# Reshaping work-integrated learning in a post-COVID-19 world of work

# BONNIE AMELIA DEAN<sup>1</sup> University of Wollongong, Wollongong, Australia MATTHEW CAMPBELL Queensland University of Technology, Brisbane, Australia

The disruption caused by COVID-19 has accelerated many changes already emerging within work and higher education sectors. With the rapid move to online and distance learning models, the value of alternative forms of work-integrated learning (WIL), in spaces other than physical workplaces, has been realized. After the state of 'panic-gogy' where experimentation was rife, purposeful design of WIL in non-workplace settings now requires greater attention. Recent practice has shown that different models and approaches can still harness the authenticity of work tasks and therefore challenge dominant understandings and practices of designing and facilitating WIL. This paper advances the argument that the nature of work, itself, is morphing and, therefore, realizations of WIL also need to change including current conceptions of quality in WIL.

#### Keywords: COVID-19, quality WIL, non-placement WIL, work-integrated learning, work

Innovation in work-integrated learning (WIL) has been occurring gradually alongside similar ongoing changes in work practices. The 'new economy' is demanding skills in creativity, communication, team work and entrepreneurship for most graduates in ways which were previously isolated to a select few (Smith, J. et al., 2019). In responding to these challenges and opportunities, WIL has also been transformed to extend beyond placement-based experiences, to embracing a diverse range of practice-based, work-based, authentic learning experiences. Workplaces provide particular kinds of experiences which support student learning in ways which may not be present in other circumstances (Kennedy et al., 2015). However, the nature of what is a workplace, and the experiences of practice in contexts other than the physical workplace, are presenting new opportunities for learning in higher education. In recent times, the COVID-19 pandemic has provided a sudden and significant driver for rapid change and adoption of innovative online WIL pedagogies and practices. This paper makes the argument that as we move beyond the 'panic-gogy' driven by the COVID-19 pandemic, consideration needs to be given to developing new understandings of quality in WIL and appreciation of the diverse learning afforded by sustainable, innovative, non-placement models of WIL.

# THE CHANGING NATURE OF WORK

Ways of working have been evolving as part of the emergence of the post-industrial economy and the 'third-wave' (Toffler, 1980) information society. The Organisation for Economic Co-operation and Development (OECD) observed that digitization, globalization and changing demographics were having a significant impact on formations work and where this work is being undertaken (OECD, 2019). Work is no longer simply completed within the confines of a bounded office and constraints of time periods. Instead the nature of work has evolved new practices and ways of being which has seen the adoption of remote work settings, fluid time constraints and continuous connectivity. Reckwitz (2017) suggests that what is evident is the realization of *disorganised capitalism*, usurping the Fordian and Weberian structured capitalist order of the past. The emergence of disorganised capitalism has brought

<sup>&</sup>lt;sup>1</sup> Corresponding author: Bonnie Dean, <u>bcord@uow.edu.au</u>

new forms of engagement in work, with the burgeoning of self-employment and dominance of projectbase work. At the core of this disorganized capitalism is the 'neo-romantic model of work and profession which identifies satisfying work with creative work' (Reckwitz, 2017, p. 91). Emergent is a discourse of the need for creative, agile, and innovative university graduates who are prepared for the jobs of the future (Thompson & Cook, 2019). Innovation and creativity, in responding to news ways of working, have evolved as key outcomes from higher education.

As society entered 2020 the changing trends of work was a discussion that was being had on the periphery of much practice. While ideas such as increases to remote working or greater reliance on digital communication had been spoken about, the impact of the COVID-19 pandemic saw these trends accelerate at a pace never before seen (Volini et al., 2020). Recent interventions in response to the COVID-19 emergency has seen an acceleration of the evolution of work with large segments of the workforce, previously not impacted by emergent and gradual change, being suddenly forced into new ways of working at a distance to colleagues and the workplace. It has been argued that it has not been the inadequacy of technology that has previously prevented the long-awaited transformation of work, but the challenge of building models that integrate humans with technology (Orlikowski, 2007; Volini et al., 2020). The COVID-19 crisis highlighted the importance of human connection, belonging, and creativity in the modern workplace. Drivers of innovation and creativity in how work is undertaken and structured, and how organizations remained connected, despite government enforced lock-downs, has revealed a raft of new ways of connecting and working.

However, the changing nature of work is not consistent across the economy. Whilst it has been the general approach to postulate large societal wide changes to work (see for example Beck, 2000), the reality is that changes are more piece-meal, industry and sector specific, and often driven by particular organizational goals (Nolan, 2004). Even consequent to the COVID-19 pandemic, opportunities for work and the form that work has taken has differed greatly across, and within, sectors and across genders (Alon et al., 2020). Such differentiation has also applied to the realization of placement WIL opportunities. For example, whilst the health sector, in general, and nursing in particular, has seen an increase in demand for more workers and engagement of students (see for example Lievre, 2020), other industries, like creative industries and the arts, have seen rapid downturns in student opportunities and medium to long term retraction (Americans for the Arts, 2020), whilst spaces like engineering are seeing mixed outcomes depending on particular areas of the sector (see for example Parada, 2020). In areas where workplaces are retracting and new ways of working are coming to bear, approaches to WIL are also transforming.

Alongside transformations in the world of work, higher education has also experienced rapid change and adaptation towards distance work and learning practices as an outcome of the COVID-19 emergency. The forced lockdowns during the COVID-19 crisis drove a hurried move by teachers to wholly online and distance learning. This surprising and rapid move online has been described as 'panic-gogy', whereby "teachers are suddenly forced to go online and experiencing that kind of panic about how to maintain [their] teaching in this environment that [they] don't understand" (Baker, 2020, p. 1). However, this period has also driven new and creative approaches to university teaching and learning, enlivening a range of supported learning and assessment practices. This has been particularly acute within the Australian and New Zealand contexts with higher education and work experiencing significant changes in permissible practice. It is difficult at this stage of the crisis recovery to fully understand the long-term impact of these emergency responses. Whilst there is a general acceleration in the realization of online learning models and transformation in higher education (Kandri, 2020; Kim, 2020) distinction should be made between emergency shifts to distance learning, captured by the concept of 'panic-gogy' (Baker, 2020), and longer-term reforms to approaches of teaching and learning in higher education.

# RE-IMAGINING NEW MODELS OF WORK-INTEGRATED LEARNING

With both the constructs of work and learning evolving rapidly as a consequence of the COVID-19 pandemic it is an inevitability that WIL, which connects these two worlds, also has to transform. WIL models have been steadily experiencing innovation over the last twenty years. Prior to 2020, WIL studies recognized that the world of work was changing and required universities to focus on supporting graduates to develop diverse and transferable skills, in order to be adaptive in response to change (Jackson et al., 2019; Smith, C. et al., 2019). It was forecast that the pedagogy of WIL was adapting: "as the practice of WIL continues to expand, it is indeed timely to broaden the range of types of WIL that are offered to higher education students" (Zegwaard & Rowe, 2019, p. 330). A range of alternative models of WIL have emerged as educators started to explore novel ways to engage industry and students in practice-based experiences beyond the physical workplace.

Beyond workplace-based experiences, WIL models are being innovated and rethought. WIL models such as micro-placements, hackathons, competitions and events, move away from approaches requiring extensive time in workplaces to engaging students through short, authentic activities (Kay et al., 2018). Partnering with small-to-medium enterprises (SMEs), or the notion of the building of a SME, has spurred the development of start-ups, consultations and incubators, as forms of WIL, to promote the development of entrepreneurial skills required for the 21<sup>st</sup> century world of work (Kay et al., 2019; Smith, J. et al., 2019). An increasing number of WIL models are moving into multi-disciplinary industry contexts, or engaging students from across disciplinary areas through interdisciplinary WIL experiences (Marchioro et al., 2014). Broadening the location of WIL beyond local contexts, the rise in global mobility, both nationally and internationally, has led to an expansion of international WIL opportunities (Gamble et al., 2012; Kay et al., 2018). Again, moving beyond physical constraints, the use of technological platforms has enabled growth in online projects and virtual placements (Kay et al., 2019), and other forms of online simulations (Bayerlein & Jeske, 2018) and virtual reality WIL experiences (Shehri, 2012).

These emerging models address challenges such as teaching to large cohorts, providing access to all students, or limitations imposed by resourcing or scalability (Kay et al., 2018; Kay et al., 2019). New models of non-placement WIL enable scalability of access and opportunity (Dean et al, 2020) as the one-to-one relationship inherent in a placement can be easily replaced with one-to-many (i.e. one workplace supervisor or mentor guiding the work of one or more groups of students), or many-to-many (i.e. multiple staff across an organization working with, guiding and coaching large cohorts of students). It has required a more agile curriculum, to allow for increased variability in student experiences and organizational requirements. These shorter, less resource intensive WIL activities also indicate an increased willingness of industry and community to partner with higher education institutions in new ways that include greater contributions to the co-design of WIL models (Kay et al., 2018).

The sudden and imposing move to remote learning during the height of the COVID-19 pandemic accelerated the need for innovative solutions to models of WIL that rely largely on learning with an external site or workplace in replacement for placements or fieldtrips. Loosing, or loosening of, 'place' diffused boundaries permitting greater networks of WIL across disciplines, sectors, countries and even universities. Enabling technologies assume a role in the provision of WIL greater than we could ever

have expected, and certainly greater than tertiary institutions had prepared for. As the tertiary sector recovers from such disruption, several opportunities for WIL remain to be explored. Technology will be leveraged at a greater scale and innovations will emerge that have not yet been imagined. This recent pivot online may also be the catalyst to move towards more inclusive WIL approaches, such as exploring opportunities for students or organizations in regional and rural settings, exploring bespoke activities or partnership experiences, and scaling WIL through novel, collaborative, virtual platforms.

In the post-COVID-19 tertiary environment, educators will need to enquire into the needs of industry and community and explore how we can work together, think outside-the-box, and design authentic experiences for student cohorts. While the sector understands the benefits of placement-based WIL, as empirical evidence tells us that programs of study with internships significantly increases graduate employment (Silva et al., 2018), there is a significant need to better understand the impact and longterm benefits of alternative and non-placement WIL models (Dean et al., 2020). Attention will need to be afforded to how students articulate skills learnt through alternative forms and include explicit activities for students to write, produce, or create artefacts or assessments that give them feedback on the skills gained. Portfolios or artefacts that can be shared and tracked and built upon across these activities will be important. With the introduction of a range of new models, there needs to be a focus on monitoring, evaluating, and making recommendations to policy, program development, and professional accrediting bodies, on the impact of alternative WIL models. Significantly, though, attention needs to be paid to developing quality measures of WIL that encompasses these emerging forms and models.

# ASSURING QUALITY IN THE NEW WORK-INTEGRATED LEARNING LANDSCAPE

Across the higher education sector there exist multiple definitions of WIL, though largely these definitions coalesce around four core principles: WIL must (1) involve direct engagement with an industry or community partner, (2) see students engage in meaningful and authentic work, (3) be part of curriculum and pedagogical approaches to enhancing student learning, and (4) be assessed in authentic and purposeful ways (Ferns et al., 2014). In defining the landscape of WIL, it is differentiated from other approaches to authentic learning by emphasizing the connectedness (i.e. integration) of practice and theory in contexts and experiences of real work. However, as previously argued in this paper, the types of experiences that are categorized as WIL are becoming more diverse and incorporating a variety of experiences that extend beyond just workplace placements. Although these experiences are diverse, it is still important that each experience has some coherence to a shared understanding of quality WIL.

What quality means and how it is measured within higher education is highly dependent upon the context of the systems, values and interpretations of the leaders, and interests of the various stakeholder groups (Steinhardt et al., 2017). There is no singular definition of what is considered to be quality within higher education. For example, Bertolin (2016) asserts that concepts of quality in higher education derive from particular worldviews of the purpose and function of higher education. Alderman (2016) makes the argument that understandings of quality measures in higher education are often derivatives and extensions of government policy frameworks which aim to 'improve' educational outcomes or evaluate investment in the sector. As understandings of WIL have emerged and evolved so to have conversations around quality. Quality in WIL has received attention from institutions and researchers around the globe (Campbell et al., 2019; Hay, 2020; Khampirat & McRae, 2016; Kiriri, 2019; Lasen et al., 2018; Palmer et al., 2018; Ross & Guescini, 2019; Smith, 2012; Smith, C. et al., 2019; York & Vidovich, 2014). Each of these frameworks and understandings attempt to bring clarity to a shared

understanding of what constitutes quality WIL practice and pedagogy (McRae & Johnston, 2016; Zegwaard & Rowe, 2019). It is important that to have an appreciation of quality in WIL, that there exist both a shared understanding of what does, and does not, constitute WIL, and how notions of quality can be evidenced and measured in these contexts.

Often what can be seen as quality is viewed through defining what it is not. Over time, in an attempt to move towards better standards and quality WIL experiences, some have attempted to demonstrate what an 'unsuccessful' placement looks like. Studies have reported students returning from placements disillusioned and dissatisfied with their WIL placements (Purcell & Quinn, 1995; Lloyd, et al., 2019). Students have described lack of support, high work pressure, marginal responsibility, micro-management, lack of appreciation and/or being ignored, as contributing to this discontent (Bates, 2004; Gribble & McRae, 2017; Waryszak, 2000). To mitigate poor placement experiences, studies have placed emphasis on the purposeful design of programs (Clark & Zukas, 2016; Silva et al., 2018) and quality frameworks for WIL (Campbell et al., 2019). However, many of these models have been developed from a naturally biased understanding of WIL as being dominated by placements. As experiences of WIL evolve it is necessary for these framings to be challenged and considered alongside non-traditional, non-placement models of WIL.

In the development of their framework, Campbell et al. (2019) employed the 3Ps (presage, process, product) model of quality in pedagogical practice (Biggs, 1993; Gibbs, 2010). Such a model reflects the findings of Billett (2011) who proposes a model of understanding WIL practice as occurring before, during and after a particular experience. Within emergent and innovative models of WIL, even where in situ placements are not dominant, it should be expected that similar framings of quality should be evident. Non-placement WIL models must still aim towards realization of the definitional components of a WIL experience; however, variation will be realized in one, or more, of the 3Ps. For example, where a student undertakes a WIL experience remotely to the workplace, but with direct online support of a workplace supervisor, the product (or outcome) of the WIL experience is comparable to the student being in the workplace (e.g. final report, recommendations, presentation to industry partner, enhanced employability). Yet, the process of achievement has varied considerably. The student is now required to manage their own time more effectively, employ a wider range of digital skills and literacies to communicate effectively in this new context, and develop appreciations of the workplace culture and supervisor expectations only through short structured interactions rather than emersion in the physical setting. To draw direct comparisons between the placement and non-placement experiences would be a false adventure. The experience of a student in the placement or non-placement model will be different, just like the experience of a student in one physical workplace is different to that in another. The non-placement model is not a direct substitute for a placement option but is instead a new way of undertaking WIL that requires specific considerations as to how quality in product, process and presage is realized.

Within the transformation of WIL, following to the recent COVID pandemic, it could be suggested that in many instances non-placement WIL alternatives have been substituted for the sudden unavailability of physical placements for WIL. In these cases, substitutions have been based on a loose assumption of comparability of experience. Baker (2020), in her interview with Sean Michael Morris, explains that as change is occurring, educators are desperately seeking continuity with what was occurring before and seeking speedy solutions to account for learning in the changing educational environment. However, Baker (2020) warns that there is not going to be continuity. Instead, teachers are encouraged to be cognizant of their pedagogical motivations and ensure these continue to be present in the new world despite the changes to platforms and contexts. Much the same needs to be considered with respect to WIL. Simple substitution of online and remote experiences for placements is not a sustainable or a valuable model for supporting long-term quality in innovative WIL models and experiences, particularly where these models are responding to transformations in the worlds of work and learning. It is critical that in the recasting of WIL in response to the changing nature of work and learning, that questions of quality, understandings of purpose and considerations of relevance be applied to any emergent model of practice. New and emerging models of WIL need to account for what is at the core of quality WIL practice and pedagogy.

#### RECASTING OF WORK-INTEGRATED LEARNING AS MORE THAN JUST 'PLACEMENTS'

Technology has introduced new ways of doing things that we may not have imagined. Many globalized organizations have connected workers across continents for years. So why then, when we think of WIL, do our thoughts turn to images of interns shadowing employees around corridors, attending meetings, or taking notes while supervisors rattle of instructions? Many of our conceptions of WIL have strong workplace materiality features. But as we have seen with the recent and rapid move to remote working and learning, organizations including higher education providers, are capable of facilitating work in different ways. During the sudden move to remote delivery, WIL educators were grappling with how to replicate WIL courses or activities online. Now that we are in the post-COVID-19 emergency, it is time to focus on alternative approaches to work and how to leverage technology to enable partnerships and support students in authentic working roles.

Recent moves which have amplified social distancing and isolation should signal the importance of technology as a materiality that is bounded and integral to organizational life rather than a tool that is distinct and treated as a matter of interest only in a certain number of circumstances (Orlikowski, 2007). Our work practices are inexorably connected to the technologies that we employ in our use for work. To illustrate, Orlikowski draws attention to the practice of searching for information. This activity in the not-so-distant-past was allocated to libraries or conversations with colleagues or others and was transformed through search engines such as Google. Yet even Google, and the practice of searching for information is not fixed. Google itself was developed by software engineers and uses algorithms that consistently updates results based on ranks and frequency of hits. Since, Orlikowski's illustration, the notion of going to a website no longer means going to a computer. We can search for information in the palm of our hands, on our wrists, through our car, on our fridge, through devices, phones, televisions and smart watches. To make the point, even the innovations themselves are being innovated, reshaping how we practice and conduct life and work activities. While the design of WIL opportunities has slowly innovated over the last several years, it is time WIL became better aligned to the various and multiple ways of using technology and conducting work.

Fundamentally here, we are arguing that placements are not the only solution to authentic work practice when work practice itself continues to shift and is enabled by technology. This also has implications for how we think about how students learn in WIL and where this learning takes place. For the last decade or so, researchers in the area of learning and work have advocated learning in WIL as impacted by a range of social, historical and cultural factors, but also that learning is largely situated (Billett, 2010; Eraut, 2008). When casting the situatedness of learning in WIL, however, theorizations invariably ascribe workplace material and social factors to the practice and site of a physical workplace (Fenwick et al., 2012). When the workspace is no longer physically occupied, among other people, practices and objects, the situatedness is problematized, as immersion in a placement site has historically been deeply connected to learning (Eraut, 2008). What is required in concepts of learning in WIL is a disconnection between immersion as learning and practice as learning. This follows

approaches of practice-based theory (Schatzki, 1996), that designate practice as the central organizing principle for work, learning and social life. Focusing on practice, that is, student's embodiment of authentic professional roles, places learning within the participation in authentic activities rather than as a result of being in a specific WIL place or model.

Disentwining the concepts of immersion and practice as learning may problematize what constitutes spaces for learning through enculturation and mimesis (Billett, 2014). Without physical cues, learning the dynamics of an organization, their culture, values and ways of working may be disconcerting for students. The transition into a workplace for a student forms a key part of learning as they orient themselves to adapt and respond to organizational culture and norms (Zegwaard, et al, 2017). For alternative and non-placement models of WIL, particularly those that are facilitated online, new questions around how to support students in their transition into practice are raised. This will be a key area of interest moving forward for WIL educators and researchers. Shining light into this space, a recent publication by Winchester-Seeto and Piggott (2020) questions the purpose of WIL as a preparatory experience for work. Acknowledging the fluidity of work and in particular the changing spaces of work, they argue that WIL should be seen as preparation for a workforce rather than for a workplace. Removing the fixed notion of place, enables educators to consider the diversity and evolving landscape of work and instead focus on the development of cultural and technical attributes.

When designing WIL curriculum, the question therefore surfaces, what does it look like for the students to assume the role of a versatile practitioner? Starting with this question, rather than the type or model of WIL, permits an intense focus on student learning through practise (Billett, 2010) but not necessarily exclusively in physical practice settings. Further, it opens space to design authentic work activities and roles that are more aligned with how many practitioners work across geographical locations as well as for those who have experienced in working remotely during the COVID-19 pandemic. Giving students opportunities to assume a variety of authentic roles, through different types of models of WIL, will enhance learning and students' ability to adapt to different types of work.

# CONCLUSION

Economies will take time to return to flourishing labor markets for recent higher education graduates. Jobs will be lost, abandoned, or reimagined. What role will university graduates take on amongst this restorative process? Universities need to support current students through the challenges and new configurations of work practice. This paper has called attention to the reshaping of WIL in a post-COVID-19 world of work, through exploring emerging innovations and trends and drawing out their ongoing place and significance for student learning and transition into work.

Through recasting WIL to align with transformations of work in this third wave information society, this paper highlighted that while innovative forms of WIL were emerging, the COVID-19 situation has escalated uptake. During this recovery period, after the state of panic-gogy moving WIL online, intentional steps can now be taken to reimagine WIL beyond place-based learning and to consider vast, innovative ways of integrating work and learning in higher education. These new and alternative models of WIL are not substitutions for placements, but instead opportunities to engage students in the changing nature of work and learning. It is suggested that WIL design focusses on creating opportunities for students to practice in authentic work activities and roles. When we focus on practice, it centralizes what students do to assume the authentic roles of a professional rather than where they do it and opens possibilities for student participation in virtual, physical or hybrids spaces of learning. Universities should advance and augment WIL – through a range of models and stages within

curriculum – to maximize students' first-hand experiences practising, observing, analyzing and immersing themselves in diverse workspaces. Importantly, as new and alternative forms of WIL advance, it is vital that the nature of quality WIL practice and pedagogy continue to be prioritized and explored.

#### REFERENCES

- Alderman, L. (2016). Mapping government reforms in quality against higher education theory: is the relationship symbiotic? *Quality in Higher Education*, 22(3), 197-212. <u>https://doi.org/10.1080/13538322.2016.1251047</u>
- Alon, T., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020). *The impact of COVID-19 on gender equality*. National Bureau of Economic Research.
- Americans for the Arts. (2020, May 4). COVID-19's impact on the Arts: Research update. www.AmericansForTheArts.org/node/103614.
- Baker, K. J. (2020). Panic-gogy: A conversation with Sean Michael Morris. *The National Teaching & Learning Forum*, 29(4), 1-3. https://doi.org/10.1002/ntlf.30239
- Bates, M. (2004). From knowledge to action and back again: Building a bridge. *Asia-Pacific Journal of Cooperative Education*, 51(1), 7-14.
- Bayerlein, L., & Jeske, D. (2018). Student learning opportunities in traditional and computer-mediated internships. Education + Training, 60(1), 27-38. <u>https://doi.org/10.1108/ET-10-2016-0157</u>
- Beck, U. (2000). The brave new world of work. Polity Press.
- Bertolin, J. C. G. (2016). Ideologies and perceptions of quality in higher education: From the dichotomy between social and economic aspects to the 'middle way'. *Policy Futures in Education*, 14(7), 971-987. <u>https://doi.org/10.1177/1478210316645676</u>
- Biggs, J. B. (1993). From theory to practice: A cognitive systems approach. *Higher Education Research & Development*, 12(1), 73-85. https://doi.org/10.1080/0729436930120107
- Billett, S. (Ed.). (2010). Learning through practice. Professional and practice-based learning. Springer.
- Billett, S. (2011). Curriculum and pedagogic bases for effectively integrating practice-based experiences: Final Report. Australian Learning and Teaching Council. <u>https://www.vu.edu.au/sites/default/files/CCLT/pdfs/billett-wil-report.pdf</u>
- Billett, S. (2014). Mimesis:Learning through everyday activities and interactions at work. *Human Resource Development Review*, 13(4), 462-482. <u>https://doi.org/10.1177/1534484314548275</u>
- Campbell, M., Russell, L., Smith, L., McAllister, L., Tunny, R., Thomson, K., & Barrett, M. (2019). A framework for assuring quality in work integrated learning. Queensland University of Technology. <u>https://research.qut.edu.au/wilquality/wpcontent/uploads/sites/261/2019/12/FINAL-FRAMEWORK-DEC-2019.pdf</u>
- Clark, M., & Zukas, M. (2016). Understanding successful sandwich placements: A Bourdieusian approach. *Studies in Higher Education*, 41(7), 1281-1295. https://doi.org/10.1080/03075079.2014.968121
- Dean, B.A., Eady, M., & Yanamandram, V. (in press). Advancing non-placement work-integrated learning across the degree. Journal of University Teaching & Learning Practice, 17(4), 1-6.
- Eraut, M. (2008, September 30-October 3). Using research into how professionals learn at work for enhancing placement learning [Paper presentation] WACE / ACEN Asia Pacific Conference. Sydney.
- Fenwick, T., Nerland, M., & Jensen, K. (2012). Sociomaterial approaches to conceptualising professional learning and practice. Journal of Education and Work, 25(1), 1-13. <u>https://doi.org/10.1080/13639080.2012.644901</u>
- Ferns, S., Campbell, M., & Zegwaard, K. (2014). Work integrated learning in the curriculum. In S. Ferns (Ed.), *HERDSA guides* series: Work integrated learning. Higher Education Research and Development Society of Australasia.
- Gamble, N., Patrick, C-J., & Peach, D. (2012). Internationalising work-integrated learning: Creating global citizens to meet the economic crisis and the skills shortage. *Higher Education Research & Development*, 29(5), 535-546. https://doi.org/https://doi.org/10.1080/07294360.2010.502287
- Gibbs, G. (2010). *Dimensions of quality*. The Higher Education Academy. <u>https://s3.eu-</u> <u>2.amazonaws.com/assets.creode.advancehe-document-</u> <u>manager/documents/hea/private/dimensions\_of\_quality\_1568036697.pdf</u>
- Gribble, C., & McRae, N. (2017). Creating a climate for global WIL: Barriers to participation and strategies for enhancing international students' involvement in WIL in Canada and Australia. In G. Barton & K. Hartwig (Eds.), *Professional learning in the work place for international students: Exploring theory and practice* (pp. 35-55). Springer International. <u>https://doi.org/10.1007/978-3-319-60058-1\_3</u>
- Hay, K. (2020). What is quality work-integrated learning? Social work tertiary educator perspectives. *International Journal of Work Intregrated Learning*, 21(1), 51-61.
- Jackson, D., Fleming, J., & Rowe, A. (2019). Enabling the transfer of skills and knowledge across classroom and work contexts. *Vocations and Learning*, 12(3), 459-478. <u>https://doi.org/10.1007/s12186-019-09224-1</u>

International Journal of Work-Integrated Learning, Special Issue, 2020, 21(4), 356-364

Kandri, S. E. (2020). *How COVID-19 is driving a long-overdue revolution in education*. World Economic Forum. https://www.weforum.org/agenda/2020/05/how-covid-19-is-sparking-a-revolution-in-higher-education/

- Kay, J., Ferns, S., Russell, L., & Smith, J. (2018). Expanding work integrated learning possibilities: enhancing student employability through innovative WIL models. Australian Technology Network.
- Kay, J., Ferns, S., Russell, L., Smith, J., & Winchester-Seeto, T. (2019). The emerging future: Innovative models of workintegrated learning. *International Journal of Work-Integrated Learning*, 20(4), 401-413.
- Kennedy, M., Billett, S., Gherardi, S., & Grealish, L. (2015). Practice-based learning in higher education: Jostling cultures. In M. Kennedy, S. Billett, S. Gherardi, & L. Grealish (Eds.), *Practice-based learning in higher education: Jostling cultures* (pp. 1-13). Springer Netherlands. <u>https://doi.org/10.1007/978-94-017-9502-9\_1</u>
- Khampirat, B., & McRae, N. (2016). Developing global standards framework and quality integrated models for cooperative and work-integrated education programs. *Asai-Pacific Journal of Cooperative Education*, 17(4), 349-362.
- Kim, J. (2020, April 1). Teaching and learning after COVID-19: Three post pandemic predictions. *Inside Higher Ed.* <u>https://www.insidehighered.com/digital-learning/blogs/learning-innovation/teaching-and-learning-after-covid-19</u>
- Kiriri, P. N. (2019). An assessment of the quality of a work-integrated learning internships program in Kenya. *International Journal of Work Integrated Learning*, 20(3), 257-271.
- Lasen, M., Evans, S., Tsey, K., Campbell, C., & Kinchin, K. (2018). Quality of WIL assessment design in higher education: A systematic literature review. *Higher Education Research & Development*, 37(4), 788-804. https://doi.org/https://doi.org/10.1080/07294360.2018.1450359
- Lievre, K. L. (2020, March 29). Student nurses and retired health workers to join the ranks in the battle against coronavirus in Canberra. *The Canberra Times*. <u>https://www.canberratimes.com.au/story/6701301/student-nurses-to-join-health-ranks-in-the-battle-against-covid-19/</u>
- Lloyd, N. A., Paull, M., Clerke, T., & Male, S. A. (2019). Access, quality and wellbeing in engineering. Work Integrated Learning placements: Implications for equity and diversity. National Centre for Student Equity in Higher Education (NCSEHE) Curtin University.
- Marchioro, G., Ryan, M. M., & Perkins, P. (2014). Implementing an interdisciplinary student centric approach to workintegrated learning. Asia-Pacific Journal of Cooperative Education, 15(4), 359-368.
- McRae, N., & Johnston, N. (2016). The development of a proposed global work-integrated learning framework. *Asia-Pacific Journal of Cooperative Education*, 17(4), 337-348. <u>https://www.ijwil.org/files/APJCE\_17\_4\_337\_348.pdf</u>
- Nolan, P. (2004). The changing world of work. *Journal of Health Services Research & Policy*, 9(1), 3-9. https://doi.org/10.1258/135581904322724077
- OECD. (2019). OECD employment outlook 2019. https://doi.org/10.1787/9ee00155-en
- Orlikowski, W. J. (2007). Sociomaterial practices: exploring technology at work. Organization Studies, 28(9), 1435-1448.
- Palmer, S., Young, K., & Campbell, M. (2018). Developing an institutional evaluation of the impact of work-integrated learning on employability and employment. *International Journal of Work Intregrated Learning*, 19(4), 371-383.
- Parada, J. (2020). Understanding the sector impact of COVID-19: Engingeer and construction. Deloitte Touche Tohmatsu. https://www2.deloitte.com/global/en/pages/about-deloitte/articles/covid-19/understanding-the-sector-impact-of-covid-19--engineering---const.html
- Purcell, K., & Quinn, J. (1995). Hospitality management education and employment trajectories. Brookes University.
- Reckwitz, A. (2017). The invention of creativity: Modern society and the culture of the new (S. Black, Trans.). Polity Press.
- Ross, C., & Guescini, D. (2019). Developing a quality assurance framework that addresses experiential learning and workintegrated learning: Lessons learnt from George Brown College. *College Quarterly*, 22(2), 1-10.
- Schatzki, T. R. (1996). Social practices: A Wittgensteinian approach to human activity and the social. Cambridge University Press.
- Shehri, W. A. (2012). Work integrated learning in virtual reality. International Journal of Computer Science Issues, 9(5), 332-334.
- Silva, P., Lopes, B., Costa, M., Melo, A. I., Dias, G. P., Brito, E., & Seabra, D. (2018). The million-dollar question: can internships boost employment? *Studies in Higher Education*, 43(1), 2-21.

https://doi.org/https://doi.org/10.1080/03075079.2016.1144181

- Smith, C. (2012). Evaluating the quality of work-integrated learning curricula: a comprehensive framework. *Higher Education Research & Development*, 31(2), 247-262. <u>https://doi.org/10.1080/07294360.2011.558072</u>
- Smith, C., Ferns, S., & Russell, L. (2019). Placement quality has a greater impact on employability than placement structure or duration. *International Journal of Work Intregrated Learning*, 20(1), 15-19.
- Smith, J., Ferns, S., Kay, J., Russell, L., Marcus, M., Wache, D., & Nielsen, E. (2019). The EDGE report: Enabling and evidencing enterprise and entrepreneurship through work integrated learning. Australian Technology Network.
- Steinhardt, I., Schneijderberg, C., Götze, N., Baumann, J., & Krücken, G. (2017). Mapping the quality assurance of teaching and learning in higher education: the emergence of a specialty? *Higher Education*, 74(2), 221-237. <u>https://doi.org/10.1007/s10734-016-0045-5</u>
- Thompson, G., & Cook, I. (2019). The lack of work and the contemporary university. In M. A. Peters, P. Jandrić, & A. J. Means (Eds.), *Education and technological unemployment* (pp. 29-44). Springer. <u>https://doi.org/10.1007/978-981-13-6225-5\_3</u>
- Toffler, A. (1980). The third wave. Morrow.

- Volini, E., Schwartz, J., Denny, B., Mallon, D., Durme, Y. V., Hauptmann, M., Yan, R., & Poynton, S. (2020). Returning to work in the future of work. Deloitte. <u>https://www2.deloitte.com/us/en/insights/focus/human-capital-trends/2020/covid-19-andthe-future-of-work.html</u>
- Waryszak, R. Z. (2000). Before, during and after: International perspective of students' perceptions of their cooperative education placements in the tourism industry. *Journal of Cooperative Education*, 35(2-3), 34-94.
- Winchester-Seeto, T., & Piggott, L. (in press). 'Workplace' or workforce: What are we preparing students for? *Journal of University Teaching & Learning Practice*, 17(4), 1-6.
- York, J., & Vidovich, L. (2014). Quality policy and the role of assessment in work-integrated learning. International Journal of Work Intregrated Learning, 15(3), 225-239.
- Zegwaard, K. E., Campbell, M., & Pretti, T. J. (2017). Professional identities and ethics: The role of work-integrated learning in developing agentic professionals. In T. Bowen & M. Drysdale (Eds.), Work-integrated learning in the 21st Century (pp. 145-160). Emerald Publishing. <u>https://doi.org/doi:10.1108/S1479-367920170000032009</u>
- Zegwaard, K. E., & Rowe, A. (2019). Research-infomed curriculum and advancing innovative practices in work-integrated learning. *International Journal of Work Intregrated Learning*, 20(4), 323-334.