



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

NEW ZEALAND



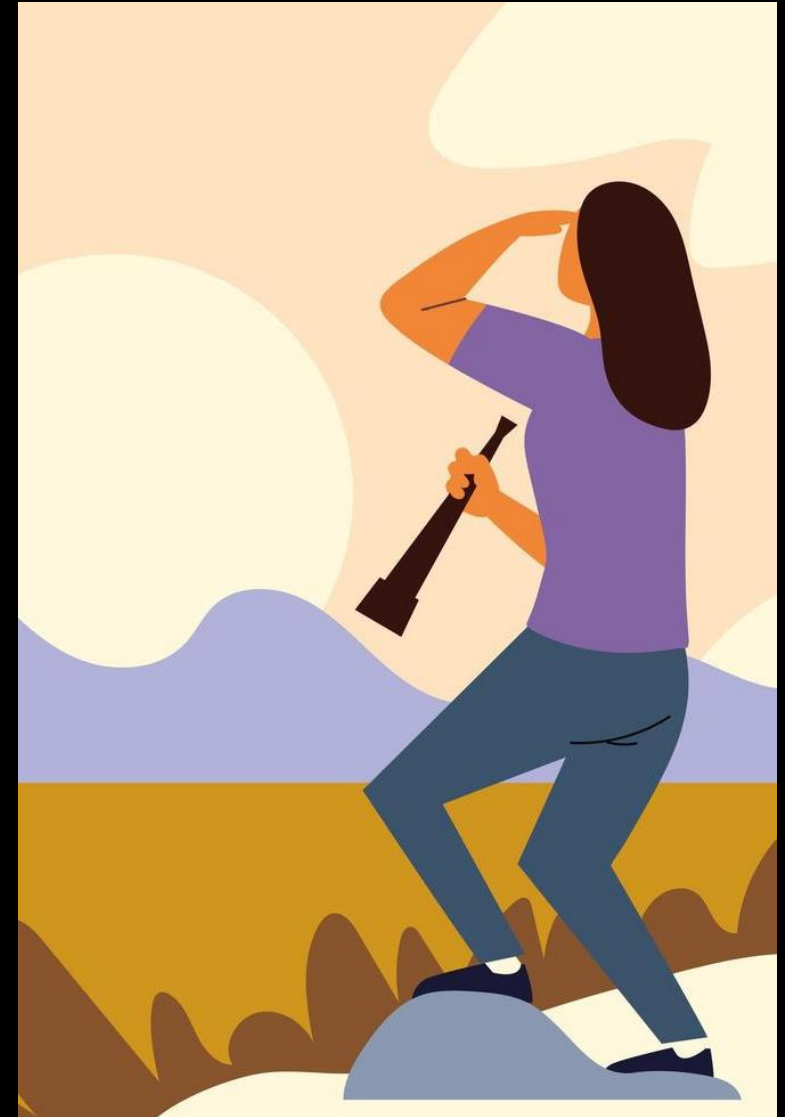
Work-integrated learning in higher education

Assoc Prof Karsten Zegwaard
Director of WIL Research, University of Waikato, New Zealand
Editor, IJWIL
President, WILNZ

Overview

- **Background and defining WIL**
- **University of Waikato developments**
- **Location of WIL**
- **Curricular, co-curricular, extra-curricular**
- **Designing WIL – quality frameworks**
- **Current topical themes**
- **Resources**

- **Models of WIL**
- **Types of assessment**
- **Examples**
 - **Work placements**
 - **Non-work placement WIL**
 - **Multidisciplinary WIL**
- **Preparation for WIL**



Background of Work-Integrated Learning

- The term 'work-integrated learning' first appeared early/mid 1990's, became widely used early 2000's (Zegwaard et al., 2023)
 - First discoverable mention of WIL was from WACE's mission statement (Bradford, 1995)
- The term WIL was is an umbrella term used to describe a range of similar educational practices (Patrick et al., 2008)
- The educational approach is not new
 - Co-op started in 1906 (borrowed from Law studies)
 - Sandwich degrees probably around 1840
 - Apprenticeships traced back to Imperial Rome
- Work-integrated learning and work-based learning



Defining work-integrated learning

- There have been many descriptions of WIL for a particular disciplinary or local context, practice, and research purpose.
- National associations and educational institutions have also developed their own definitions.
- Broadly, there are two forms of WIL
 1. Work placement WIL - full immersion into a workplace, Co-op, practicums, internships, etc
 2. Non-placement WIL - mostly campus-based but with an external partner, consultancy project, product design and/or creation, investigation, performances



Common elements

Commonalities of the definitions:

- Integrating theory with practice
- Intentionally within the curriculum
- Authenticity of the learning context
- Meaningful practice of work-focussed tasks
- Relevant to the students' study and/or career goals
- Involving an external partner

These elements are interconnected and need to be considered together

Reciprocity is inherent for all three stakeholders (the win-win-win)



Definition of WIL

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.

Definition of WIL

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

- 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.



Why more WIL and WBL

- Employability outcomes!
 - The core driver of the expanding practice of WIL (Jackson, 2015; Rowe & Zegwaard, 2017)
- Government see it as a university KPI (Cheng et al., 2021)
 - Economic growth, return on investment
 - Students enrol because they want good careers
- University strategic goals focus on employability and community engagement
- NZ higher education sector under review

Developments

- Australia
 - Govt funded ACEN start-up
 - All unis offer WIL, many aiming for 100% participation
 - WIL research ballooned
- Canada
 - Expanded mandate to include WIL, changed name to CEWIL
 - Govt provided CAD\$70 million
 - All unis offer WIL
- US
 - Long history of co-op, declined when federal funding was withdrawn
 - Rebuilding
- NZ
 - WIL referred to in Govt documentation
 - Renamed to WILNZ
- South Africa
 - Very wide practice of WIL, seen as an economic driver
- Germany
 - Dual education model



wace
advancing cooperative &
work-integrated education

University of Waikato developments

- Standardising credit point weightings for offerings
- Curriculum Enhancement Project (2018)
 - Compulsory discipline foundations
 - Compulsory cultural perspectives
 - Compulsory WIL (2020)
- All NZ and Australian universities:
 - Offer WIL
 - Some require that WIL must be 'offered' in all degrees
 - None require that all students must do WIL
- Waikato had to:
 - Redesign curriculum design framework
 - Determine how widespread practice is
 - Define WIL (very broad)
 - Decide on how much centralising



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Roll out – Waikato's approach

- Senior leadership support
- Endorsements, review current practice
- Information flow
- Showcasing good practice
 - Quest speakers
- Schools proposed their choice(s)
- Workflow management system
 - One system for all
- Grouping people together



Roll out – Waikato's approach cont.

- WIL working group
 - Started with diverse people (senior leaders, WIL leaders, HR, Comms, H&S, careers, Academic Office)
 - Evolved to WIL representation of the Divisions
 - Community of practice replaced the WIL Working Group
- Support areas where there was no prior WIL
- Seminars and lots of one-to-one!
- Was areas needed extra encouragement
- Currently reviewing all WIL
- Not everyone loves WIL - not everyone needs to
 - Do need a champion in every school

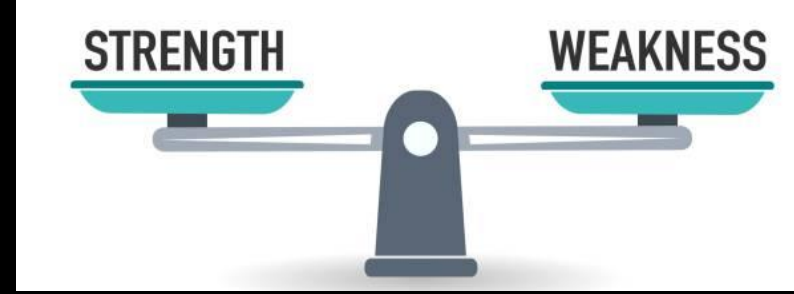


Location of WIL



- Centralisation: to be or not to be? (or a bit of both)
- Located school-based → hybrid → centralised → ‘fully’ centralised
 - Physically and/or financially
- No single one right answer. No perfect answer.
 - University history – how did WIL start
 - University structure and funding model
 - University centralised vs decentralised preference
 - Leadership direction and internal politics
 - Staff buy-in and commitment
- Universities have restructured WIL (and back again)
- Fully centralised example: University of Waterloo
- Many opt for hybrid and the adjust to suit
- To merge WIL with Careers Office or not?
 - Mix practice, mixed results
 - If centralising, must include Careers Office

Strengths and limitations



College-based (college managed staff)

- College/schools self-manage
- WIL staff become part of the school
- Closest to the action (more 'other' gains)
- Funding follows the student
- Assessment closely align to discipline

- *Duplication of systems*
- *Mixed messages and internal competition*
- *Less central oversight*
- *Less consistency*
- *Less confidence on quality*
- *Small programmes tend to struggle*

Centralised

- Efficiency of scale
- Easier to get consistency and standardisation
- Can shift staff to where the workload is
- Like-minded people located closer together

- *Less aware of faculty strengths*
- *Less 'other' gains*
- *Schools likely to demand more*
- *Schools do not feel in control*
- *Requires ongoing meeting structure for schools to have voice*
- *Risks becoming a 'service' more than learning*

Mixing it up

- Centralised staff but mostly located as sub-units in the colleges
 - Avoids duplication of systems
 - Can shift staff around as numbers change
 - Staff close to faculty – feel more part of the college
- Hybrid model (Waikato model)
 - College-based staff
 - Small central office
- No one right answer. No perfect answer.
 - Find the model that works best and then manage the model weaknesses
- Key principles
 - Avoid duplication of systems – use a central tracking platform
 - Avoid mixed messaging to externals
 - Standardise where possible
 - WIL staff must remain well connected with college activities
 - Invest in relationships



Waikato: Location of WIL - hybrid

- University → Divisions → Schools → (Departments)
- 12,000 students
- Adopted hybrid model
- Division-based WIL offices
 - Securing opportunities
 - External relationship with key workplace supervisors
 - Student relationship building and queries
- Assessment managed by an academic(s) in the school



WIL Central Unit

- Director of WIL Research (academic 0.5)
- WIL Unit Manager (0.6)
- Systems manager (1.0)
- 2 x Project Leads (0.5 each)

WIL Central Unit purpose

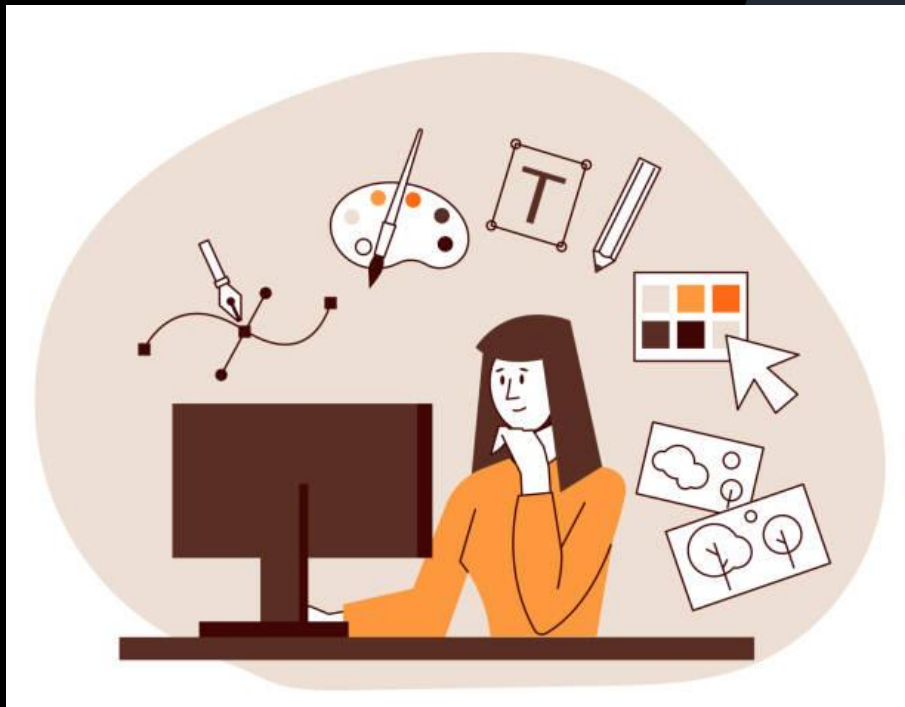
- WIL policy
- WIL workflow platform management
- Supporting good practice
- Information flow and reporting
- Standardising stakeholder agreements
- Risk management and reporting
- International WIL
- Multidisciplinary options
- University-level representation
- Centralised marketing and online
- Central complaints submission and serious complaints
- Emergency response

Curricular, co-curricular, extra-curricular

- Curricular = within the curriculum, for credit
- Co-curricular = alongside the curriculum
 - Can or cannot be for credit, may be compulsory (e.g., Engineering)
- Extra-curricular = not curricular, not for credit
 - Is great,but is not WIL
 - Confused employers and students if to call this WIL
 - But it may be relevant to the studies
 - Could be flipped into WIL
- Consider creating Grad Certs in WIL

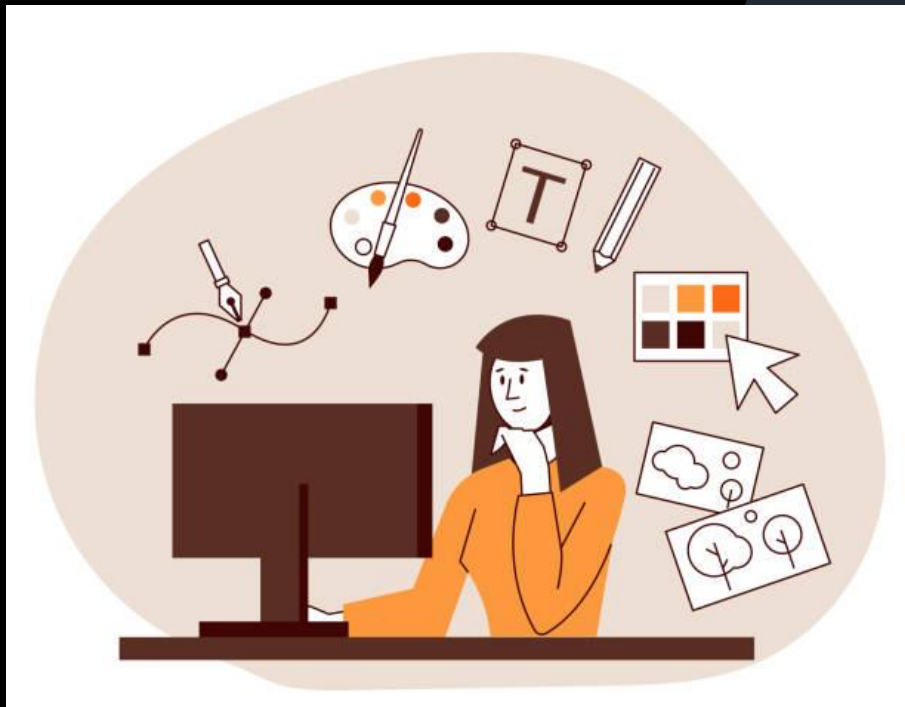


Designing WIL



- Purpose and academic justification
- Stakeholder engagement
- Student learning needs, capability and learning capacity (prerequisites)
- Scaffolding of learning
- Models of WIL (and good practice elsewhere)
- Intended learning outcomes and assessment design
- Mapping to the qualification graduate attributes and university graduate attributes
- Mapping to institutional curriculum design framework (CDF) and a national qualification framework (NZQF)
- Mapping to university policies

Designing WIL



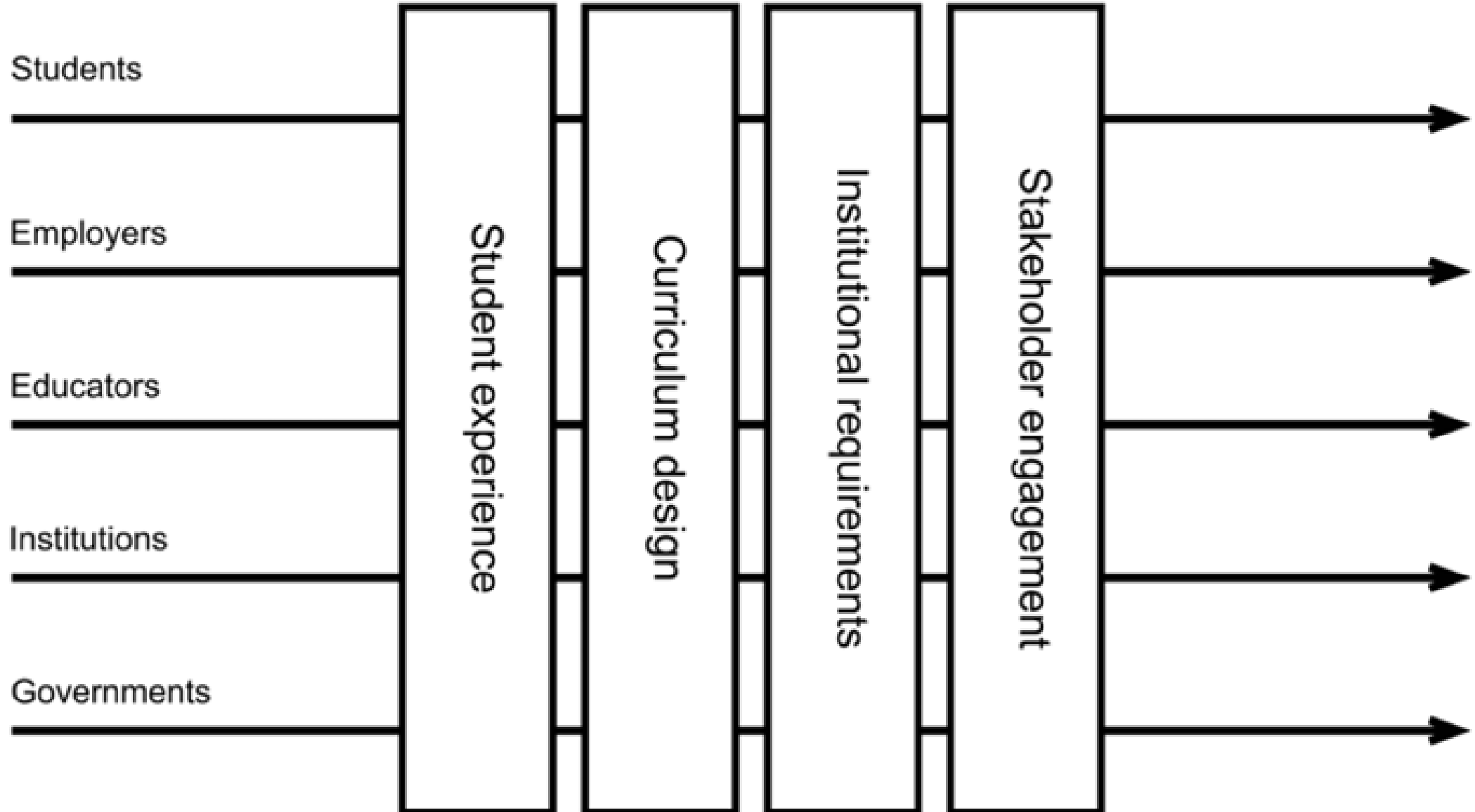
- Accreditation requirements?
- External engagement model
- Managing risk, IP, cultural safety, inclusivity, equitable access, wellbeing
- Responsibilities
- Resourcing, staffing, workload
- Review cycle
 - Intended learning outcomes vs actual learning outcomes

Follow a quality framework

Stakeholder Aims

Domains of Action

Stakeholder Achievements



WILNZ Quality Framework	Student	Host organisation	University
Pre-WIL	<ul style="list-style-type: none"> • Student is appropriately prepared for learning in the workplace. • Student responsibilities and requirements are documented. • Student learning goals are identified. • WIL experiences are negotiated and aligned to curriculum and graduate profile. • Learning/contractual agreement is negotiated and signed. 	<ul style="list-style-type: none"> • Host organization is prepared for taking on a WIL student. • Host organisation responsibilities and requirements are documented. • WIL activities within the host organization are suitable for student learning and aligned with curriculum. • Contractual agreement is negotiated and signed. • Resources are developed and available for preparing the student and host organization. • Processes for assessing suitability of the host organization and WIL opportunity are rigorous, including health, safety, and risk. • Processes for identifying and managing 	<ul style="list-style-type: none"> • Resources are developed and available for preparing the student and host organization. • Processes for assessing suitability of the host organization and WIL opportunity are rigorous, including health, safety, and risk. • Processes for identifying and managing risks and reporting incidents are documented. • Contractual agreement is negotiated and signed.
During WIL	<ul style="list-style-type: none"> • Student experiences are safe and supported. • Student reflects upon their learning experiences. • Student completes appropriate assessment tasks to demonstrate learning. 	<ul style="list-style-type: none"> • Health and safety processes and procedures are followed. • Student provided with authentic, meaningful, and relevant activities. • Activities include opportunities to extend learning with relevant challenges. • Student supervision provides support, guidance 	<ul style="list-style-type: none"> • Student learning progress is monitored and supported. • Appropriate student pastoral care checks occur. • Support and guidance is provided for the host organization.
Post-WIL	<ul style="list-style-type: none"> • Student receives feedback on learning achieved and areas for future development. • Student provides feedback on their progress towards their learning goals. • Student provides feedback on the WIL experience. 	<ul style="list-style-type: none"> • Feedback is provided to student. • Feedback is provided to university. • Maintaining ongoing communication/relationship with university. 	<ul style="list-style-type: none"> • Institution collects feedback from student and host organisation on the WIL experience. • Maintaining ongoing relationship management and engagement with the host organisation.

Resources: Good practice reports and quality frameworks

- Campbell, M., & Pretti, T. J. (2023). Quality indicators of work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook for work-integrated learning* (3rd ed., pp. 342-360). Routledge.
- Campbell, M., Russell, L., McAllister, L., Smith, L., Tunny, R., Thomson, K., & Barrett, M. (2019). A framework to support assurance of institution-wide quality in work-integrated learning. ACEN. https://drive.google.com/file/d/13Voqe_rqb0MMpYNC1BGs3MpBMtudKy5n/view
- Lowe, S., & Hay, K. (2016). Good practice in international placements: Ideas for students and tertiary staff. Ako Aotearoa New Zealand. <https://ako.ac.nz/assets/Knowledge-centre/good-practice-publications/GOOD-PRACTICE-PUBLICATION-good-practice-in-international-placements-ideas-for-students-and-tertiary-staff.pdf>
- McRae, N., Pretti, T.J., Church, D (2017) . Work-integrated learning quality framework. https://uwaterloo.ca/centre-advancement-co-operative-education/sites/ca.centre-advancement-cooperative-education/files/uploads/files/wil_quality_framework_-_aaa_-_for_posting.pdf
- Sachs, J., Rowe, A. D., & Wilson, M. (2017). Good practice report – WIL. Report undertaken for the Office of Learning and Teaching. https://ltr.edu.au/resources/WIL_Report.pdf
- SASCE (2000) Best Practice Guide in Co-operative Education South African Society for Co-operative Education. Southern African Society of Cooperative Education. SASCE. https://docs.google.com/document/d/1ZCvvJs13hrgLMuFhYV4N5CzOLwtQRWXHK2n-6f_pojU/edit?usp=sharing
- Stirling, A., Kerr, G., Banwell, J., MacPherson, A., & Heron, A. (2016). A practical guide for work-integrated learning. Higher Education Quality Council of Ontario. https://heqco.ca/wp-content/uploads/2020/03/HEQCO_WIL_Guide_ENG_ACC.pdf
- Orrell, J. (2011). Good practice report: Work-integrated learning. Australian Learning and Teaching Council. https://ltr.edu.au/resources/GPR_Work_Integrated_Learning_Orrell_2011.pdf
- WACE (2024). Global Quality WIL Framework. <https://waceinc.org/Global-Quality-WIL-Framework>
- Walker-Martin, F., Flynn, S., & Siva-Jothy, D. (2022). ASET good practice guide for work based and placement learning in higher education. ASET. <https://www.asetonline.org/wp-content/uploads/2023/04/ASET-Good-Practice-Guide-Work-based-and-Placement-Learning.pdf>
- Wilson, J., Flynn, S., Loescher, A., Ward, T., & Siva-Jothy, D. (2013). ASET good practice guide for work based and placement learning in higher education. ASET. <https://www.asetonline.org/wp-content/uploads/2017/09/ASET-Good-Practice-Guide-eWBPL.pdf>
- Winberg, C., Engel-Hills, P., Garraway, J., & Jacobs, C. (2011). Work-integrated learning: Good practice guide. Council on Higher Education. https://www.che.ac.za/sites/default/files/publications/Higher_Education_Monitor_12.pdf
- Winchester-Seeto, T. (2019). Quality and standards for work-integrated learning. Australian Government Department of Education and Training. <https://www.acds.edu.au/wp-content/uploads/Winchester-Seeto-Literature-Review-Quality-and-Standards.pdf>

Maximising from WIL



- WIL represents significant resourcing for external engagement and networking
- How are these levered?
 - Funded research collaborations
 - Employer advisory panels, sponsorship
 - Pulse surveys
 - Quest lecturers, mentors
 - Media events and profile
- Data mining
 - Work performance evaluations
 - Employer types and locations



Current topical themes in WIL

- Employability outcomes
- Non-placement WIL
- Wellbeing
- Equity, access, and inclusion
- Risk
- Unpaid work placements
- Workload, resourcing
- Technology and AI
- Integration into the curriculum (again)
- WIL in graduate degrees
- Multidisciplinary WIL
- Linking to the UN SDGs



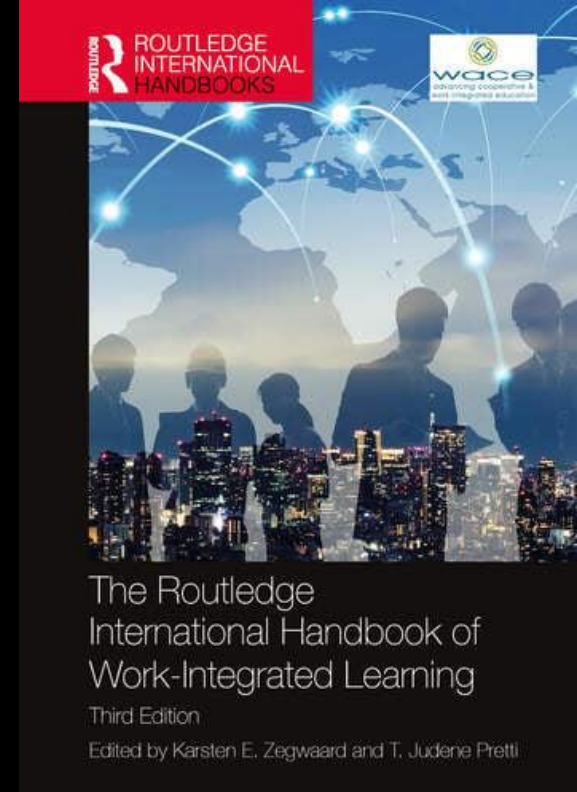
An open book with text on the pages, resting on a stack of other books. The pages are aged and yellowed. The text is dense and appears to be a classic literary work. The book is open to a page with a large block of text. The background is a light, textured surface.

LITERATURE

The Routledge International Handbook of Work-Integrated Learning (3rd ed.)

- Compilation of established knowledge and critical discussion of the practice of WIL
- A 'go to first' book for WIL practitioners, educators, and researchers
- 37 chapters, nearly 100 authors, 644 pages
- Five sections:
 - 1) *defining and theoretical background*,
 - 2) *benefits*,
 - 3) *models of WIL*,
 - 4) *developing and managing WIL*, and
 - 5) *topical issues*
- Available in hardback and eBook – paperback/softback later this year.
- www.routledge.com/9780367741761
- University libraries likely to have ebook access already

**Watch for discounts.
20-25% off is common.**



Currently selling:
IEP\$35 (eB)
\$170 (HB)



International Journal of Work-Integrated Learning

ISSN: 2538-1032

www.ijwil.org

- Central journal for WIL, commenced 24 years ago
- More than 600 published articles
- Open access, double blind reviewed, 50-member international review board
- Indexed on Scopus, EBSCO, ERIC, DOAJ, Cabells, ESCI
- Q2 journal (71 percentile)
- Special issues:
 - Assessment
 - Employability
 - Research methods
 - Impact of COVID (double special issue)
 - Cultural perspectives
 - Equity, inclusion and access
 - Wellbeing (*to be published start of 2025*)

www.ijwil.org

Resources: Books and good practice reports

- Ferns, S., Rowe, A. D., & Zegwaard, K. E. (Eds.). (2022). Advances in research, theory and practice in work-integrated learning: Enhancing employability for a sustainable future. Routledge. <https://doi.org/10.4324/9781003021049>
- Bowen, T., & Drysdale, M. T. B. (Eds.). (2017). Work-integrated learning in the 21st century: Global perspectives on the future, edited by T. Bowen and M. T. B. Drysdale. Emerald. <https://doi.org/10.1108/S1479-367920170000032009>
- Gerhardt, T., & Annon, P. J. (Eds.). (2021). Application of work-integrated learning among gen z and y students. IGI Global. <https://doi.org/10.4018/978-1-7998-6440-0>
- Campbell, M., Russell, L., McAllister, L., Smith, L., Tunny, R., Thomson, K., & Barrett, M. (2019). A framework to support assurance of institution-wide quality in work-integrated learning. Queensland University of Technology. <https://research.qut.edu.au/wilquality/wp-content/uploads/sites/261/2019/12/FINAL-FRAMEWORK-DEC-2019.pdf>
- Lowe, S., & Hay, K. (2016). Good practice in international placements: Ideas for students and tertiary staff. Ako Aotearoa New Zealand. <https://ako.ac.nz/assets/Knowledge-centre/good-practice-publications/GOOD-PRACTICE-PUBLICATION-good-practice-in-international-placements-ideas-for-students-and-tertiary-staff.pdf>
- McRae, N., Pretti, T.J., Church, D (2017) . Work-integrated learning quality framework. https://uwaterloo.ca/centre-advancement-co-operative-education/sites/ca.centre-advancement-cooperative-education/files/uploads/files/wil_quality_framework_-_aaa_-_for_posting.pdf
- Sachs, J., Rowe, A. D., & Wilson, M. (2017). Good practice report – WIL. Report undertaken for the Office of Learning and Teaching. https://ltr.edu.au/resources/WIL_Report.pdf
- Stirling, A., Kerr, G., Banwell, J., MacPherson, A., & Heron, A. (2016). A practical guide for work-integrated learning. Higher Education Quality Council of Ontario. https://heqco.ca/wp-content/uploads/2020/03/HEQCO_WIL_Guide_ENG_ACC.pdf
- Orrell, J. (2011). Good practice report: Work-integrated learning. Australian Learning and Teaching Council. https://ltr.edu.au/resources/GPR_Work_Integrated_Learning_Orrell_2011.pdf
- WACE (2024). Global Quality WIL Framework. <https://waceinc.org/Global-Quality-WIL-Framework>
- Wilson, J., Flynn, S., Loescher, A., Ward, T., & Siva-Jothy, D. (2013). ASET good practice guide for work based and placement learning in higher education. ASET. <https://www.asetonline.org/wp-content/uploads/2017/09/ASET-Good-Practice-Guide-eWBPL.pdf>
- Winberg, C., Engel-Hills, P., Garraway, J., & Jacobs, C. (2011). Work-integrated learning: Good practice guide. Council on Higher Education. https://www.che.ac.za/sites/default/files/publications/Higher_Education_Monitor_12.pdf

References

- Adams-Hutcheson, G., Muller, S., Zegwaard, K. E., Martin, L., & Miller, N. (2023). Multidisciplinary work-integrated learning: The Impact Lab at University of Waikato. In K. E. Zegwaard, P. R. Lucas, & K. Hay (Eds.), *Work-Integrated Learning New Zealand 2023 Refereed Conference Proceedings* (pp. 1-5). *Work-Integrated Learning New Zealand*.
- Ajjawi, R., Tai, J., Jorre de St Jorre, T., & Johnson, L. (2022). Authentic assessment design for work-integrated learning. In S. J. Ferns, A. D. Rowe, & K. E. Zegwaard (Eds.), *Advances in research, theory and practice in work-integrated learning: Enhancing employability for a sustainable future* (pp. 37-46). *Routledge*.
- Bandura, A. (1977). *Social learning theory*. *Prentice Hall*.
- Bayerlein, L., Dean, B. A., Perkiss, S., & Jeske, D. (2022). Using technology platforms for work-integrated learning. In S. J. Ferns, A. D. Rowe, & K. E. Zegwaard (Eds.), *Advances in research, theory and practice in work-integrated learning: Enhancing employability for a sustainable future* (pp. 239-248). *Routledge*.
- Bradford, I. W. (1995). International recognition of vocational qualifications. International Vocational Education and Training Association Conference (South Africa, May 1995), South Africa.
- Cameron, C. (2017). The contract risks to universities of work-integrated learning programs. *Australian Business Law Review*, *45*(5), 405-418.
- Cameron, C. (2017). The strategic and legal risks of work-integrated learning: An enterprise risk management perspective. *Asia-Pacific Journal of Cooperative Education*, *18*(3), 243-256.
- Cameron, C., Ashwell, J., Connor, M., Duncan, M., Mackay, W., & Nagvi, J. (2019). Managing risks in work-integrated learning programmes: A cross-institutional collaboration. *Higher Education, Skills and Work-Based Learning*. <https://doi.org/https://doi.org/10.1108/HESWBL-05-2019-0072>
- Cameron, C., Dodds, C., & Mclean, C. (2019). Ethical risks in work-integrated learning: A study of Canadian practitioners. *International Journal of Work-Integrated Learning*, *20*(1), 83-95.
- Cameron, C., Fleming, J., Hay, K., & Hewitt, A. (2023). Risk management of work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge International Handbook of Work-Integrated Learning* (3rd ed., pp. 412-427). *Routledge*.
- Cameron, C., & Orrell, J. (2022). Governance and risk management. In S. Ferns, A. Rowe, & K. E. Zegwaard (Eds.), *Advances in research, theory and practice in work-integrated learning: Enhancing employability for a sustainable future* (pp. 215-226). *Routledge*.
- Campbell, M., Cooper, B., Smith, J., & Ruckert, C. (2022). The framing of employability policy and the design of work-integrated learning curriculum. In S. J. Ferns, A. D. Rowe, & K. E. Zegwaard (Eds.), *Advances in research, theory and practice in work-integrated learning: Enhancing employability for a sustainable future* (pp. 17-26). *Routledge*.
- Campbell, M., & Pretti, T. J. (2023). Quality indicators of work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook for work-integrated learning* (3rd ed., pp. 342-360). *Routledge*.
- Cheng, M., Adekola, O., Albia, J., & Cai, S. (2021). Employability in higher education: A review of key stakeholders' perspectives. *Higher Education Evaluation and Development*, *16*(1), 16-31.
- Engestrom, Y. (1999). Activity theory and individual social transformation. In Y. Engestrom, R. Miettinen, & R. L. Punamaki (Eds.), *Perspectives on activity theory*. *Cambridge University Press*.
- Eisenstein, A. (2023). The practice of entrepreneurship education and start-up creation. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (pp. 218-228). *Routledge*.
- Dean, B. A., Eady, M. J., & Yanamandram, V. (2020). Advancing non-placement work-integrated learning across the degree [Editorial]. *Journal of University Teaching & Learning Practice*, *17*(4). <https://ro.uow.edu.au/jutlp/vol17/iss4/1>
- Dewey, J. (1938). *Experience and education*. *Touchstone*.
- Drysdale, M., & Johansson, K. (2011). A scientific approach to research design and quality in cooperative and work-integrated education. In R. K. Coll & K. E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 85-97). *World Association for Cooperative Education*.
- Fannon, A.-M. (2023). The practice of cooperative education. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 147-162). *Routledge*.
- Ferns, S. J., & Arsenault, C. (2023). Accreditation and quality in work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (pp. 361-380). *Routledge*.
- Ferns, S. J., Lewis, S., Russell, J. K., Childers, J., Brewer, M., & Alessandrini, J. (2022). Designing and implementing interdisciplinary project-based work-integrated learning. In S. J. Ferns, A. D. Rowe, & K. E. Zegwaard (Eds.), *Advances in research, theory and practice in work-integrated learning: Enhancing employability for a sustainable future* (pp. 167-178). *Routledge*.
- Ferns, S. J., & Zegwaard, K. E. (2014). Critical assessment issues in work-integrated learning [Special issue]. *Asia-Pacific Journal of Cooperative Education*, *15*(3), 179-188.
- Gibbs, G. (1988). *Learning by Doing: A Guide to Teaching and Learning Methods*. *Oxford Further Education Unit*.
- Harrison, G., & Ip, R. (2013). Extending the terrain of inclusive education in the classroom to the field: International students on placement. *Social Work Education*, *32*(2), 230-243.
- Hay, K., Borren, J., Maidment, J., Tudor, R., & Chilvers, D. (2023). The practice of block placements. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 163-175). *Routledge*.

- Hicks, H., & Swain, P. (2007). Direct, facilitate, enable - juxtaposition of the duty of care and duty of disclosure in social work field education. *Social Work Education, 26*(1), 235-252.
- Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education, 40*(2), 350-367.
- Jackson, D., & Pham, T. (2022). International students and work-integrated learning: Overcoming challenges and looking to the future. In S. J. Ferns, A. D. Rowe, & K. E. Zegwaard (Eds.), *Advances in research, theory and practice in work-integrated learning: Enhancing employability for a sustainable future* (pp. 179-190). Routledge.
- Judd, B., Brentnall, J., Phillips, A., & Aley, M. (2023). The practice of simulations as work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge handbook of work-integrated learning* (3rd ed., pp. 254-271). Routledge.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Konstantinou, I., Gerhardt, T., & Miller, E. (2023). Supporting the wellbeing of students: A framework for work-integrated learning programs. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook for work-integrated learning* (3rd ed., pp. 533-547). Routledge.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Marlow, A., Saunders, C., & Mather, C. (2022). Evaluating work-integrated learning. In S. J. Ferns, A. D. Rowe, & K. E. Zegwaard (Eds.), *Advances in research, theory and practice in work-integrated learning: Enhancing employability for a sustainable future* (pp. 121-130). Routledge.
- McRae, N., Ramji, K., & Ivkovic, S. S. (2023). Addressing complex global challenges: Developing cultural intelligence in work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 563-577). Routledge.
- Office for Students. (2021). *Student mental health*. <https://officeforstudents.org.uk/advice-and-guidance/student-wellbeing-and-protection/student-mental-health/what-we-re-doing/>
- O'Connor, M. D. (2023). Design principles for work-integrated learning-based, alternative doctoral training programs informed by PhD candidate feedback. *International Journal of Work-Integrated Learning, 24*(4), 567-582.
- Olsson, A. K., & Bernhard, I. (2023). Transforming doctoral education: Exploring industrial PhD collaboration in Sweden. *International Journal of Work-Integrated Learning, 24*(4), 523-536.
- Patrick, C.-j., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [Work Integrated Learning] report: A national scoping study. The final report to the Australian Learning and Teaching Council (ALTC)*.
- Perkins, J., & Irwin, A. (2023). The practice of online internships. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 271-288). Routledge.
- Piaget, J. (1985). *The equilibrium of cognitive structures: The central problem of intellectual development* (T. Brown & K. L. Thampy, Trans.). University of Chicago Press. (1975)
- Ramji, K., Ivkovic, S. S., Miller, N., Karim-Haji, F., & Trompetter, S. (2023). The practice of international work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 289-305). Routledge.
- Rook, L., & Dean, B. A. (2023). The practice of non-placement work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (pp. 243-253). Routledge.
- Rowe, A. D., Ferns, S. J., Lucas, P. R., Piggott, L., & Winchester-Seeto, T. (2023). The practice of short-term and part-time work placements. In K. E. Zegwaard & T. J. Pretti (Eds.), *The International handbook of work-integrated learning* (3rd ed., pp. 190-206). Routledge.
- Rowe, A. D., Ferns, S. J., & Zegwaard, K. E. (2022). The future of work-integrated learning: Vision and insights. In S. J. Ferns, A. D. Rowe, & K. E. Zegwaard (Eds.), *Theories, Practices and Research in Work-Integrated Learning in Australia: Enhancing Employability Capabilities for a Sustainable Future* (pp. 251-268). Routledge.
- Rowe, A. D., & Zegwaard, K. E. (2017). Developing graduate employability skills and attributes: Curriculum enhancement through work-integrated learning [Special issue]. *Asia-Pacific Journal of Cooperative Education, 18*(2), 87-99.
- Schon, D. A. (1983). *The reflective practitioner: How professional think in action*. Basic Books.
- Smith, S., Taylor-Smith, E., Fabian, K., & Klotz, D. (2023). The practice of apprenticeships. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge handbook of work-integrated learning* (pp. 207-217). Routledge.
- Sovilla, E. S., & Varty, J. (2023). Work-integrated learning: A US history with lessons learned. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 13-28). Routledge.
- Udell, J., O'Brien, V., Flynn, S., Hooper, H., & Walker-Martin, F. (2023). The practice of sandwich degrees. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 176-189). Routledge.
- Valencia-Forrester, F. (2023). The practice of service learning as work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 229-242). Routledge.
- Vygotsky, L. S. (1978). *Mind in society: Development of higher psychological processes*. Harvard University Press.
- Wheeldon, A. L., Whitty, S. J., & Van Der Hoorn, B. (2023). Burnt out by underinvestment: Why university professional staff suffer amidst the Australian work-integrated learning system. *International Journal of Work-Integrated Learning, 24*(1), 99-115.
- Wertsch, J. V. (1991). A sociocultural approach to socially shared cognition. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 85-100). American Psychological Association.
- Zegwaard, K. E. (2015). Building an excellent foundation for research: Challenges and current research needs [special issue]. *Asia-Pacific Journal of Cooperative Education, 16*(2), 89-99.
- Zegwaard, K. E., & Pretti, T. J. (2023). Future directions for advancing work-integrated learning pedagogy. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3rd ed., pp. 593-606). Routledge.
- Zegwaard, K. E., Pretti, T. J., & Rowe, A. D. (2020). Responding to an international crisis: The adaptability of the practice of work-integrated learning. *International Journal of Work-Integrated Learning, 21*(4), 317-330.
- 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.

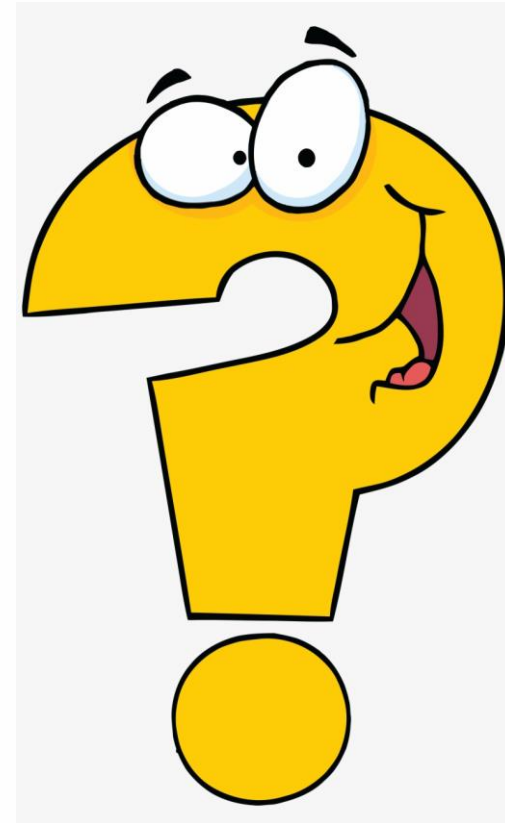
National associations

Connect with the wider family

- ASET – UK work-based learning association
 - Great people, very helpful good practice guides
 - Annual conferences (Sept, Belfast)
- WACE – the international association for WIL
 - World conference, 2025, Istanbul – May
- CEWIL – Canadian WIL association
 - Biannual conference
 - Great resources online
- ACEN – Australian association
 - Biannual conferences – November 2024 Sydney
 - Great online resources
- CEIA, WILNZ, SASCE, TACE



Any Questions?



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

NEW ZEALAND



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

NEW ZEALAND



Work-integrated learning in higher education: Assessment

Assoc Prof Karsten Zegwaard
Director of WIL Research, University of Waikato, New Zealand
Editor, IJWIL
President, WILNZ

WIL underpinned by several learning theories

- Cognitive development theory by Piaget (1985)
- Social culturalism by Vygotsky, 1978; Wertsch, 1991; Engestrom, 1999
- Learning through experience by Dewey (1938) and Kolb (1984)
- Reflective learning to enhance learning from practice (Schon, 1983; Gibbs, 1988)
- Social learning theory (Bandura, 1977)
- Situated learning theory (Lave & Wenger, 1991)

LEARNING THEORY



Models of WIL cont...

Non-placement WIL:

- Work-related projects
- Student consultations
- Community projects
- Project-based WIL
- Commissioned works
- Entrepreneurships
- Start-ups and enterprise
- Hack-a-thons
- Performances
- City Studio/Creative Studio
- Capstones (if with external partner)
- Service Learning

Eisenstein, 2023;
Fannon, 2023;
Hay et al., 2023;
Judd et al., 2023;
Perkins & Irwin, 2023
Ramji et al., 2023
Rook & Dean, 2023;
Rowe et al., 2023;
Smith et al., 2023;
Udell et al., 2023;
Valencia-Forrester, 2023



Placement WIL:

- Work placements
- Co-ops
- Internships
- Practicums
- Industry placements
- Field placements
- Apprenticeships
- Cadetships
- Attachments

WIL in practice
and assessment

THEORY

PRACTICE



Types of Assessment

1. Performance-based

- Work/task performance
- Skill tests
- Observations (e.g., classroom observations)

2. Reflective assessment

- Reflective essays
- Reflective report
- Journaling
- Dairies
- Learning goal settings and reflection (co-design)
- Career statements (current and future directions)

3. Portfolio

- Compilation of evidences
- Portfolio approach is best across the whole degree

4. Work-related

- Health and safety assessments
- Technical reports (co-design)
- Consultation reports (co-design)
- Oral presentations (co-design)
- A product (co-design)

Weightings

- 100% work performance
- 100% assessments
 - Work performance is 0% weighted feedback
- 50:50 work performance, assessment
- <50 : >50 work performance, assessment
 - E.g., 25% work performance, 75% assessments

Example: Science work placements (30pts – double paper)

Compulsory prep for work placement (15pts)

- 400 hours, full time, paid, over the summer (C Trimester)
 - Some variations allowed
- Must be relevant to the major
- Securing placements: Students source their own, WIL Coordinator generates opportunities
 - MyWIL platform
- Employers are vetted (3, 4, or 5 years). Placement opportunity is vetted.
- Assessment online (Moodle)
- Site visit by WIL Coordinator, maybe academic supervisor
- MyWIL sends prompts to students
- Online communication



Example: Work placements (30pts – double paper)

Compulsory prep for work placement (15pts)

1. **Workplace health and safety (5%)**
 - Template. Evidence of induction and H&S Manual, risk assessment
2. **Placement brief (5%)**
 - Template. Scope of placement, key contacts
3. **Setting of learning goals (0%)**
 - Technical, behavioural/professional, knowledge. 2 goals for each using SMART
4. **Reflection on applying a taught concept in the workplace (20%)**
 - E.g., a principle, set of knowledge, lab tests
5. **Reflecting on learning goals (10%)**
 - Progress to achieving learning goals
6. **LinkedIn update (5%)**
 - Need to see evidence of a bigger network, work history updated
7. **Technical report (30%)**
 - Technical writing with a focus on the work done, not reflection of learning
8. **Work performance (25%)**
 - Completed by the workplace supervisor



Example: non-work placement WIL (15pts)

Practice varies significantly

- Projects are generated by a Project Lead with an external stakeholder
 - External stakeholder is marginally involved
 - May be a community
 - Some projects have additional fees/costs
 - Nearly always group work
- Opportunities are listed on MyWIL
 - Student preference their choices
 - Usually receive first choice
 - Some students do not preference, we decide for them
- Project Lead oversees the process
 - Projects largely run independently from others
- Paper offering overseen by a Paper Convenor



Example: non-work placement WIL (15pts) - examples

Scientists in schools

Gully ecological restoration

Modern methods for molecular scientists

Rewilding rivers

Rēkohu Chatham Islands investigation

Marine protection, human use and underwater noise

Waiwhakareke ecological reserve

Hamilton Zoo educational projects

Ad hoc projects



Example: non-work placement WIL

Assessment varies depending on the project

Some assignments geared to the activity (e.g., field notebooks, H&S)

A mix of group and individual assignments

- **Planning assignment (group, 5%)**
 - Template. Project name, scope, purpose, timeline, measures of success, resource needs, deliverables
- **Midpoint update (individual, 5%)**
 - Template. Update on progress on timeline and deliverables. How the team is functioning
- **Reflection assignment (individual, 20%)**
 - Identify 1 technical skill and 1 behavioural skill learnt and explain. Reflect on teamwork
- **Oral presentation (group, 20%)**
 - Of the work completed, recommendation. Content similar to final report.
- **Final report (group, 20%)**
- **Professional engagement (group and individual, 30%)**
 - 15% peer assessment (individual), 15% external stakeholder (group)



Example: Multidisciplinary projects (The Impact Lab)

- Run by WIL Central
 - Staff support from the Divisions
 - Team mentors from across the university
 - All disciplines eligible
- Multidisciplinary projects, based around the UN SDG
- Multidisciplinary teams
- Two modes of delivery
 1. Individual group projects
 - Each group has their own project
 - Project is well defined
 - Likely each project has a different stakeholder
 2. Competition mode
 - One problem proposition
 - One stakeholder
 - Many possible outcomes/solution
 - Best outcome/solution wins



Example: Multidisciplinary projects (The Impact Lab)

- Inner City Community Garden
- Tauranga Campus Transport Project
- Info app for bike tours
- Alternative transportation options for new suburbs
- Trees at the meteor
- PET strapping upcycling
- Wellbeing hub
- Kīngitanga Day Event
- Carless Wednesday challenge
- Actional manufacturing waste re-use project

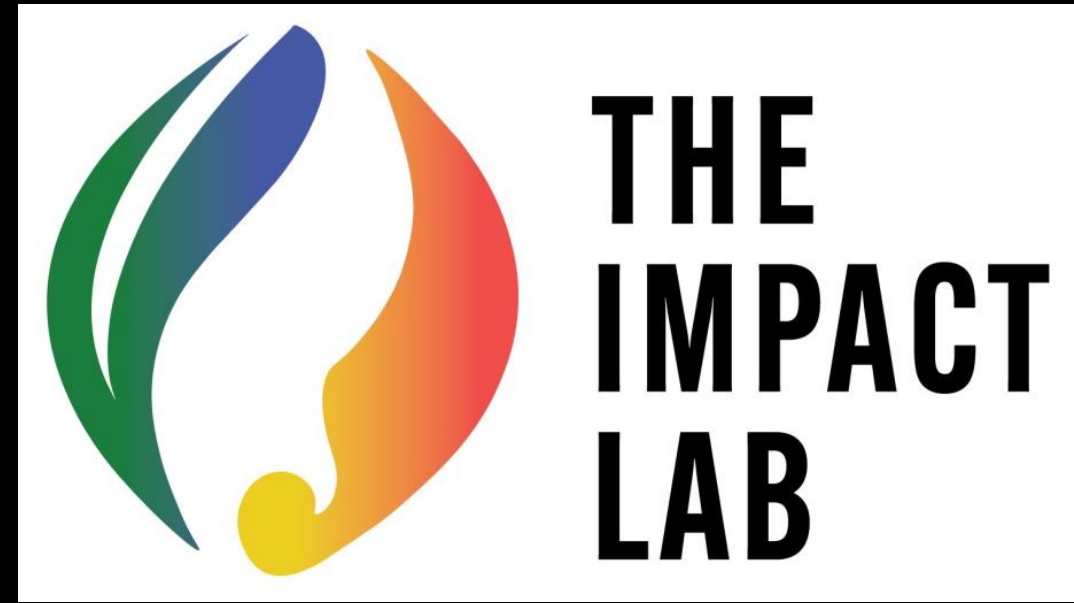


Example: Multidisciplinary projects (The Impact Lab)

Assessment

All groups have the same assessment, even if doing different projects

- Professional profile (individual, 15%)
 - CV, cover letter, LinkedIn
- Project plan (group, 15%)
- Midpoint update (individual, 15%)
- Oral presentation (group, 20%)
- Final report (group, 25%)
- Project contribution (individual, 10%)



Other assessment approaches



- Industry-Company overview assignment
- Reflection around an event
 - A success or failure (or both)
- Career statements
- Updated CVs
- Journalling
 - Common
 - Labour intensive
- Placement report with personal reflection
 - Could also include industry overview
 - Often written in the first person
 - Often becomes a 50% report and 50% work performance
- Portfolios
 - Common. Use portfolio software (e.g., PebblePad)
- Oral presentations
 - Create an Industry Day?
- Assessment during site visits
 - Preliminary work performance, presentation, knowledge tests

Compulsory paper
before work
placement

Professional
profile (CV, cover
letter, LinkedIn)

Interview
technique

Workplace H&S,
legal
entitlements, IP

Employer
expectations

Skill identification
and transferability

Professional
identity and
ethics

Codes of conduct,
company values

Personalities and
management
types

Science in society
and economy

Communication

Cognitive bias and
dissonance

Reliability of
information

Work-life balance

Wellbeing and
traits for success

Preparation for the Professional Workplace



Assessment

- Professional profile – 30%
- H&S test – 10%
- Reflection on personality type – 20%
- Oral presentation – 25%
- End of paper test – 15%

Any Questions?



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

NEW ZEALAND