The development of a proposed global work-integrated learning framework

NORAH McRAE[1]
University of Victoria, Victoria, Canada
NANCY JOHNSTON
Simon Fraser University, Burnaby, Canada

Building on the work completed in BC that resulted in the development of a WIL Matrix for comparing and contrasting various forms of WIL with the Canadian co-op model, this paper proposes a Global Work-Integrated Learning Framework that allows for the comparison of a variety of models of work-integrated learning found in the international post-secondary education system. The Global Framework enables researchers, practitioners, and other WIL stakeholders including students and employers to better understand the key goals and outcomes of each model as well as explore the commonalities and differences between the various models based upon identified attributes of quality experiential education programs. This Framework also provides a means for situating or developing new models of WIL intentionally designed for specific experiential learner outcomes and program impacts. At the institutional level, the Framework provides a mechanism for rationalizing the many, and often independently designed and delivered, WIL offerings by connecting them through their shared attributes and providing a way to differentiate them through their unique processes and outcomes. The proposed Framework is based upon high impact practices for experiential learning as identified in the literature and allows users to map WIL programs directly to the academic agenda through learning outcomes. (*Asia-Pacific Journal of Cooperative Education, 2016, 17(4), 337-348*)

Keywords: Work-integrated learning (WIL); experiential education; learning outcomes; WIL Global Framework.

As a result of increased attention and calls for more work-integrated experiential learning (WIL) opportunities for students in post-secondary education (PSE), the Accountability Council of Co-operative Education (ACCE) in British Columbia, Canada developed a Comparative Matrix for Work-Integrated Learning and Education in 2015 (Johnson, McRae, & Maclean, 2016). This work was a response to significant confusion in the field with respect to defining and describing the many and diverse models of WIL within the Province of British Columbia (BC) which challenged the system, and indeed institutions themselves, with respect to tracking, assessing and further developing these models (Johnston & Sator, 2016). The ACCE Comparative Matrix utilized the Canadian Association for Co-operative Education's (CAFCE) accreditation criteria to form the core comparative attributes as shown in Table 1 (Canadian Association for Co-operative Education, 2015; Johnson et al., 2016).

TABLE 1: Core comparative attributes for mandatory co-op, based on CAFCE accreditation requirements that specify co-op structural components

Structural criteria	**Cooperative Education (mandatory)**
Paid (salary, stipend, etc.)	✓
Academic credit bearing	✓
Mandatory	✓
Full time (35+ hours/week)	✓
Proportion of time required for credential = 25% (two year program) or 30% (more than two year program)	✓

[1] Corresponding editor: Norah McRae, nmcrae@uvic.ca

The BC Comparative Matrix represents the collective work of 15 public post-secondary institutions in British Columbia and has served to inform the Provincial conversations around work-integrated learning in ways that extend beyond definitions and shift the discussion towards comparing attributes of quality programs. The BC Comparative Matrix has been presented at several national and international gatherings including the 2016 WACE Research Symposium in Victoria, BC, Canada, and significant interest has been expressed for the development of an approach that would work for WIL stakeholders beyond the province of BC. This paper proposes such an approach through the development of a broader framework that includes other models of WIL notable in the global tertiary system. Additionally, this framework extends the comparator criteria beyond those defined by the CAFCE accreditation standards so as to include other distinguishing attributes, with a particular focus on student learning outcomes.

RATIONALE FOR THE GLOBAL FRAMEWORK PROJECT

A better understanding of WIL parameters and attributes is needed to inform discussions between and among key stakeholders including students, institutions, employers, and governments. Without such, the potential for developing and promoting appropriate offerings, conducting meaningful research, collecting data, developing quality standards, and assessing impact is limited (Johnson et al., 2016). There is a history of conflating the definitions of many forms of WIL and many terms have been used interchangeably to describe student learning in work place settings. This conflation of terms without clear understanding of how these models may both differ and align has resulted in confusion amongst all stakeholders (Johnston & Sator, 2016). While most of these models share many attributes, they can also differ in important ways that impact program design, policy, practice, and outcomes. This is particularly true when the conversations extend beyond Provincial, State, and National boundaries. This confusion, and general lack of a framework for sorting through the confusion, necessarily limits the extent to which the various WIL models can be usefully explored in the research, and from which generalizable conclusions may be drawn. The lack of a shared framework also limits the extent to which best practices and effective tools can be shared across models, institutions and countries. The lack of both a shared language and way of comparing and contrasting various forms of WIL also inhibits the tracking of WIL collective participation and resultant impacts at a system level, as there is most often no central repository of such collective engagement, even at the institutional level (Johnston & Sator, 2016). When institutions, systems or countries are asked to increase the number (and quality) of WIL opportunities in post-secondary, there is a very real but often unspoken, underlying challenge of determining exactly what is included in the WIL "tent" and what constitutes quality WIL experiences. This Global WIL Framework is an attempt to elevate this conversation by proposing a breadth of Global WIL opportunities, and providing ways to describe them that help clarify what is meant when very different terms are used in different jurisdictions. Most importantly the Global WIL Framework provides a set of quality attributes that help distinguish key features of each of the WIL models based upon program practices, outcomes, and impacts.

PROJECT METHODOLOGY

This project was undertaken in an effort to address the substantial interest generated by presentation of the BC Comparative Matrix at various national and international educational conferences and institutes. Both WIL practitioners and researchers appreciated

the potential value of the BC Matrix but noted several limitations with respect to its utility in their own contexts. In particular, there was a call for the inclusion of additional forms of WIL offered globally (e.g., sandwich education) and to addressing language and terms used in the BC Matrix that were more limited to the BC/Canadian context and less, or not at all, applicable beyond that. This feedback triangulated with reviewers' comments on the Matrix when presented in 2016 at the World Association for Cooperative and Work-Integrated Education (WACE) 2nd International Research Symposium, at the Canadian Association for Cooperative Education national conference, and at the 2016 WACE Institute for High Impact Experiential Education. As a result, the authors explored moving beyond the Comparative Matrix developed by the ACCE-BC in a way that would better reflect the international WIL community which, in most cases, do not deliver co-op programs as was defined in the Canadian context. Through individual and collective brainstorming and discussion it became clear that a useful global framework would need to consider the following:

- Language and descriptors that allow for as many models of WIL as possible to be represented by either their inclusion in the operational descriptions presented or their ability to be appropriately added and adequately described by the Framework's attributes and outcomes.
- Attributes that extend beyond the CAFCE accreditation criteria (that form the core of the BC Comparative Matrix) and which are linked to quality practice.
- A focus on outcomes at the learner, program, institutional, and system levels.
- Approaches grounded in the work-integrated and experiential learning literature and best practices.

The authors have also imagined an interactive version of the Global Framework that could generate a variety of reports in response to attribute and outcomes based queries, and have kept this future development in mind when designing the current Framework.

THEORETICAL UNDERPINNINGS OF THE GLOBAL WIL FRAMEWORK

The role of experience has long been seen as an important component of human learning. Though experience is seen as a critical component of learning, there has historically been a distinction between the development of the intellect as promoted by Plato for example, and the more pragmatic Aristotelian development of "practical wisdom". This divide is still evident in many post-secondary environments today.

Early in the twentieth century, progressive educators such as Dewey, sought a new model of education that eliminated the "separation of the ideas of the world from the ideas of the classroom" in order to develop a fully educative experience (Dewey, 1938). Dewey's work set the stage for constructivist theorists whose philosophy of learning more fully engages the learner in the construction and re-construction of their knowledge. Dewey's work also shaped the thinking of several more contemporary educational theorists such as Kolb (1984), Schön (1987), and Mezirow (1998), each of whom move beyond a purely behavioural definition of learning to suggest instead that meaning – which may be difficult to observe and measure – plays a central role in that learning (Kolb, 1984; Marsick & Watkins, 1990; Mezirow, 1998; Schön, 1987). Each of these theorists support a more constructivist orientation to learning, one that underscores the important role of critical reflection in and on practice as well as to the learners' ability to mobilize what they know and can do from one context to another.

New learning and assessment tools have been proposed to assist and monitor learning in these more authentic environments. And most current theorists concur that high levels of learner engagement with real life problems and facilitated reflection in and on the solution finding process leads to more fully educative experiences that have the power to transform (Lave & Wenger, 1991) both the individual learner and, as critical theorists Freire and Engeström would hope, transform the world in which we live and learn (Engeström, 1987; Friere, 1970). The attributes underpinning the proposed Global WIL Framework are derived from the theoretical models of experiential learning presented by many of these theorists.

Within this theoretical context, post-secondary work-integrated learning programs have emerged and are fast becoming an integral part of the post-secondary experience around the world. Work-integrated learning describes educational offerings that formally *integrate* academic learning with workplace learning, intentionally helping students connect and derive greater meaning from both (Patrick, Peach, & Pocknee, 2009; Sattler, Wiggers, & Arnold, 2011). This structured integration of academic studies and practice differentiates curricular WIL from other post-secondary experiential learning activities such as job shadowing, career fairs, and work-study. While these may provide students with exposure to workplaces and career oriented experiences, they do not have at their heart a direct connection, or integration, back to the program of study and as such are not curricular but rather co- or extra-curricular in nature. (Sattler et al, 2013). According to Simon, Dippo, and Schenke, (1991), work-integrated, curricular programs such as cooperative education, which place students directly in employment situations, create:

> occasion(s) in which students necessarily confront ideas, terms, procedures, relations, and feelings in order to make sense of their presence in the workplace. How students do this – how they accomplish experience – depends in part on the beliefs, ideas, assumptions, and values they bring with them, but also on the context and content of reflection and analysis that we may be able to provide in work education programs. (p. 10)

Many WIL programs such as co-op often cite learner outcomes such as those inferred above: personal growth and increased self-efficacy, development of new knowledge, skills and understandings, and transformation of personal beliefs and motivations, particularly as these relate to students' academic and employability futures (Dressler & Keeling, 2011; Peach & Matthews, 2011). WIL programs themselves can also have impacts that extend beyond individual learner outcomes such as reduction of debt load for graduates (if the WIL experience is paid), increased labor market participation of graduates, and increased satisfaction with the overall educational experience (Peters, Sattler, & Kelland, 2014). Finally, the institution itself can benefit from student participation in WIL through improved recruitment and retention, enhanced relationships with external stakeholders and communities and by contributing to economic development and workforce needs through the education of work ready graduates (Anderson et. al., 2012; Canadian Chamber of Commerce, 2012; Sattler et al., 2013; Wiesz & Atchison, 2011).

PROPOSED FRAMEWORK AND DISCUSSION

The Global WIL Framework provides a way of talking about many differently termed WIL offerings, regardless of what the particular model may be called. This takes away the need to specifically define Cooperative Education, for example, as it is designed and delivered in Canada vs. how it is designed and delivered in the US, New Zealand, Sweden, or Thailand,

or conversely to try to determine a global definition which would likely not fully describe *any* of the offerings. The Framework instead focuses on key elements that are known to relate to high impact programs and practices as well as key WIL outcomes at the learner, program and system levels. The WIL Global Framework allows the user to situate their particular WIL model, regardless of what terminology is in use, within this attributes and outcomes context. In this way, once populated, the Framework will allow users to usefully discover other models from around the world that share similar purposes and approaches. This will allow the professional and academic discourse to shift away from determining shared definitions and towards better understanding the theoretical underpinnings and best practices of WIL as they related to the primary program and learning outcomes of any given model.

Attributes and Outcomes

The following table summarizes the key attributes previously identified in the ACCE BC matrix (Johnson et al., 2016) that are components of quality experiential programs as founded in the literature on experiential learning (Anderson, Greeno, Reder, & Simon, 2000; Andresen, Boud, & Cohen, 2000; Dewey, 1938; Kolb, 1984; Moon, 2004; Schön, 1983):

TABLE 2: Key attributes of experiential learning

Experience	Curriculum Integration	Student Outcomes	Reflection
Has direct learner involvement (is hands-on and learner's choice)	Learning outcomes are articulated and measured	Skills, knowledge & understanding are developed	Is ongoing and meaningful: In and on practice and projected forward to future practice
Is meaningful & substantial (not just watching, has impact)	Outcomes and assessment are aligned	Attitudes, values and beliefs are challenged	Is critical vs descriptive
Is situated/authentic (ideally in place where learning is to be used)	Experiential and academic learning are connected for, and by, the learner	The learner contributes to the learning environment and the curriculum	Is socially mediated, supported, and assessed
Embraces disruptive moments and supports personal exploration of one's beliefs and values		New meaning is constructed by connecting previous and new learning	

As a result of this examination of the experiential learning theory literature and with reference to the attributes described in the BC Matrix (2016), the authors propose a number of additional attributes for the Global WIL Framework. These attributes, specified in Table 3, then become the features common to all WIL, regardless of the program structure or specific model.

TABLE 3: Key attributes of work-integrated learning for the Global WIL Framework

Experience in a workplace setting	Curricular Integration workplace learning and academic learning	Student Outcomes that lead to employability	Reflection
Direct Involvement (hands-on), and the learner is enabled to contribute in productive ways within the host organization.	Learning outcomes identified based in curriculum and on needs of host organization.	Skills and attributes that are relevant to the workplace context: locally, nationally and/or globally.	Ongoing and through formative and summative reflective processes that could be shared with both the academic program and host organization.
Meaningful to learner's academic program and/or career goals.	Formal assessment of learning outcomes conducted by institution in consultation with host organization/professional body. Assessment forms part of credit assigned for WIL experience.	Knowledge of the discipline of study and the workplace context: locally, nationally and/or globally.	Meaningful reflection that is designed to facilitate the student's understanding of their skills, knowledge, attributes and capacity to contribute.
Intentionally designed and linked to curriculum and program structures, including such possible features as multiple work experiences, capstones.	Workplace learning is re-connected to the curriculum and program.	Capacity to contribute as a member of a workplace or as an entrepreneur as well as a member of responsible, ethical civic society: locally, nationally and/or globally.	Reflection designed to facilitate the integration of learning from the workplace and academic program and career transitions to workplace.

Depending on the structure of the WIL program, additional program and institutional outcomes might be identified and evaluated, such as:

- Reduced debt load for graduates and financial aid requirements (if paid WIL)
- Increased recruitment, retention, completion and overall satisfaction with the academic program rates
- Fulfillment of accreditation and professional body requirements
- Enhanced institutional reputation

Additionally, graduate employability, community engagement and economic impact of WIL programs could be assessed at a broader level (province, state, country), including such factors as contributions to economic development and workforce needs, increased capacity in industry and improved university-community relations.

GLOBAL WIL MODELS

Using this new set of global WIL attributes, we can now introduce the proposed Global WIL Framework, seen in Table 4. This Framework also necessarily expands the number and nature of WIL models represented so as to include other forms prominent in the international context (e.g., sandwich education in the UK). As not every model is likely to be captured by any single tool, the Global WIL Framework is designed to allow users to name their own model and situate it within the global WIL offerings by identifying key attributes and outcomes of that model or program. In this way, programs may be compared, contrasted, further developed and assessed, resources shared, etc, by virtue of their relationship to shared key attributes and outcomes, regardless of what that model may be called in North America, Australia, New Zealand, Europe, South America, Africa, or Asia. The focus then shifts from trying to define each and every model to talking about what each are primarily trying to accomplish and the methods and processes by which it is doing so.

Key to the success of the Global WIL Framework is its ability to capture the attributes and outcomes that resonate with a majority of global WIL offerings. This is more important than trying to capture from the outset all the many and varied models offered internationally. The goal of the framework is not to rank or judge any one WIL model against another. Rather it is to provide a way for WIL practitioners and researchers to further the development of WIL programs and a tool for WIL program designers and administrators to help rationalize WIL model choices in ways that are directly linked to learning and program outcomes. Currently the major program types proposed for the Framework span a range of models in terms of intensity of the experience, degree of time spent in the work setting, and level of formalized integration with the curriculum. These include:

- Applied research*[2]
- Clinic*
- Course based community service learning*
- Cooperative education*
- Internship*
- Field placement*
- Practicum/clinical placement*
- Sandwich education
- Work experience*

The authors propose space is left open on the Global Framework to add new WIL delivery models, such as Industry Based Placement, as referred to by their local program name but operationally defined by their key attributes and outcomes. The various WIL models would be required to identify the *primary* outcome for each of the learner, the program and the broader system as well as the next two most important outcomes for that model of WIL. They would also describe which of the attributes define that model of WIL and rank the five most important attributes to the integrity of the model and its delivery. In this way new WIL program designers, practitioners, and /or researchers can better understand which specific models are used for particular purposes and what quality attributes they share.

[2] All WIL models listed here with an '*' have been defined in the Canadian context. The glossary of terms can be found at: http://www.co-op.bc.ca/acce

The curricular WIL models shown in Table 4 all indicate, with check marks, that the attributes as identified down the left-hand column, exist for each program type. However, what is not shown is how differences in program practices, specific learning outcomes and impacts may be very different between these models. For example, a co-op program within the Canadian context will have program practices where each work term is full-time for at least 12 weeks and paid. While one can expect certain learning outcomes to be attainable regardless of the co-op work term (for example communication skills, team work etc.) there will likely be different learning outcomes from co-op program to co-op program in that students in a humanities co-op program, for example, may have different learning from a student in an engineering co-op program. Similarly the impact of these two program types may be different. Taking the example of a curricular service-learning program, the practices are very different from a co-op program in terms of the time with the host organization and the salary. Learning outcomes may relate more to the development of a critical-cultural perspective and, given the nature of the program, the expected impact on both the learner and the host organization are likely to be very different. None of this is to say that one model is superior to the other, but rather to identify a framework that establishes certain key attributes, but still allows for a great degree of diversity and flexibility in program design.

Table 5, on the other hand, shows the attributes for co- (or extra) curricular WIL and how this is different from WIL programs that are curricular. In this table, while attributes such as direct hands-on experience, meaningful, and substantial may be checked off, the fact that these experiences are outside of the curriculum means that the experiences do not have learning outcomes that emerge from the curriculum, they are not formally assessed, nor is the learning from the experience linked back to the curriculum with any pedagogical intention. This does not mean that they are not learning experiences, but rather that they are not curricular. Again, these programs while sharing some common attributes will vary in program design with respect to program practices, outcomes and impacts.

The Global WIL Framework proposed in this paper could provide researchers with new ways of exploring questions around learning and program impacts by examining more than one type of WIL based upon selective outcomes and attributes. In this way, for example, one could explore the various ways in which embedding critical reflection plays out in various WIL models and how that relates to stated outcomes of those models. In a more immediate and practical sense, the Global WIL Framework allows practitioners from many different types of WIL programs to elevate the professional discourse in ways that relate to important elements of their shared work. When trying to define specific WIL programs, approaches, and labels it is often by pointing out how one program differs from another. This "othering" limits the discourse to a level of detail that focuses on differences (often local, and operational) rather than on the many more critical shared elements of high impact programs.

TABLE 4: Global WIL Curricular Framework

	CURRICULAR WORK-INTEGRATED LEARNING								
ATTRIBUTES	**Applied Research**	**Sandwich Education**	**Clinic**	**Curricular Community Service Learning**	**Co-op**	**Internship**	**Field Placement**	**Practicum/ Clinical Placement**	**Work Experience**
Experience:									
Direct hands-on experience	✔	✔	✔	✔	✔	✔	✔	✔	✔
Meaningful and substantial	✔	✔	✔	✔	✔	✔	✔	✔	✔
Linked to curriculum	✔	✔	✔	✔	✔	✔	✔	✔	✔
Curriculum Integration:									
Learning outcomes	✔	✔	✔	✔	✔	✔	✔	✔	✔
Assessment by institution	✔	✔	✔	✔	✔	✔	✔	✔	✔
Assessment by workplace	✔	✔	✔	✔	✔	✔	✔	✔	✔
Integration back to curriculum	✔	✔	✔	✔	✔	✔	✔	✔	✔
Student Outcomes:									
Knowledge, skills, attributes	✔	✔	✔	✔	✔	✔	✔	✔	✔
Knowledge of discipline and workplace	✔	✔	✔	✔	✔	✔	✔	✔	✔
Capacity to contribute	✔	✔	✔	✔	✔	✔	✔	✔	✔
Reflection:									
Formalized, ongoing, integrated	✔	✔	✔	✔	✔	✔	✔	✔	✔

TABLE 5: Global WIL Co-Curricular Framework

	CO-CURRICULAR WORK-INTEGRATED LEARNING								
ATTRIBUTES	**Para-Professional**	**Research Assistantships**	**Post-Credential Internship**	**Teaching Assistantships**	**Co-Curricular Community Service Learning**	**Volunteer**	**Work Study**	**Externship**	**Students as Staff**
Experience:									
Direct hands-on experience	✔	✔	✔	✔	✔	✔	✔	✔	✔
Meaningful and substantial	✔	✔	✔	✔	✔	✔	✔	✔	✔
Linked to curriculum	✖	✖	✖	✖	✖	✖	✖	✖	✖
Curriculum Integration:									
Learning outcomes	✔	✖	✔	✖	✔	✖	✖	✔	✖
Assessment by institution	✖	✖	✖	✖	✖	✖	✖	✖	✖
Assessment by workplace	✔	✔	✔	✔	✔	✔	✔	✔	✔
Integration back to curriculum	✖	✖	✖	✖	✖	✖	✖	✖	✖
Student Outcomes:									
Knowledge, skills, attributes	✔	✔	✔	✔	✔	✔	✔	✔	✔
Capacity to contribute	✔	✔	✔	✔	✔	✔	✔	✔	✔
Reflection:									
Formalized, ongoing	✖	✖	✖	✖	✔	✖	✖	✖	✖

BENEFITS AND LIMITATIONS OF THE MATRIX

One of the greatest benefits of developing a global framework is the ability to focus on points of intersection versus points of variance. By looking at shared attributes and learning/program outcomes, it is clear that there are many shared practices and processes amongst the various global WIL models and fewer differentiating attributes. This indicates that there is room for greater sharing of best practices, program materials, and research across the various models and around the globe. As noted previously, the major benefit relates to elevating the conversation regarding WIL away from finding a universal defining nomenclature that may privileging certain models over others) to one that focuses more on attributes and outcomes and the many points of intersection that most WIL offerings share. Here there is ample space for sharing of resources, approaches, pedagogical and assessment tools. A framework such as this also has the potential for helping track the amount and nature of WIL programs offered at an institution, in a country or around the globe without becoming pre-occupied with trying to resolve specific definitional differences.

As the Global WIL Framework focuses more on describing programs by their goals and approaches, it is limited in its ability to help resolve the issue of discriminating between and amongst the many WIL terms that are often conflated. The existing confusion has done little to help advance the field and the lack of shared lexicon often leads to confusion at even the most basic level of communications to students, employers, and other key stakeholders such as parents, governments and researchers. This confusion also limits the WIL community in its ability to advance a global promotion of any particular form of WIL. Furthermore, the lack of shared definitions and terms makes it very challenging to conduct research, assessment, and collect data as the results are often unique to the specific model studied and not widely generalizable. However, because the Global WIL Framework provides a way of describing WIL offerings that focuses on shared goals and approaches, future researchers may choose to investigate specific attributes or outcomes shared by many forms of WIL as opposed to only investigating one WIL model with limited ability to generalize from the findings.

Another limitation to this Framework is the number and nature of the attributes and outcomes selected. The rationale for the current attributes has been described, and as this Framework evolves, likely too will the list of attributes and outcomes. The current Framework may also need to develop a mechanism for providing more nuanced information about each attribute and outcomes, beyond the proposed ranking scheme. Finally, as currently designed, the Framework does not provide much detailed information about the extent to which an attribute is present in a given WIL model or regarding the quality assessment of that attribute within a given WIL model.

CONCLUSIONS

As the global WIL landscape is ever evolving it will be important for this Framework to be continuously challenged and revised. The Global WIL Framework, particularly should it become interactive in nature, will be most useful once it has been populated with as many known forms of global WIL that can be described by the stated attributes and outcomes. At the very least, the Framework provides a way of checking any given WIL program against a set of quality attributes and program related outcomes common to existing standards. At an institutional level it may help rationalize a variety of WIL programs based upon their

different learning outcomes and goals. At a system level it may help further the discussions around quality programming and institutional impacts so that when governments, industry, or even academia asks for "more and better quality WIL programming" there is a reference point for starting such conversations.

REFERENCES

Anderson, E., McRae, N., Johnston, N., Reed, N., Iles, L., Walchli, J. (2012). Co-operative Education and Student Recruitment, Engagement and Success: Early Findings from a Multi-Institutional Study in British Columbia. *Journal of Cooperative Education & Internships, 46*(1), 58-76

Anderson, J. R., Greeno, J., Reder, L. M., & Simon, H. A. (2000). Perspectives on learning, thinking, and activity. *Educational Researcher, 229*(4), 11-13.

Andresen, L., Boud, D., & Cohen, R. (2000). *Experience-based learning*. Sydney: Allen and Unwin.

Canadian Association for Co-operative Education. (2015). Accreditation Council Standards and Rationale. Retrieved from http://www.cafce.ca/accreditation.html

Dewey, J. (1938). *Experience and Education*. New York: Macmillan Publishing Company.

Dressler, S., & Keeling, A. (2011). Benefits of Cooperative and Work-Integrated Education for Students. In R. Coll & K. E. Zegwaard (Eds.), *International Handbook for Cooperative and Work-Integrated Education* (Vol. 2, pp. 261-275). Lowell, MA: World Association for Co-operative Education, Inc.

Engeström, Y. (1987). *Learning by expanding*. Helsinki: Orienta-Konsultit.

Friere, P. (1970). *Pedagogy of the oppressed*. New York, NY.: Continuum.

Johnson, N., McRae, N., & Maclean, C. (2016). *The Development of a Comparative Matrix of Forms of Work-Integrated Learning and Work-Integrated Education (WIL/WIE) within the Province of BC, Canada.* Paper presented at the 2nd WACE International Research Symposium on Cooperative and Work-Integrated Education, Victoria, BC, Canada.

Kolb, D. (1984). *Experiential Learning as the Science of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall.

Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. New York: Cambridge University Press.

Marsick, V., & Watkins, K. (1990). *Informal and Incidental Learning in the Workplace*. London: Routledge.

Mezirow, J. (1998). On critical reflection. *Adult Education Quarterly, 48*(3), 185-199.

Moon, J. (2004). *A handbook of reflective and experiential learning: theory and practice*. London, UK: RoutledgeFalmer.

Patrick, C.-j., Peach, D., & Pocknee, C. (2009). *The WIL Report: Work Integrated Learning A National Scoping Study*. Retrieved from Brisbane:

Peach, D., & Matthews, J. (2011). *Work-integrated learning for life: encouraging agentic engagement*. Paper presented at the Higher Education on the Edge, Gold Coast, Queensland, Australia.

Peters, J., Sattler, P., & Kelland, J. (2014). *Work-Integrated Learning in Ontario's Postsecondary Sector: The Pathways of Recent College and University Graduates*. Retrieved from Toronto:

Sattler, P., Wiggers, R., & Arnold, C. (2011). *Combining Workplace Training with Postsecondary Education: The Spectrum of Work- Integrated Learning (WIL) Opportunities from Apprenticeship to Experiential Learning*. Retrieved from Toronto:

Schön, D. (1983). *The Reflective Practitioner*. San Francisco: Jossey-Bass.

Schön, D. (1987). *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass.

This APJCE Special Issue was sponsored by

Papers stem from presentations[1] delivered at the

2nd International Research Symposium on Cooperative and Work-Integrated Education

[1] Papers included in this APJCE Special Issue are based on selected manuscripts from the research symposium's refereed proceedings. All manuscripts were expanded and modified to meet APJCE requirements, double-blind reviewed by the APJCE editorial board, and amended before being accepted to be published in APJCE.

Asia-Pacific Journal of Cooperative Education
ISSN 1175-2882
www.apjce.org

About the Journal

The Asia-Pacific Journal of Cooperative Education publishes peer-reviewed original research, topical issues, and best practice articles from throughout the world dealing with Cooperative Education (Co-op) and Work-Integrated Learning/Education (WIL).

In this Journal, Co-op/WIL is defined as an educational approach that uses relevant work-based projects that form an integrated and assessed part of an academic program of study (e.g., work placements, internships, practicum). These programs should have clear linkages with, or add to, the knowledge and skill base of the academic program. These programs can be described by a variety of names, such as cooperative and work-integrated education, work-based learning, workplace learning, professional training, industry-based learning, engaged industry learning, career and technical education, internships, experiential education, experiential learning, vocational education and training, fieldwork education, and service learning.

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

Submitting Manuscripts

Before submitting a manuscript, please unsure that the 'instructions for authors' has been followed (www.apjce.org/instructions-for-authors). All manuscripts are to be submitted for blind review directly to the Editor-in-Chief (editor@apjce.org) by way of email attachment. All submissions of manuscripts must be in Microsoft Word format, with manuscript word counts between 3,000 and 5,000 words (excluding references).

All manuscripts, if deemed relevant to the Journal's audience, will be double-blind reviewed by two or more reviewers. Manuscripts submitted to the Journal with authors names included with have the authors' names removed by the Editor-in-Chief before being reviewed to ensure anonymity.

Typically, authors receive the reviewers' comments about 1.5 months after the submission of the manuscript. The Journal uses a constructive process for review and preparation of the manuscript, and encourages its reviewers to give supportive and extensive feedback on the requirements for improving the manuscript as well as guidance on how to make the amendments.

If the manuscript is deemed acceptable for publication, and reviewers' comments have been satisfactorily addressed, the manuscript is prepared for publication by the Copy Editor. The Copy Editor may correspond with the authors to check details, if required. Final publication is by discretion of the Editor-in-Chief. Final published form of the manuscript is via the Journal website (www.apjce.org), authors will be notified and sent a PDF copy of the final manuscript. There is no charge for publishing in APJCE and the Journal allows free open access for its readers.

Types of Manuscripts Sought by the Journal

Types of manuscripts the Journal accepts are primarily of two forms; *research reports* describing research into aspects of Cooperative Education and Work Integrated Learning/Education, and *topical discussion* articles that review relevant literature and give critical explorative discussion around a topical issue.

The Journal does also accept *best practice* papers but only if it present a unique or innovative practice of a Co-op/WIL program that is likely to be of interest to the broader Co-op/WIL community. The Journal also accepts a limited number of *Book Reviews* of relevant and recently published books.

Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a 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 for practitioners, and a conclusion preferably incorporating suggestions for further research.

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

Asia-Pacific Journal of Cooperative Education
ISSN 1175-2882
www.apjce.org

EDITORIAL BOARD