

Factors affecting Work Integrated Learning student placement process for the Agricultural Management programme at Central University of Technology, Free State

Z. P Khetsha^[zkhetsha@cut.ac.za] and P. M Makhoahle

Central University of Technology, Free State, Bloemfontein, 9300, South Africa zkhetsha@cut.ac.za

Abstract. Since 2017, resistance by the agricultural industry to accept the placement of Work Integrated Learning (WIL) students from the Central University of Technology, Free State (CUT) was observed in the Department of Agriculture. With the general monitoring, and feedback from farmers between 2018 and 2021, they explicitly stated to a greater extent that student preparedness for the CUT-WIL programme is a challenge. Therefore, this study aimed to identify the factors affecting the WIL student placement process for the Agricultural Management programme at CUT. Participatory Action Research was used to allow researchers to engage in a co-partnership relationship with academic staff, a group of students, and selected prominent farmers, who were described in this study as practitioners. Feedback from the academic staff practitioners' engagements described the pull of the first years from diverse high schools as a main factor leading to low morale in agricultural discourse; in that way leading to disciplinary shock. Moreover, the teaching approach towards the first-year curriculum is irresponsive to the institutional graduate attributes; thereby significantly affecting the uptake of institutional culture. An EcoCycle model and benchmarking with other universities of technology were used to revise the first-year syllabus during 2022/23. A significant improvement was observed in the first semester following the revision and remodeling of WIL. However, the anticipated changes are further to be implemented in the second semester of 2023 until 2026 to observe the redressing of social justice in WIL.

Keywords: EcoCycle model, graduate attributes, industrial placements, Participatory Action Research, student preparedness

1 Introduction

Central University of Technology (CUT) is among the university of technologies (UoTs) offering the Agricultural Management Diploma (previously known as National Diploma) programme, which mainly focuses on applied commercial and agricultural sciences, and is categorized as a hard-applied discipline as described by Biglan's theory [1]. Based on Biglan's theory, the design of the Agricultural Management curricu-

lum at CUT is developed in such a way that knowledge is produced through an applied theory, and praxis through intense agricultural practical component throughout the programme on campus, the Work Integrated Learning (WIL) programme. Although this curriculum has been laid out to suite the purpose since the last recurriculation, feedback from the industry and key stakeholders cast doubt on students' preparedness for WIL placement and the agricultural industry.

Agriculture requires a set of psycho-and-meta cognitive skills for ease of facilitating knowledge. Within the UoTs, as accredited by SAQA, WIL is a key component of the Agricultural Management programme curriculum. Since 2017, most farmers and the agricultural industry recorded a significant decline in the placement of WIL students in the Agricultural Management programme (CUT). Therefore, feedback from farm visits as part of the pilot study was conducted between 2018, 2019, and 2020 with prominent farmers accommodating CUT sophomores. It was mentioned to a greater extent that student readiness for the WIL programme is a challenge. Other reasons proffered were that students were mostly unprepared for placement at the time when they were placed and did not show any level of maturity throughout the WIL academic year. This could be associated with the recent publication by the Technological Higher Education Network South Africa (THENSA) on challenges related to WIL placement in respective industries due to the readiness of students for industrial placements [2]. The departmental WIL Convenor also observed a decline in the level of engagement by the sophomores placed across the country on the Learning Management System (eThuto) and other forms of communication. Through a random peer discussion, it was also noted that the sophomores exiting the WIL programme struggle to cognitively articulate to the third year of their studies, being mostly attributed to their preparedness for the WIL programme; however, this hypothesis needs to be confirmed.

Various departmental strategies were put in place between 2018, 2019, and 2020, which included special inductions and orientation programmes through the WIL office, the Centre for Innovation in Learning and Teaching (CILT), and CUT Wellness. With all these arrangements during this period, farmers continued to show disinterest; thus, challenges relating to the quality of student performance in WIL persisted. For this study, it was deemed important to ascertain the claims made by the farmers and other key stakeholders by evaluating the factors affecting the students' preparedness for WIL and the effectiveness of integrating the context-based leadership core curricula with graduate attributes as the alternative solution.

2 Methodology

2.1 Background of the Project

This study was aimed at the departmental level within the Faculty of Health and Environmental Sciences, CUT, mainly for the programme of Agricultural Management academic staff members, and students (first and second years), as part of the Teaching Advancement at Universities (TAU4). Moreover, this study is part of the THENSA

Strategy Development on the sustainable project: Developing a Competence-based Assessment and Evaluation tool for CUT using the Competence-Based Teaching and Learning Model, which is aimed to run for the next four-year cycle (2023 - 2026). Therefore, for this part of the study, the scope was only limited to determining the factors affecting student preparedness for the Agricultural Management WIL programme, 2022/23.

2.2 Background of the Project and Selection of Participants

The achieve the main objective, the research team consisted of scholars in the agriculture departments from CUT, Cape Peninsula the University of Technology (CPUT), Durban University of Technology (DUT), selected prominent farmers, and students in the programme as demonstrated in Table 1.

Table 1. Selection of participants, and research activities with events dates

Research Activity	Selection of Participants	Event date
Special Institutional Event 1: Structured meeting with the Department of Agricul- ture and individual practi- tioner discussion on change strategy	Group 1: Through a special departmental meeting, all academic staff members in the Department of Agriculture were engaged on a special item on the WIL Report, with the emphasis being on Agriculture WIL placement challenges.	31 August 2022
	Group 2: In the Department of Agriculture, two WIL Convenors, who are permanent staff members involved in first-year lecturing, and the Head of Department (HoD) were involved with studies as practitioners following the event on the 31st of August 2022 departmental discussion.	19 – 23 September 2022
Special Institutional Event 2: Agri-Work Integrated Learning Indaba	Five students at first, second-, and third-year levels were selected as practitioners in the study.	30 September 2022
Benchmarking – UoTs	Cape Peninsula the University of Technology (CPUT), and Durban University of Technology (DUT)	17 – 18 November 2022 06 – 08 December
	were consulted and included as co- researchers and practitioners in the study.	2022
Study visits – Stakeholders (farmers)	At least two farmers were included as practitioners in the Free State, Western Cape, and KwaZulu Natal provinces. These farmers were selected based on their student placement hosting consistency since 2010.	November 2022 to March 2023

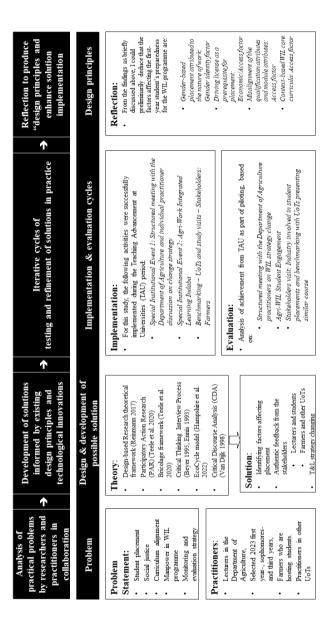


Fig. 1. Demonstration of Design-Based Research Methodology followed in this study

2.3 Data Collection and Data Analysis

As illustrated in Fig. 1, the study approach was based on the Design-Based Research. In Table 1, data collection for group 1 in the Special Institutional Event 1 followed the Participatory Action Research (PAR) as guided by [3], where these practitioners' focus of discussion was primarily on the identification of the problem and possible solutions together, depowered. During this process, the discussion was not structured, as described in the Bricolage theoretical framework [4], where co-researchers were self-directed in learning, taking charge of their own learning needs, setting goals, recognizing priorities, applying strategies, and assessing the results themselves.

Data collection for the second group followed the Critical Thinking Interview Process as described by [5]. An individual engagement with the HoD, the lecturers teaching first-year major modules (Agricultural Management, Plant Production, and Animal Production), and the farmers hosting placements for the WIL sophomores. This activity aimed to further deliberate on the first year-syllabus to probe factors affecting student preparedness for the WIL year, probe the incorporation of the context-based leadership core curricula at first- and second-year level in line with the course outcomes and the institutional graduate attributes, drawing primarily from the developmental, apprenticeship and the nurturing perspectives for multidisciplinary courses such as Agricultural Management in UoTs [6].

Using the Microsoft Teams platform, students from first-, second-, and third-year levels in the Department of Agriculture were allowed to engage openly using the PAR theoretical framework. The aim was to formulate challenges and possible solutions together from the student's perspective. During the process, the researcher did not guide the engagement as prescribed by the PAR and Bricolage theoretical frameworks [4].

The Department of Agriculture and Horticulture from CPUT and DUT, respectively, were consulted on benchmarking the WIL practices as part of data collection. The discussions during the benchmarking processes followed the Bricolage theoretical framework to further unpack challenges and possible solutions from these respective institutions [4]. At least two prominent farmers in Wellington and Pietermaritzburg, respectively, were engaged during the 2022 academic year. Moreover, two more farmers in Bloemfontein were engaged during the early part of the 2023 academic year. The Critical Thinking Interview Process was used when engaging the farmers [5].

Qualitative data was analyzed using a Critical Discourse Analysis (CDA) [7]. All translated interviews were recorded on Microsoft Excel for each researcher per interviewee based on the set of questions. Researchers followed the approach described by [3] and [7] to analyze the tape/audio, video, and text recordings using CDA. The use of the CDA was based on authenticating the data recorded to uncover the unspoken and hidden discursive engagement (control of feedback from interviewee over the text) at different levels, board members, management, and employees.

3 Results of the research and discussions

From the study, the piloted results in semester one of 2023 were achieved through the events and activities stipulated in the data collection; meeting with the Department of Agriculture practitioners (lecturers) on WIL strategy change; the Agri-WIL Student Engagement; the visits to the industry involved in WIL student placements; and benchmarking with UoTs presenting the similar course. The following results were some of the key factors recorded to be affecting the students' preparedness and placement for WIL.

3.1 High school to university articulation challenges

The pull of the first years from diverse high schools was a main factor leading to low morale in agricultural-discourse engagement due to disciplinary shock. The disciplinary shock could also be attributed to the lack of adequate mentorship on skills advisory to prepare for lifelong careers; thus, some students find themselves in random courses that they do not have passion for, similar findings reported by [8] and [9]. However, the constructive alignment highly addresses the notion of the articulation gap in hard-applied disciplines such as Agricultural Management [10, 11].

With reflective teaching in this discipline for example, it is a common practice to start the syllabus with introductory modules to address the wide pool of students who come from the pure sciences, engineering sciences, and commercial sciences schools, to close the articulation and knowledge gaps. Nonetheless, no matter how scholarly teachers tend to be in their disciplinary professions, recent increases in competitiveness in university access [12, 13], the lack of improvement in basic resources [14], and the increasing quotas have shown a negative impact on the quality of graduates of this lifetime [15]. In addition to these findings, it was recorded as well that even though most students will have an introduction to agriculture, science, and commerce from high school, finding strategies to address the articulation gap at the first-year level is still important.

An EcoCycle theoretical framework was adopted as described by [16], to courageously engage the custodians of the curriculum and the syllabuses. Findings that emerged from the engagements with the practitioners teaching first-year major modules indicated that there is a need for syllabus revision, mainly to be responsive to the current industrial context and discourses. For example, it emanated from the individual discussions with practitioners that students fail to associate the production systems in Animal Production and Plant Production with the financial planning and management, in the Agricultural Management module. These findings were also corroborated by the engagements with farms visited, which ascertained that students at most could not associate production systems and strategic management part of farming.

[17] and [18] emphasized the responsiveness of curricula, that syllabuses should not only address the disciplinary learning outcomes and qualification outcomes; however, the curricula should embrace social responsiveness, critical consciousness, and responsive pedagogy, a key factor affecting WIL ascertained by farmers on Agricul-

tural Management students. In creating a responsive curriculum, the solution was to create more learning opportunities by increasing the agricultural practical components of the major modules. In the first semester of 2023, an academic harmony between lecturers teaching major modules was developed, and thereby an alignment was created to address access for all students, an important social justice matter [19].

For example, lecturers who are teaching production commodities such as crop and animal production had to infuse intense practical and engage pedagogy on production systems, making use of the departmental farm (Agri-Training Centre) to introduce students to farming systems. This has been reported by [20], that the use of intense practical(s) improves the metacognitive skills of agricultural students' academic achievement in Iran. In addition, the agricultural production planning and strategic management modules should make use of evidence-based challenges based on the commodities [21] to ease comprehension and the fusion of these major modules. Lastly, Competence-Based Learning [22] was recognized as a suitable assessment and evaluation model for the revised syllabus at the first-year level, particularly in major modules.

3.2 WIL staff deployment

The workload of the staff involved in WIL was identified as the second factor affecting the WIL process, particularly the monitoring and evaluation. When comparing the department with another department at the faculty level at CUT, institutionally with other faculties' WIL deployments, and as well through the benchmarking with CPUT and DUT, these programmes at the departmental level had a WIL Coordinator. This was not the case with the Department of Agriculture; the standard practice before the significant increases in students' quotas was that the WIL Convenor(s) were appointed as first-year lecturers. However, part of the feedback from the group of academic staff practitioners, individual engagements, and students was that there is a lack of intervention by the WIL Convenor(s). In addition, the feedback could be associated with the general feedback from the stakeholders (farmers) involved in hosting CUT WIL sophomores. Amongst the feedback provided by these farmers was that there is a lack of student visits (monitoring and evaluation), one angry farmer stated furiously:

"It's like students are just brought here and left on their own; unlike Glen College students, you never bother checking on the students' progress".

Although the WIL Convenors continued with the standard practices with increasing quotas annually, the performance and completion of CUT-WIL students decreased between 2018 and 2021, thus becoming a risk factor. Through the TAU special project, a recommendation was made based on [23], where an appointment of part-time lectures for project assessment, a WIL Coordinator to administer the WIL programme, and the current WIL Convenor(s) and Peer Mentors (CILT) as mentors for WIL sophomores. WIL Convenor(s) as first-year major modules lecturers further continue to mentor and participate in the preparation of first-year students for the WIL year to meet the espoused industrial expectations as described by [24] and [25]. Interestingly,

this was also mentioned and associated with the general feedback from the key WIL stakeholders (farmers) involved in hosting CUT WIL sophomores.

3.3 Benchmarking with other UoTs

When benchmarking with other UoTs; CPUT and DUT, it was observed that the two institutions had a different approach towards first-year students' preparation for the WIL academic year. The two institutions recommended the development of training units' placement, rather than placing one student per farm, a subject of peer learning related to the meta-cognitive development in WIL [26, 27]. Placements within these training units are based on the database updated annually by the Advisory Boards and internal WIL committees. From the benchmarking, it was recorded from previous years' experience that placements should not exceed more than ten students per training unit to ascertain the quality of WIL.

The training unit model has been reported successfully by the two institutions because of the disciplinary traditions in the agricultural context, the variation of practitioners and stakeholders involved, and the degree of involvement of academics with the WIL students as described by [28]. As described by [29]; training units facilitate peer learning, which has been reported extensively to have a significant effect on behavioural change, the adaptation related to agricultural discourses, and as well increasing career resources through identity and social learning processes, which in turn affects the career choices and outcomes. Therefore, training units may be recommended; however, this depends on the readiness and preparedness of the students for the WIL programme. This was also recorded in the feedback from the key practitioners, WIL hosting farmers, who reported fiercely that CUT students are not ready at the time of their placements, relating this to the curriculum. Below, a farmer was quoted:

"Other institutions I am hosting allow their students to spend at least four semesters before being placed in farms for experience, and they come here matured".

When benchmarking with CPUT and DUT, students are placed after four semesters instead of two semesters. However, with CUT, it emanated two semesters suffices, as recommended during the recurriculation and Advisory Boards. The argument was that two semesters before WIL should be followed by academic reintegration on campus after the WIL year to allow students to fine-tune their psycho- and meta-cognitive skills as described by [11] and [22] following the constructive alignment and CBL theories, respectively.

On the other hand, based on the CPUT and DUT strategies, feedback from the internal practitioner(s) about placement approaches was argued during the participatory engagement; where it emanated that the training units approach restricts students from having a diverse perspective about agriculture because it forces specialty at an early stage of the student career. However, a solution sought from students on the placement approach by CUT was that the best model would be to seek mixed farms or/and revise the farm placement guidelines to allow ease of relocation. Thus, students are circulated from various farms based on their interests yet considering key parts of the different production systems at hand.

3.4 Lack of engagement from students

First-year, sophomore, and third-year students claimed that the department's lack of monitoring and evaluation was among the key factors affecting learning; thus, the department should improve the WIL strategy to increase participation in learning during the WIL year. This was corroborated by [30], where a blended approach was reported as a suitable strategy to be incorporated into the institutional WIL to enhance the monitoring and evaluation. Moreover, [31] and [32] argued that meta-cognitive learning needs in WIL primarily depend on the WIL curricula and syllabus layout, particularly the assessment, monitoring, and evaluation models; thereby encouraging deep learning and motivating students to learn the espoused skills.

Due to increasing quotas since 2017, and a declining number of farmers willing to accommodate placements for CUT WIL, students were encouraged to seek their farms. Through the preliminary feedback during placements, it was observed that female students were more disadvantaged compared to male students as farmers specified their lack of interest in female students. One of the farmers engaged during a visit in KwaZulu Natal stated that:

"The nature of work in my farm is catered for males at most, and I do not have special accommodation for females".

To mitigate this challenge, the establishment of farm training units was recommended as described by [26] and [27], and practices in CPUT and DUT. Another student who completed the WIL stated that even having a driving license was a challenge in finding a suitable farm. "A majority of farms requested one to have a driving license; thus, I could not have access to the top farms I had espoused to gain experience from", the student stated. During the participatory engagement of students, it was interesting to observe peer learning between students of different academic levels [33]. A first-year student and a WIL sophomore shared knowledge as to what to expect during the WIL academic year; interestingly, a third-year student also suggested that it could be best to have a special programme or workshop during the first year to induct first-year students for the WIL year, and this should not be a one-day induction, but rather a series for at least a quarter to a semester.

This was in line with the benchmarking with the two institutions, particularly the DUT, and the report by [34]; where they have a special module or workshops dedicated to the WIL Coordinator(s), a year before students take their WIL year to ensure their readiness for WIL. Although the lack of student engagement was a factor identified, this study also contributed to mitigating strategies such as adopting effective strategies of developing training units, and possible context-based cocurricular or workshops for WIL readiness; thereby ensuring that all students were equally placed and had access to quality WIL year, redressing the social justice matter [35]. In addition to the agric-core curricula, it was recommended that the inclusion of a driving license be a priority in the programme as part of the process preparation.

4 Conclusion and future studies

From this study, access, gender discrimination, and socio-economic factors were identified as key social justice challenges affecting the placement of Agricultural Management WIL students. Socially unjust education remains a challenge, given the nature of the discipline, warranting a paradigm shift from the industry, and the decolonization of the curriculum in this hard-applied course with time, mainly to ensure inclusivity. In addition, factors identified in this study also confirmed the need for frequent revision of the curricula to ensure alignment with industrial needs; thereby ensuring psychoand-meta cognitive skills and competencies. Interestingly, some of the factors affecting the WIL placement in the Agricultural Management programme process were addressed based on the theoretical frameworks adopted in this study.

In the future, a tangible draft of the Agric-WIL Placement Guiding Document (ToRs), the proposal of the Agric-WIL Advisory Board, and Agric-core curricula focusing on first-year students' preparation for WIL should be prioritized. This study is part of the HERESA strategy development focusing on Developing a Competence-based Assessment and Evaluation tool for CUT using the CBL Model. Future studies in the Agricultural Management WIL programme should focus on identifying the key competencies that determine the required psycho-and-meta cognitive skills, WIL readiness, and competence as associated with the institutional graduate attributes, and the industrial needs.

References

- Vo, H. M., Zhu, C., & Diep, N. A. (2017). The effect of blended learning on student performance at course-level in higher education: A meta-analysis. Studies in Educational Evaluation, 53, 17-28.
- 2. Naidu, E. (2022). Work-integrated learning to help with graduate unemployment. University World News.
- 3. Teele, T., Nkoane, M., & Mahlomaholo, S. (2020). Erudite pedagogic praxis of extension paradigm for technological skills transfer of the emerging farmers. South African Journal of Agricultural Extension, 48(2), 106-112.
- Teele, T. (2018). Technological skills transfer framework amongst emerging farmers: an adult education perspective (Doctoral dissertation, University of the Free State Bloemfontein).
- Karim, R. S. A., & Nurlaelah, E. (2023). Analysis of the critical thinking skills of class x smk students in bandung city. AKSIOMA: Jurnal Program Studi Pendidikan Matematika, 12(1), 1428-1435.
- Khetsha, Z.P., Teele, T. (2017). Teaching multidisciplinary agricultural disciplines in the University of Technology. Poster. HELTASA 2017, Durban University of Technology; 11/2017.
- Van Dijk, T. A. (2015). Critical discourse analysis. The handbook of discourse analysis, 466-485.

- Nandedkar, A., Mbindyo, M., O'Connor, R. J., & O'Connor, T. C. (2023). Academic Advising Leadership and Change Management. In Academic Advising Administration (pp. 68-84). Routledge.
- Sabila, I. (2023). The effectiveness of british culture club podcast towards students'listening skill (An Experimental Study in Fourth Semester Students of English Education Department of Pancasakti University Tegal) (Doctoral dissertation, Universitas Pancasakti Tegal).
- Malatji, K. S., & Singh, R. J. (2018). Implications of the articulation gap between Geography learners in secondary schools and university. Alternation Journal, (21), 91-108.
- Biggs, J. (2012). What the student does: Teaching for enhanced learning. Higher education research & development, 31(1), 39-55.
- Yonezawa, A. (2023). Japan's Higher Education Policies under Global Challenges. Asian Economic Policy Review.
- 13. Boliver, V., Banerjee, P., Gorard, S., & Powell, M. (2021). Reconceptualising fair access to highly academically selective universities. Higher Education, 1-16.
- Beyene, W. M., Mekonnen, A. T., & Giannoumis, G. A. (2023). Inclusion, access, and accessibility of educational resources in higher education institutions: exploring the Ethiopian context. International Journal of Inclusive Education, 27(1), 18-34.
- Lembani, R., Gunter, A., Breines, M., & Dalu, M. T. B. (2020). The same course, different access: the digital divide between urban and rural distance education students in South Africa. Journal of Geography in Higher Education, 44(1), 70-84.
- Dufour, Y., Steane, P., & Corriveau, A. M. (2018). From the organizational life-cycle to "ecocycle": a configurational approach to strategic thinking. Asia-Pacific Journal of Business Administration, 10(2/3), 171-183.
- Hansen, A., Engel-Hills, P., Jacobs, C., Blitz, J., Cooke, R., Hess-April, L., ... & van Schalkwyk, S. (2023). Understandings and practices: Towards socially responsive curricula for the health professions. Advances in Health Sciences Education, 1-19.
- 18. Le Pichon, E., Wattar, D., Naji, M., Cha, H. R., Jia, Y., & Tariq, K. (2023). Towards linguistically and culturally responsive curricula: the potential of reciprocal knowledge in STEM education. Language, Culture and Curriculum, 1-17.
- Cuenca-Soto, N., Martínez-Muñoz, L. F., Chiva-Bartoll, O., & Santos-Pastor, M. L. (2023). Environmental sustainability and social justice in Higher Education: A critical (eco) feminist service-learning approach in sports sciences. Teaching in Higher Education, 28(5), 1057-1076.
- Bijani, M., Raeisi, A., Valizadeh, N., Fallah Haghghighi, N., & Neisi, M. (2021). Impact
 Assessment of Self-directness and Meta-cognitive Skills on Agricultural Students' Academic Achievement in Iran. International Journal of Agricultural Management and Development, 11(1), 17-34.
- Shaharudin, M. S., Fernando, Y., Ganesan, Y., & Shahudin, F. (2022). Development of Blockchain Agriculture Supply Chain Framework Using Social Network Theory: An Empirical Evidence Based on Malaysian Agriculture Firms. The Digital Agricultural Revolution: Innovations and Challenges in Agriculture through Technology Disruptions, 411-445.
- Okagbue, E. F., Ezeachikulo, U. P., Nchekwubemchukwu, I. S., Chidiebere, I. E., Kosiso, O., Ouattaraa, C. A. T., & Nwigwe, E. O. (2023). The effects of Covid-19 pandemic on the education system in Nigeria: The role of competency-based education. International Journal of Educational Research Open, 4, 100219.
- 23. Wang, J., Gill, C., & Lee, K. H. (2023). Effective mentoring in a work-integrated learning (WIL) program. Journal of Teaching in Travel & Tourism, 23(1), 20-38.

- Parrella, J. A., Esquivel, C., Leggette, H. R., & Murphrey, T. P. (2023). Preparing agricultural leaders: an assessment of agricultural students' perceived importance and development of employability skills. The Journal of Agricultural Education and Extension, 1-23.
- McLennan, B., & Keating, S. (2008, June). Work-integrated learning (WIL) in Australian universities: The challenges of mainstreaming WIL. In ALTC NAGCAS National Symposium (pp. 2-14).
- Johnson, E., Rice, J., Varsavsky, C., Holdsworth, J., Ward, J., Skelly, D., ... & Aughterson, J. (2019). Successful WIL in science. Canberra: Australia. Dept of Education and Training (DET).
- Nagarajan, S. V., & McAllister, L. (2015). Integration of practice experiences into the allied health curriculum: Curriculum and pedagogic considerations before, during and after work-integrated learning experiences. Asia-Pacific Journal of Cooperative Education, 16(4), 279-290.
- 28. Rombach, M., & Bailey, A. (2023). A Work-Integrated Learning (WIL) program for industry professionals in NZ-Horticulture.
- Inceoglu, I., Selenko, E., McDowall, A., & Schlachter, S. (2019). (How) Do work placements work? Scrutinizing the quantitative evidence for a theory-driven future research agenda. Journal of Vocational Behavior, 110, 317-337.
- 30. Baichoo, M., Fane, J., Loken, T., & Mahood, A. (2023). Establishing and managing a blended approach to institutional work-integrated learning. The Routledge international handbook of work-integrated learning.
- 31. Majiya, P. N. (2023). An evaluation of assessment practices of Work Integrated Learning (WIL) in programmes offering Office Management and Technology OMT): a case study of three South African Universities (Doctoral dissertation).
- 32. Matook, S., Maggie Wang, Y., Koeppel, N., & Guerin, S. (2023). Metacognitive skills in low-code app development: Work-integrated learning in information systems development. Journal of Information Technology, 02683962231170238.
- 33. Bernhardsson, L. (2023). Work-integrated learning through peer narratives about workplace experiences. International Journal of Work-Integrated Learning, 24(2), 277.
- 34. Young, K., Palmer, S., Binek, C., Tolson, M., & Campbell, M. (2019). Assessment-led reform: Creating a sustainable culture for WIL. Journal of Teaching and Learning for Graduate Employability, 10(1), 73-87.
- 35. Compare, C., & Albanesi, C. (2023). Belief, attitude and critical understanding. A systematic review of social justice in Service-Learning experiences. Journal of Community & Applied Social Psychology, 33(2), 332-355.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

