participation, interaction, and recognition within communities of practice rather than through knowledge acquisition or career decision-making alone (Goldie, 2012; Billett, 2015). In early stages of study, students may not yet possess sufficient exposure to resolve career uncertainty but can nonetheless begin to develop a sense of fit, affiliation, and legitimacy within a professional field (Trede et al., 2012; Pedler et al., 2022).

Students who engaged with practitioners, visited workplaces, and participated in applied, community-connected tasks described experiences that made professional roles more visible and accessible. In this study, community engagement involved curriculum-embedded interaction with external organisations and professional settings rather than formal placement-based participation, enabling early exposure to authentic practice without requiring workplace immersion. This finding aligns with typologies of WIL that recognise simulations, applied projects, and community-based learning as legitimate and powerful forms of work-integrated learning, particularly in early-year contexts where scalability and access are critical considerations (Rowe et al., 2012; Dean et al., 2020).

Qualitative findings further illuminate the learning processes represented in the model, particularly relational engagement and guided reflection. Interaction with practitioners and community contexts created opportunities for students to connect disciplinary content with real-world practice and to develop a sense of proximity to professional communities. This aligns with relational and multi-stakeholder models of WIL that foreground interaction between students, educators, and external partners as central to learning and identity development (Wait & Govender, 2016; Zegwaard et al., 2023). While community-engaged WIL is often discussed alongside industry-focused models, these findings suggest that community partnerships may offer distinctive opportunities for early relational engagement and visibility of professional practice within first-year curricula (Peach & Gamble, 2011; Brabazon et al., 2020).

Structured reflection and career development tasks supported students in making sense of these experiences, translating exposure into clearer understandings of professional roles and potential pathways. This reinforces the central role of reflection in WIL as a mechanism for integrating experience with self-concept, identity and future orientation (Helyer, 2015; Ewing & Ewing, 2017). As the conceptual model indicates, the effectiveness of early WIL lies not only in exposure to professional

contexts, but in how that exposure is intentionally scaffolded, relationally situated, and meaningfully embedded within the curriculum (Orrell, 2011; Ferns & Lilly, 2015).

Through sustained engagement with these learning processes, students begin to develop aspects of vocational identity and to navigate key dimensions of the transition into higher education. Outcomes such as professional belonging, role identification, and emerging career clarity occur alongside broader patterns of engagement, motivation, confidence and connection to study. As conceptualised in the model, these outcomes are developmental and ongoing rather than fixed end points, reflecting the formative nature of first-year WIL experiences and their role in shaping early student trajectories (Milliken et al., 2021; Kahu et al., 2022).

These findings should be interpreted in light of the study design. The cohorts differed in recruitment context and program structure, with the sport development cohort drawn from a single first-year course and the health cohort recruited across multiple programs. While this reflects authentic differences in curricular design, it may also introduce variation in student experience and engagement independent of WIL exposure. Accordingly, findings should be interpreted as indicative of associations rather than causal effects.

Overall, the conceptual model synthesises the study's findings by illustrating how student development emerges through dynamic interaction between curriculum design, relational engagement and reflective learning processes. In doing so, it highlights the central role of early, curriculum-embedded, community-engaged WIL in shaping how students orient themselves toward study, work and future professional pathways during their transition into higher education.

Conclusion

This study provides evidence that first-year, curriculum-embedded, community-engaged WIL is associated with differences in how students experience vocational identity and sense of belonging during the transition to university. By foregrounding intentional theory–practice integration, relational engagement with community and professional partners, and guided reflection, early-stage WIL appears to support students in developing a sense of professional belonging and emerging identification with their chosen field.

Positioning WIL as an identity-forming process from the first year represents a shift from traditional models that locate WIL primarily as a late-stage employability intervention. Instead, the findings support a more developmental conception of WIL, aligned with contemporary scholarship that recognises multiple forms of practice-visible, curriculum-embedded engagement as legitimate and valuable (Orrell, 2011; Rowe et al., 2012; Dean et al., 2020). For higher education institutions, this highlights the potential of community-engaged WIL to support not only career readiness, but also student engagement, belonging, and successful transition into university study across disciplines.

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