Towards conceptual clarity: Pedagogical liminality

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Work-based learning (WBL) is used interchangeably with other concepts such as work-related learning (WRL) and workplace learning (WPL). Work-integrated learning (WIL) considers WBL a subset within WIL. Some scholars and practitioners argue that WBL as a mode of learning is pedagogically incompatible with WRL, WPL, and WIL. WBL and WIL practitioners work across the coexistence of many possible meanings of modes and disciplines within the Higher Educational space, something WPL and WRL does not do explicitly when applied outside of Higher Education by Human Resource Management (HRM) practitioners. This conceptual paper applies a critical, multi-perspectival, multi-theoretical and multi-methodological approach of inquiry to the concept of boundaries as it relates to WIL and WBL as a mode of learning within pedagogics. It emphasizes the unique *raison d'être* for WBL and WIL which is the liminality and tension as a mode of pedagogical practice, between, across, and through disciplines.

Keywords: Work-based learning, work-integrated learning, higher degree apprenticeships, pedagogical practice, disciplinary boundaries

Work-based learning (WBL) and work-integrated learning (WIL) are presented as different, but they are not. Boud and Solomon (2001b, p. 19) "suggest that work-based learning is different enough [from WRL, WPL, WIL] to warrant a careful examination of its practices and what they signify." In the same publication, Portwood (2001, p. 76) adds further to the claim that WBL is not "simply a different type [mode] of learning but an educational field in its own right," with quite different and often incompatible pedagogical ideas. These ideas relate to new analytical concepts, theories, and methodologies (Portwood, 2001, p. 76). Boud and Solomon (2001a, p 225) add further that WBL as a pedagogical site "challenges most of our [academia] conventional assumptions about teaching, learning, knowledge and curriculum " A similar view is expressed when WBL (formal learning) is associated with Workplace Learning (WPL) and Work-Related Learning (WRL) (informal learning) (Allan, 2015; Gerhardt & Mackenzie-Philips, 2018). WIL as an umbrella term would incorporate all these modes. The distinction between WIL and WBL, and the focus of this paper, suggests pedagogical and conceptual differences and therefore perceived incompatibility. Some have argued that WBL should be seen as a distinct field of study (Nottingham, 2017), however, that should not exclude WIL as they share many similarities in practice and outcomes

Cooper et al. (2010, p. xiv) attest WIL has broader goals than WBL because WBL is a specific mode or form of teaching within WIL. Degree apprenticeships are the dominant form of WIL in UK universities and is referred to as WBL. Many degree apprenticeships are managed separately from WIL departments. It appears the differentiation is not just conceptual but also evident in practice and management. Do different pedagogical approaches (modes) justify the conceptual differences? The distinction raises questions about power discourses, 'boundary' assumptions, and thus impacting professional identity/status. There is a tension for the WIL practitioner working across disciplinary boundaries and different modes. Cooper et al. (2010, p. 21) suggest that leading and managing WIL

"often occurred at the expense of an academic's personal success," expressing the tension that exists in, and between, pedagogical practice.

Talbot (2019), suggests that sense can be made by understanding the pedagogical practice and curriculum design within educational settings from a labor market perspective. Talbot also suggests viewing the forms of education designed for those outside the labor market, such as, full time students and mature students seeking to (re-)enter the market, for example:

- the Co-operative Education and Work-Integrated Learning Canada (CEWIL Canada) (2021) WIL definition - for those already employed seeking to gain formal qualifications,
- the Boud and Solomon (2001b) definition of WBL, and
- for those partly in the workplace but also partly in formal education, the UK degree apprenticeships (HDA) (Hordern, 2015; Minton & Lowe, 2019).

Work, in this latter example, is only guaranteed for the duration of the apprenticeship. Service learning is not included in these definitions. This definition however supports the notion of WBL as a subset of WIL. These complex questions will be addressed by first acknowledging the positionality of the authors of this paper. The different modes and their suggested incompatible pedagogical ideas will then be considered by exploring how WBL/WIL is understood within concepts such as knowledge, disciplines, learning, curriculum, skills, and models of liminality.

IMPROVISIONAL ENACTMENT

Author Positionality

As liminal pracademics (Dickfos, 2019), the positionality of the authors is important to acknowledge (Tisdell, 2012). They are an insider/outsider (Merriam & Tisdell, 2016) that Martsin (2018) describes as rupture and transition, where the latter is characterized by a sense of ambivalence. This ambivalence is a catalyst for learning and sense-making including one's sense of self and identity, a key aspect of this paper. The dialectical process involved is what is being studied by the authors, but also simultaneously, how this affects them as authors (Merriam & Tisdell, 2016), creating meaning in the tension between voices (Ness & Riese, 2015). This dual identity, of being practical and an academic (the pracademic), being an insider/outsider, having diverse backgrounds and experience creates a bricoleur.

A bricoleur practitioner has a broad repertoire from which to assemble their way of working in a concrete and complex context (Visscher, 2006), a heterogeneous approach using a wide variety of methods (Talbot & Lilley, 2014). They understand that "the frontier of knowledge work rests in the liminal zones where disciplines collide" (Kincheloe & Berry, 2004, p. 80). These are the zones inhabited by WIL/WBL practitioners and those who become experts in mastering this space, sharing similar pedagogical approaches, and avoiding the creation of boundaries. Bricolage, as a bricoleur methodology, offers a pragmatic escape from the implosion of disciplinarity (Kincheloe & Berry, 2004) and the thinking associated with disciplinarity. Bricolage is about questioning assumptions, even subverting them (Hammersley, 2013), such as disciplinary boundaries and unnecessary incompatible pedagogical practices, a "critical, multi-perspectival, multi-theoretical and multi-methodological approach to inquiry," a methodology about meaning-making (Rogers, 2012, p. 1). Bricolage acknowledges complexity (Kincheloe & Berry, 2004), and respects the complexity of meaning-making processes. Research is an interactive process shaped by one's habitus (dispositions and virtues) (Brockbank & McGill, 2006) and, as such, aims to discern their location in the web of reality in relation to complex intersecting axes such as personal history, ethnicity, and other dynamics, that is, rapture

and transition (Kincheloe & Berry, 2004). This, therefore, requires one to reflexively piece together their research adding depth and plurality to the inquiry process (Rogers, 2012). The bricoleur appreciates how ideologies and discourses shape how knowledge and meaning is produced, drawing techniques from multiple perspectives, voices, and sources (Kincheloe & Berry, 2004; Rogers, 2012).

This paper focuses on WBL as a form of WIL in terms of its outcomes and focus, on interdisciplinary, transdisciplinary, and multidisciplinary liminality. The argument is guided by Baracskai et al. (2016, p. 13), who refer to interdisciplinary as an empty space occurring between disciplines; multidisciplinary belongs to multiple disciplines at the same time, while transdisciplinary means transcending disciplinary boundaries and crossing various disciplines in that process. This paper argues that WIL and WBL inhabit all the inter/trans/multidisciplinary zones and is defined by that liminality. The definitions and modes of WIL and WBL as a form of WIL are explored below.

DIFFERENT AND INCOMPATIBLE PEDAGOGICAL MODES

Co-operative Education and Work-Integrated Learning Canada (CEWIL Canada) (2021) defines WIL as an umbrella term for a model and process of curricular experiential education, that formally and intentionally integrates a student's academic studies within a workplace or practice setting. Not all experiential education can be defined as WIL. Portwood (2001, p. 77), however, states that "proponents of experiential learning had/have never made a convincing academic case for work-based learning." UNESCO (2014) refers to this type of experiential learning as Work-Based Learning (WBL). They consider WBL as a subset of experience-based learning, and therefore a subset of WIL, an umbrella term for learning that occurs through undertaking real work, through the production of real goods and services, whether this work is paid or unpaid, and is therefore a supported inclusive definition (Harris & Chisholm, 2010). Zegwaard et al. (2022, p. 2) describe WIL as "a field of practice and scholarship in its own right, with its own pedagogical, curricular, and practical challenges." Cooper et al. (2010, p. xiii) define WIL as "the intersection and engagement of theoretical and practice learning." Boud and Solomon (2001b, p. 19) defined WBL as a partnership between universities and employers, delivering learning that meets the needs of the learners and employers, resulting in an accredited qualification. WBL is seen as different enough to warrant a careful examination of its practices, a legitimate pedagogical field of study in higher education (Nottingham, 2017). Talbot and Lilley (2014) concur that WBL is a distinctive pedagogical practice [from disciplinary teaching modes] due to the negotiation of learning which follows the needs of the workplace rather than a professional body or subject discipline with learning occurring principally in the workplace and is concerned with the practice of work. Distinction here is more in comparison to traditional disciplines than as a subset of WIL.

WIL has many traditional modes as listed below (CEWIL Canada, 2021, section 3: Co-operative Education; Cooper et al., 2010, pp 37-39, 53; Milliken et al., 2021, p. 236):

- Apprenticeships, combining about 80% at-the-workplace experience with 20% technical classroom training. UK Higher Degree Apprenticeships (HDAs) are considered a form of WBL (Hordern, 2015)
- Co-operative Education, which must be at least 30% academic study for programs over two years in length and 25% of time for programs two years and shorter in length
- Internships/Placements, usually discipline specific, occur in the middle of an academic program or after all academic coursework has been completed and prior to graduation. Advanced Practice is included in this category

- Entrepreneurships, which allow a student to leverage resources, space, mentorship and/or funding to engage in the early-stage development of business start-ups
- Service Learning, which integrates meaningful community service with classroom instruction and critical reflection
- Applied Research Projects, which occur primarily in workplaces
- Mandatory Professional Practicum/Clinical Placement, which involves work experience under the supervision of an experienced registered or licensed professional (e.g., preceptor)
- Field Placements, which is an intensive part-time/short term intensive hands-on practical experience in a setting relevant to their subject of study
- Work Experience, which intersperses one or two work terms (typically full-time) into an academic program.

Note, the list above does not include WBL explicitly (as well as field placements and co-op) in any of the descriptions, although WBL is implicit in HDAs, thus is a subset of WIL. Furthermore, the list does not include other innovative models, as listed by Kay et al. (2019, p. 402) such as micro placements, online projects or placements, and WIL in incubators and start-ups.

Below in Table 1, is a summary of WIL, WBL and UK HDAs and the main similarities based on this frame around the work by Talbot (2019).

TABLE 1: WIL, WBL, and HDA comparison .

Type of integration/learning	Descriptions
WIL (CEWIL, 2021 definition) – (re)-enter	- For those in full-time education seeking work experience - Learning outcomes set by the institution and often pass/fail - Often subject/disciplinary specific - Facilitation of experience varies between workplace supervisor and careers university staff (some Canadian specific)
WBL (Boud & Solomon, 2001b definition) – already employed	- For those in full time work seeking university qualification (APL) - Learning outcomes negotiated by student and not just pass/fail - Often interdisciplinary - Facilitated by workplace supervisor and university faculty staff (all elements of WIL in general)
UK HDAs (Felce, 2019; Hordern, 2015; Hughes & Saieva, 2019) Part-work-part-study	- For those combining temporary work and learning - Learning outcomes based on modules but also on an End Point Assessment (EPA) for professional body accreditation - Subject/disciplinary specific - Facilitated by an appointed staff member (faculty or otherwise) and workplace supervisors - Widening participation

Similarities of WIL, WBL, and HDAs:
- Experiential learning
- Reflection
- Soft skills development
- Professional development
- Learning in/from/about work
- Employability and career progression
- Active student-centered learning

Service learning (a mode of WIL) is not associated with work per se, as work is more than just paid employment. Nevertheless, all these approaches increase employability (job-readiness/job advancement), transferable skills and learning that applies theory in practice (Martin & Rees, 2019; Toledano-O'Farrill, 2017), as well as increasing professional learning (Cooper et al., 2010). They all aim to produce self-determined learning (heutagogy) (Newman & Farren, 2018), and have potential for professional education (Gustafsson & Thang, 2017, p.47), and develop professional knowledge, skills, and attitudes (Garnett, 2016; Gerhardt, 2019; Martin & Rees, 2019; Toledano-O'Farrill, 2017), and reflection, which creates double-loop learning - learning how to learn (Newman & Farren., 2018). They are all action-orientated, aimed at developing reflective practice, collective learning, and solving contextualized problems with the instructor as a facilitator (Kelliher & Byrne, 2018). Self-directed learning is one solution to meet the continuous learning demands of a modern economy (Baracskai et al., 2016; Newman & Farren., 2018). This enables students to adopt work codes and conventions, to problem solve by making decisions in situ, and be responsive and adaptable (Bowen & Drysdale, 2017). The different modes do not suggest incompatible pedagogical ideas within WIL but do suggest a unique field of pedagogical practice. How knowledge is understood within WIL and WBL will now be considered.

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Aristotle argued that there are three types of knowledge, namely, theoretical/scientific (theoria), practical (praxis), and productive/technical (poiesis) (Kemmis, 1995). Theoria is gained through reason and rationality alone and praxis is predominantly about the furthering of human well-being (Kemmis, 1995). Praxis and poiesis were recovered and further developed rejecting reductionism and linear interpretation placing, rather, an emphasis on spiral interpretation and radical contextuality producing models that were experiential and praxis-orientated (Elias, 2006), ushering an on-going pursuit towards wisdom, referred to as phronesis, that is, practical wisdom. This practical wisdom is an action-orientated form of knowledge (Dunne, 2011). The development of reflection, reflexivity, and reflective practice is an important aspect of practical wisdom leading to and developing tacit knowledge. Cooper et al. (2010) explain it by drawing the distinction between declarative knowledge (information passed on in books and lectures – Mode 1 knowledge - associated with disciplinary knowledge and theoria), and functional knowledge (the application of declarative knowledge in real-world contexts – Mode 2 knowledge). Praxis, poiesis are associated with declarative knowledge and describe WIL/WBL and sets them apart as a unique pedagogy.

The changing nature of work and the modern enterprise is calling on more professions to work in multidisciplined and interdisciplinary contexts, considering practice in new ways and thereby producing new forms of knowledge, such as Mode 2 knowledge (Gerhardt, 2019; Mardini, 2013;), that is, praxis and poiesis. WBL questions the more traditional notion that knowledge is held and transferred by the privileged few through formal situations in pre-determined ways, that is, Mode 1 knowledge (theoria) (Cooper et al., 2010; Helyer, 2016). WBL projects applying reflective practice is the best method to learn how to work with ill-material (a term created by Moon (1999) that refers to uncertain material or unpredictable circumstances) to change and adapt (Gerhardt, 2013). This produces Mode 2 knowledge, which is transdisciplinary (Algers et al., 2016), highly contextual, practically focused, and often unsystematic in contrast to Mode 1 knowledge categorized in subject disciplines that are linear, formal, cumulative, and generalizable (Edwards et al., 2007; Garnett, 2016; Gibbons et al., 1994). WBL programs have been used as a process for recognizing, creating, and applying knowledge through and for work, rather than simply at work (Garnett et al., 2001). This makes WBL and WIL pedagogically unique. Therefore, in terms of application, expanding the tripartite

partnership to a four-way partnership between student, university, industry, and professional bodies, organizational boundaries must be blurred so that universities can become active partners in a complex knowledge producing game, weaving understandings into the concerns and constraints of practice, avoiding silo practice (Ferns, Dawson, & Howitt, 2022; Gibbons et al., 1994). In the UK, WBL is traditionally understood as a person in employment studying a degree linked to their employment. WBL projects are work activities done (often as a group) by a student (Gerhardt, 2019). The different modes do not suggest incompatible theories about knowledge. If anything, as has been demonstrated, the similarities in concepts, such as Mode 2 knowledge, reveal more similarities than differences.

SUBJECT DISCIPLINES

Traditional practices, although there are exceptions, emphasize the uni-directional communication of knowledge organized within the confines of subject disciplines, whether purely academic, such as the arts and sciences or more vocational/technological, such as engineering, architecture and surveying (Loughran, 2009; Talbot, 2019). For example, Loughran (2009, p. 193) illustrates these boundaries when they suggest that "the traditional disciplines (e.g., history, science, philosophy) do not draw on other disciplines in order to pursue or define their own subject matter and methods; these disciplines look to their own accumulated works to define themselves or to guide scholars in the doing of the discipline." The role of the educator is to decide the important aspects of a subject, and facilitate appropriate learning experiences, usually in a formal setting such as the classroom, lecture theatre, seminar room, and laboratory, each belonging to the educational institution creating and delivering the curriculum (Cooper et al., 2010; Helyer, 2016), that is, Mode 1 knowledge and theoria. Loughran (2009) concurs that teaching is seen as something that is done, and although it is done across all fields of academic endeavor, it is rarely afforded a status commensurate with the more scientifically based disciplines or sub-disciplines. It is seen as an activity, not an academic endeavor. Pedagogy is, however, referred to as the science of education. Pedagogy is a discipline (Canning, 2007; Ķestere & Ozola, 2011). Loughran (2009) continues that in contrast to the pure knowledge disciplines, are those that produce applied knowledge such as WBL and WIL, which focus primarily on the practical issues that arise from specific contexts, and the aim is not to establish general patterns, but to solve particular problems, that is, Mode 2 knowledge, praxis and poiesis. As such, Cooper et al. (2010) confirm that WIL is often a challenge to the academic status quo and disciplinary expertise. But what does WBL mean as a distinctive field (Nottingham, 2017; Portwood, 2001)?

Bourdieu (as cited in Pellandini-Simányi, 2014) uses the concepts of field, capital and habitus. Field is a specific site of economic, cultural, and intellectual reproduction with its own logic of practice. What is reproduced has value or capital in terms of being valued, recognized, and rewarded. Field is structured with distinctive properties and thus distinctive forms of capital. Fields continuously reflect changing positions of relative dominance and/or subordination in determining what counts as capital in the field, including norms and boundaries such as subject disciplines. Fields form individual habitus. Professional learning communities, such as what creates social capital (Coleman, 1990), learning organizations (Senge, 1990), and communities of practice (Lave & Wenger, 1991), promote both intellectual capital and professional cultural capital (Algers, et al., 2016; Baines, 1997; Murphy, 2015; Yang, 2007). Habitus influences "schemes of perception" guiding conduct (Levinson, 2011, p. 120). Bourdieu's application of habitus in education is "to make explicit the more implicit understanding of social life" (Brockbank & McGill, 2006, p. 122). This has implications for what Moon (1999) calls transformative learning. In order to allow deep learning to take place, learning in making meaning requires assimilation. Assimilating learning and experience, such as what happens with and in reflection, with our habitus can potentially lead to a change in disposition, and as such, capital (Adams

& Jones, 2022). From what has been discussed thus far, WIL and WBL share many similarities. These similarities together are quite distinctive from other fields of studies or disciplines. If WIL and WBL as modes of learning are applied across disciplines, how do we understand disciplines, and the function of WIL and WBL as multi/trans/inter-disciplinary?

Bernstein was interested in the social organization and status hierarchies of academic disciplines and studied these through a number of concepts (Hordern, 2017; Singh, 2002). Classification is the boundary within and between academic disciplines. Framing is the locus of control over pedagogic communications and its context. Pedagogic communications are the new forms, or developing of existing forms of conduct, knowledge, practice, and criteria. Bernstein applied these tools to academic disciplines from the 19th century onwards and their organization into self-regulating communities, which he called singulars, meaning a strong boundary maintenance (classification), supported culturally (e.g., associations, publishing), and psychologically (e.g., students, teachers, researchers) (Hordern, 2017; Hu, 2022; Singh, 2002). Canning (2007, p. 394) described these as a "tribe, a culture, or a guild," powerful practitioners maintaining border control by identifying the core concerns that the discipline ought to address. These boundaries were framed by three interrelated rules, namely, distributive rules - whose or what research is deemed acceptable, valued, legitimate within that discipline (singular); recontextualizing rules - regulations on how teachers enact the accepted research (textbooks, syllabi etc.); and evaluative rules - the production of what counts as legitimate (Hordern, 2017; Singh, 2002). Interdisciplinary and/or applied fields are called regions - recontextualizing/expanding of singulars (Hordern, 2017; Singh, 2002). WBL and WIL correlate with regions rather than singulars and have their meaning in the action of recontextualizing and expanding of these singulars. Regions replicate a more reflexive, porous understanding of the origins and research principles underlying academic disciplines. These represent accurately the modes of WIL/WBL as interdisciplinary, transdisciplinary, and multidisciplinary being more inclusive of learning that takes place in, during, from, and for work (Harris & Chisholm, 2010). Inhabiting these liminal spaces between disciplines is where WIL/WBL define their raison d'etre. Thus far, the similarities between WBL and WIL and, therefore, what makes them distinctive as modes of learning has been explored within the concepts of knowledge and subject disciplines. How this relates to learning will now be examined.

LEARNING: CRITICAL CITIZENS

Talbot (2019) argues that despite the efforts of progressives, the traditional model of delivery and, indeed, the definition of what counts as learning has largely prevailed in educational practice, reinforcing singulars, and neglecting regions. Even though Dewey (1933), Lewin (1951), Rogers and Freiberg (1994), and Kolb (1984) have attempted to identify how people learn in real life, there has been relatively little reform according to Talbot (2019). Knowles (1980) argued that an adult learning experience should be a process of self-directed inquiry enabling them to be active participants. This kind of learning (praxis and poiesis and regions related) will be unique and different from the more scientific education (theoria and singulars). Adults learn best from experience (Gerhardt, 2013). Knowles (1980) defines purely knowledge driven curriculum as pedagogy although, by definition, pedagogy is the science of teaching and therefore cannot be confined to knowledge driven curriculum. Andragogy, in contrast, is how adults learn (i.e., pedagogy for adults), learning from their experiences (Dickfos, 2019; Knowles, 1980). Andragogy is goal-orientated, activity-orientated, and learner-orientated (Knowles, 1980), resonating with praxis and poiesis. This produces competent reflective practitioners. Competent people can apply their knowledge under changing conditions (Knowles, 1980). "To produce such competent people," continues Knowles (1980, p. 19) "is to have them acquire

their knowledge [and skills, understanding, attitudes, values, and interest] in the context of its application," that is, integrating work and learning, a focus on regions. An on-going communication and healthy complex balance, therefore, need to be maintained particularly because there is a conflict between the assumptions of traditional pedagogy (evaluation of control, precision, data, proof) and the assumptions of modern andragogy (self-actualization, intuition, play, creativity) (Knowles, 1980). The principles of andragogy dictate WBL and WIL practice (Janchai et al., 2019) and support them as a unique field and mode of pedagogy. University education is what fosters critical citizens who can actively engage in transformative action for democratic societies (Cooper et al., 2010; Etsuko, 2009). What is the impact on curriculum as WIL is a pedagogical strategy intentionally embedded within curricula (Marlow et al., 2022)?

CURRICULUM

The creators of curriculums are overwhelmingly subject specialists (*theoria* and singulars), and it is often assumed that the process of education is simply an ever-increasing level of knowledge and expertise within a defined subject (Talbot, 2019), neglecting human flourishing or transformative learning as already discussed. Central to a learning view of employability within WIL is the role of high-quality curriculum design (Campbell et al., 2022; Cooper et al., 2010). However, historically there has been a tension between what is considered vocational curriculum and professional curriculum. "The medieval association in the West between the learned professions…emphasized the distinction between professional elites and traders and artisans" (Crook, 2008, p. 12). Traditional professions retain a high degree of internal control over their members, have their own code of ethics to govern and place boundaries on its practice, have guarded entry, apply expulsion or exclusion for those breaching rules, and provide a great deal of autonomy in judgement and authority (Crook, 2008; Delattre & Ocler, 2013; Swinton, 2011), including what would be considered appropriate curriculum (singulars). Traders and artisans acquired their skills through apprenticeships, while university education was for the professionals (Crook, 2008). The "distinguishing mark of a professional is the possession of 'an intellectual technique acquired by special training'" (Crook, 2008, p. 16). The notion of profession is a social consensus while professionalization is about societal consensus to socially conform to the wage earner (Cooper et al., 2010; Delattre & Ocler, 2013). This is an important distinction because it raises the question about what WIL achieves, as a distinctive pedagogical mode, towards enabling students to be job-ready (Martin & Rees, 2019).

Bines and Watson (1992) provide three main models of professional education. The first is the apprenticeship or pre-technocratic model. Within this model you find on-the-job training reminiscent of curriculum such as the cookbook knowledge embodied in practice manuals and the mastery of routines. The instruction is provided by an experienced practitioner. This model is primarily for initial professional development based around competencies. Dickfos (2019) calls this the novice. The second model is the technocratic model which is the pattern for many professions taking place in institutions of higher education. This model has three main elements, namely, systematic knowledge, the interpretation and application of knowledge and the supervised practice of this knowledge in selected placements. The third model is the post-technocratic model, which is about the acquisition of professional competences, making subtle and refined discriminations (Fergusson et al., 2020). These are developed primarily through experience and reflection on practice. This means facilitating the development of awareness for learners of their learning, and explicitly incorporating this within the curriculum (Boud, 2001). This description of WIL and WBL is focused on occupational knowledge (procedural + propositional knowledge) (Caley, 2001). Skilled practitioners act as coaches and facilitators - Dickfos (2019) calls this the expert. WBL/WIL practitioners can be experts facilitating this

interdisciplinary, transdisciplinary, and multidisciplinary liminal space (Ferns, Lewis et al., 2022; Ruskin & Bilous, 2022; Smith et al., 2022).

In understanding curriculum design, it may be helpful to consider this question students may ask: "Why do we have to learn this stuff?" (Atherton, 2013). The options are:

- academic (expressive) curriculum answers, "Because it is good for you"
- vocational/professional curriculum answers, "Because you can use it to…"
- mastery/induction curriculum answers, "Because you will become competent"
- developmental/constructive curriculum answers, "Because it will maximize your potential"

Academic curriculum resonates with the views of Heap (2012), where material is deemed to be important in its own right, and where disembodied reason and rationality is an end in itself (Gerhardt, 2015). Heap (2012) suggested that this was the professional model asserted at the expense of the vocational as it is more highly valued; however, Atherton (2013) places the professional in the next category of curriculum. Although the content within vocational/professional curriculum may be similar to that of the academic curriculum described, it is different in terms of what content is chosen (its practical use), and what the students are expected to do with the content (applied knowledge) (Atherton, 2013), which resonates with WBL/WIL curriculum. If the curriculum becomes exceedingly skills based in terms of utility, it can be suggested that the education has become training, and this is more reminiscent of WRL and WPL facilitated by Human Resource Management practitioners. In other words, the curriculum may regress into pre-technocratic models. Mastery/induction curriculum is unique in that what is required to be learnt already exists, and it is the task of education to induct the student into an already established body of knowledge (Atherton, 2013). This description resonates with one of the factors of professionalism, namely that the profession generates its own kind of knowledge, often produced in academic journals, and that the professionals continue to add and build upon that existing knowledge. Again, this resonates with WBL/WIL practice as a pedagogical discipline, but it is problematic as a singular if the types of journal publications are considered. Luntley (2011) asserts one is initiated into expertise. Competency-based curricula are based on this kind of curriculum such as end point assessments in HDAs. A curriculum of mastery assumes that what needs to be learned exists out there and that the task of education or training is to induct you into this already established body of knowledge (Atherton, 2013). Both vocational and mastery curriculum run the risk of economic capitalism. In contrast, transformative learning (Moon, 1999), its connection with habitus, and the nature of reflective practice, places developmental/constructive curriculum and the use of reflection within a highly advanced skill curriculum, especially as it relates to ethics. The aim of this kind of curriculum is to develop the student by developing an on-going sophisticated understanding or skill in a particular area, that is, it strikes a balance between disciplinary and transdisciplinary/interdisciplinary/multidisciplinary knowledge and practice. This curriculum resonates with the post-technocratic knowledge mentioned earlier and represents knowledge and subject matter that are interpreted with constitutive interests (through interpretative lenses) and are "not rooted in fact to the same extent as other scientific disciplines" (Moon, 1999, p. 55). Instead, transdisciplinary/interdisciplinary/multidisciplinary knowledge and practice found in WBL and WIL and their use of reflexive, problem-based, intuitive, and synthetic skills (Ferns, Lewis, et al., 2022) often applied to moral and ethical complexities (critical citizens). Many of these skills are not present in the pre-technocratic model. Skills-based learning emphasizes what you need to know and be able to do, compared to life-long learning which accentuates the ever-changing nature of the workplace, and through reflective practice, foster one's capacity to learn, review and adapt (Baracskai, et al., 2016; Drysdale et al., 2022; Paterson, 2013).

SKILLS: ACADEMIC CAPITALISM

The notion that economic drivers, such as labor markets, dictate educational practice is academic capitalism according to Zacharakis and Holloway (2016). In contrast, the connection between the university and industry is crucial and, as such, argues Muscio et al. (2013, p. 64), "Higher Educational Institutions should not just provide knowledge but also enable this knowledge to impact upon economic and social development, increase research commercialization, create institutionalized spin-off activities, and foster a change among academics regarding collaborative projects with industry". Talbot (2019) recognizes this tension too, in that education is seen as an instrument for personal development, the creation of citizens able to fully participate in a democratic society, a means to foster social mobility and integration, an instrument for social control to enable the creation of national identity, an opportunity too for individuals to pursue knowledge for its own sake, and a collective mechanism for creating universal knowledge, that is, human capital theory (Campbell et al., 2022; Fergusson et al., 2020). Hughes and Saieva (2019) confirm this was a key factor for the UK government in the formation of HDAs associated with WBL with similar drivers in Australia (Fergusson et al., 2020; Kay et al., 2019), New Zealand (Martin & Rees, 2019; Zegwaard & Rowe, 2019), and Canada in relation to WIL (Rowe et al., 2018), although these publications may not specifically be representative of the countries mentioned.

Societal investment in education is an important factor in economic development (Talbot, 2019). The number of years a person spends in formal education determines future levels of earnings, knowledge, skill, and competence, that is, social mobility (Talbot, 2019). A highly educated population is a pre-condition for economic success in the globalized economy (Talbot, 2019). Talbot (2019) recognizes that those exiting the formal education system (before completing schooling) are perceived by industry to be ill-equipped for the modern workplace. Universities educate graduates to meet UK and global demand for higher-level skills, and generate world-class research that supports local and national economic growth (Tudor & Mendez, 2014). WBL and WIL can produce professional skills and attitudes, developing for example, self-confidence and ethical behavior (Costley & Abukari, 2015; Toledano-O'Farrill, 2017) to be work-ready plus, but also, agentic professionals (Bowen & Drysdale, 2017; Martin & Rees, 2019). However, some modes, such as service learning and service-based projects, are not associated with economic gain and labor markets (Cooper et al., 2010), but are important for societal impact and the development of employability skills such as empathy and resilience. WBL and WIL, in this context, are not seen as incompatible. Yet again, WIL/WBL are evidenced as a unique field and mode of pedagogy. How can this distinctive mode of pedagogy therefore be conceptualized?

MODELS

Lemanski and Overton (2016) mapped WBL to several pedagogical modes. The vertical axis has a continuum between employer-centered activity (work-based) and university-centered (work-related), and a horizontal axis with a continuum between student-centered transferable skills (praxis) and student-centered specialist knowledge *(theoria)*. As such it creates a top left quadrant which includes projects and a skills portfolio, a top right quadrant which includes projects, a bottom left quadrant which includes a skills portfolio and a bottom right quadrant which includes distance learning. If WBL and WIL are to emphasize their similarities by their shared outcomes, that is, professional development through reflection and experiential learning (Dickfos, 2019; Rowe, et al., 2018), rather than their differences based on pedagogical modes, then a new model is needed to illustrate the pedagogical distinctiveness, similarity, and the inter/multi-transdisciplinary nature of the mode.

Below is a reconfigure of the Lemanski and Overton model that considers the changing/challenging nature of professionalism, that is, technocratic and post-technocratic models. These dimensions exist between the professional role within an institution/organization and the informal role within society/community (the vertical social/citizenship being) on the vertical axis, and between the person and their professional role/development as personnel on the horizontal axis. These individual and social reference points are all influenced by glocal (local and global) labor factors, shaping and reforming their role and identities accordingly, emphasizing the importance of context both locally as well as globally (Ferns, Dawson, & Howitt, 2022). The personnel within the institution focuses on their competency as demonstrated through applicable skills, employability, and social mobility. The personal is about professional status used as agency within society/community as ethical citizens, that is, global citizens (Martin & Rees, 2019), while the personnel are about the professionalism dimension demonstrated as status through achievements and/or qualifications, and their use on influence beyond the institution/organization. This influence and agency within the society/community by the person in a professional role defines another professional dimension in terms of responsible citizenship expressed in/by integrated/re-integrated citizenship through work, that then also incorporates the outcomes from service learning (Ferns, Dawson, & Howitt, 2022). The professional dimension concerns the person within the institution/organization and their increased self-awareness through professional activities such as reflection and critical thinking. Citizenship equates with ethical expectations as does self-awareness, competence, and status resonate with class and qualification. New professionalism, due to the impact of glocal factors, is more interdisciplinary and fluid (non-static) moving and contributing to individual dimensions based on personal and societal demands (market demands) (Baracskai, et al., 2016; Fergusson et al., 2020; Ferns, Dawson, & Howitt, 2022). The diagram, therefore, recognizes not only the change(s) within professionalism, but also the challenge to traditional professions/disciplines which dominate across all the dimensions with equal capacity. That capacity is now challenged by focused capacity within one or two dimensions only. It is, more broadly, what WIL and WBL aims to achieve as outcomes. It represents both a more fluid movement and a more specialized progression and is focused on the practice rather than the pedagogical modes/differences, as seen in Figure 1 below.

FIGURE 1: WIL mapping matrix.

Institution/Organisation

Glocal labour markets

Glocal labour markets

Self-awareness EQ

Competence Skills

Person

Personnel

Citizenship

'Status' Professionalism

Glocal labour markets

Glocal labour markets

Society/Community

This model is informed by a more transdisciplinary/interdisciplinary/multidisciplinary understanding of curriculum and how various WIL/WBL functions apply to different quadrants.

CONCLUSION

Ness and Riese (2015) state that to create new knowledge one needs some tension. This paper has argued that rather than WIL and WBL being incompatible, that WBL, as a different form of WIL, inhabit the space, the tension across disciplines, and in that space, as experts, produce practical knowledge (praxis and poiesis). This paper has argued that WBL as a different form of WIL, finds meaning and creates meaning in the liminal zones across disciplines. It is the common outcomes and processes (pedagogical practices) of WBL/WIL leading to these that define one of its important outcomes, to produce work-ready professional citizens, through experiential-transformative-experience-based learning (andragogy - person and personnel). These processes involve Mode 2 knowledge, praxis and poiesis leading to phronesis, that is, practice-based theory (Dickfos, 2019). WIL is a meaning-making process in between the disciplines, because these disciplines exist, and creates new knowledge in the tension it generates in the rapture and transition. This does make it a unique pedagogical field and addresses the concerns regarding pedagogical incompatibility between WIL and WBL and the suggestion of WBL uniqueness, creating boundaries. The WIL practitioner is in a position of agency as an expert of liminality, rather than that of a discipline, a uniquely bounded pedagogical practice singular. This acknowledged importance of agency adds value to the WIL role and to the practitioner as an interdisciplinary expert and WBL as one of these modes.

A glossary of special, unusual, or technical words or expressions related to this paper is provided in Appendix A.

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APPENDIX A: Glossary of terms.

Listed in alphabetical order below, are all the special, unusual, or technical words or expressions and their meanings as related to this paper.

Apprenticeship or pre-technocratic model: Within this model you find 'on-the-job' training reminiscent of curriculum such as 'cookbook' knowledge embodied in practice manuals and the mastery of routines. The instruction is provided by an experienced practitioner. This model is primarily for initial professional development based around competencies (Bines & Watson, 1992).

Bricolage: A process of employing multiple methodological strategies as they are needed in the unfolding context of research (Kincheloe & Berry, 2004), questioning assumptions, even subverting them (Hammersley, 2013), such as disciplinary boundaries, a "critical, multi-perspectival, multi-theoretical and multi-methodological approach to inquiry" (Rogers, 2012, p. 1).

Bricoleur: A French word describing a handyman or handywoman who makes use of tools available to complete a task (Kincheloe & Berry, 2004).

Habitus: The combination of previous life experiences, identity, lifestyle, personality, class, gender and cultural background (Brockbank & McGill, 2006, pp.27-28)

Interdisciplinary: An empty space occurring between disciplines (Baracskai et al., 2016, p. 13).

Mode 1 Knowledge: Declarative knowledge such as information passed on in books and lectures (Cooper et al., 2010).

Mode 2 Knowledge: Functional knowledge such as the application of declarative knowledge in real-world contexts (Cooper et al., 2010).

Multidisciplinary: Belonging to multiple disciplines at the same time (Baracskai et al., 2016, p. 13).

Phronesis: A Greek word for practical wisdom (Elias, 2006).

Poiesis: A Greek word for productive/technical knowledge (Kemmis, 1995).

Post-technocratic model: The acquisition of professional competences, making subtle and refined discriminations (Bines & Watson, 1992; Fergusson et al., 2020).

Pracademics: Persons who are dually recognized experts in both academic and professional practice (Dickfos, 2019).

Praxis: A Greek word for practical knowledge (Kemmis, 1995).

Reflection: A process of learning and the representation of that learning (Moon, 1999, p. 4).

Singulars: The knowledge relationships that are conceptually derived and empirically buttressed. Bernstein identifies the instantiation of singulars in the university curriculum as academic disciplines, which construct clear boundaries between themselves, other disciplines and fields of practice (Hu, 2022).

Technocratic model: The pattern for a large number of professions taking place in institutions of higher education. This model has three main elements, namely, systematic knowledge, the interpretation and application of knowledge and the supervised practice of this knowledge in selected placements (Bines & Watson, 1992).

Theoria: A Greek word for theoretical/scientific knowledge (Kemmis, 1995).

Transformative Learning: A form of learning that involves various domains of learning and reflective discourses (Mezirow, 2000), is concerned with human agency and emancipation (Taylor & Elias, 2012), embraces complexity, emergence, ambiguity, nonlinearity and antagonism (Alhadeff-Jones, 2012), and is boundary crossing, interdisciplinary, intersubjective, and an evocative pedagogy (Willis, 2012).

Transdisciplinarity: Transcending disciplinary boundaries and crossing various disciplines in that process (Baracskai et al., 2016, p. 13).

Work-Based Learning (WBL):A distinctive pedagogical practice due to the negotiation of learning which follows the needs of the workplace rather than a professional body or subject discipline with learning occurring principally in the workplace and is concerned with the practice of work (Talbot & Lilley, 2014).

Work-Integrated Learning (WIL): The intersection and engagement of theoretical and practice learning (Cooper et al., 2010, p. xiii), an umbrella term for a model and process of curricular experiential education that formally and intentionally integrates a student's academic studies within a workplace or practice setting (CEWIL Canada, 2021).

About the Journal

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

In this Journal, WIL is defined as "*an educational approach that uses relevant work-based experiences to allow students to integrate theory with the meaningful practice of work as an intentional component of the curriculum. Defining elements of this educational approach requires that students engage in authentic and meaningful work-related task, and must involve three stakeholders; the student, the university, and the workplace*". Examples of practice include off-campus, workplace immersion activities such as work placements, internships, practicum, service learning, and cooperative education (Co-op), and on-campus activities such as work-related projects/competitions, entrepreneurships, student-led enterprise, etc. WIL is related to, and overlaps with, the fields of experiential learning, work-based learning, and vocational education and training.

The Journal's main aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that leads to the advancement of effective practices, development of further understanding of WIL, and promote further research.

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Types of Manuscripts Sought by the Journal

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

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

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

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

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