Integration of practice experiences into the Allied Health Curriculum: Curriculum and pedagogic considerations before, during and after work-integrated learning experiences

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Work-integrated learning (WIL) is an essential component of all allied health university courses. In allied health, learning that occurs during WIL experiences and the relationship between academic and WIL experiences are not well understood. Good integration of WIL experiences into the allied health curriculum is key to realizing the full educational worth of WIL experiences and ensuring good student learning outcomes. This paper will use Billett's theoretical framework (Billett, 2009) for the educational value of integrating practice experiences with academic experiences and discuss how his framework could be applied to improve integration of WIL experiences in allied health. Curriculum and pedagogic considerations for allied health academics that need to be considered prior to, during and after the WIL experiences are discussed. The challenges to the integration of academic and WIL experiences that occur inside and outside universities are described. Suggestions and recommendations for better integration of academic and WIL experiences before, during and after placements are provided. *(Asia-Pacific Journal of Cooperative Education, 2015, 16(4), 279-290)*

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Work-integrated learning (WIL), including on-campus WIL related activities and off-campus placements (also referred to as practice, clinical experiences, placements or fieldwork), are a significant component of allied health courses. Such opportunities are provided to ensure that university courses produce competent graduates, meet the accreditation criteria set by the accrediting authorities and professional boards, and acknowledge that learning for work in health professions occurs in a variety of settings. Understanding how well students are prepared and make use of learning that occurs during WIL is important for several reasons, three of which are to: a) maximize the potential for student learning that occurs during WIL; b) maximize the impact of placements on the learning; and c) prepare graduates for future professional practice by developing skills and capabilities that would assist with transition from study to work. There is a growing body of literature concerned with how the richness of WIL may be better utilized (see, for example, Ferns & Moore, 2012), which confirms our experience of four decades in WIL coordination that while preparation for allied health placements is generally adequate, and support for student learning on placements is generally good, more could be done to better prepare students, as well as review and apply learning that occurs during placement, especially when students return to campus. We believe that the framework proposed by Billett (2009) to better leverage the potential of placements and more fully integrate these into WIL curricula is useful for promoting reflection and discussion in this area. Our primary audience for this paper is placement coordinators who have academic responsibility for placement programs and placement supervisors in the field.

Good integration of WIL into the academic experience is key to maximizing impact on student learning and development of occupational competence (Billett, 2009). Dahlgren, Dahlgren, and Dahlberg (2012) state that past research has shown that many universities

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have attempted to rethink their educational design to reduce theory-practice gap so as to have an integrated curriculum. Gonczi (2013) argues that what students from health disciplines learn and how they learn during clinical experiences is not well understood and that we need to understand the relationship between the academic and the clinical experiences. To realize the full educational worth of university studies, integration of practice experience into the curriculum is of utmost importance (Billett, 2009). Billett argues that,

> ... to secure the educational worth of these [practice] experiences, particular curriculum and pedagogic responses are needed prior to, during and after students' engagement in practice-based learning experiences, in order to maximise their contributions and integrate those experiences. In addition, there is the importance of students' agency as active learners, and the important role the agency plays in realising the effective integration of these two sets of experiences. ...the means to secure a rich integration of practice-based experiences into higher education programs requires a particular set of couplings of pedagogy, curriculum and personal epistemologies (p.829).

How can good integration of WIL and academic experiences in university allied health curricula be achieved? This question is the focus of this discussion paper. We include in this discussion paper (particularly in Tables 1-3) reference to educational initiatives, where available, which seek to improve quality learning outcomes in WIL. We use Billett's framework of pedagogical and curriculum considerations for the integration of WIL into the curriculum (Billett, 2009) and highlight key concepts in that framework for consideration. We discuss how his framework can inform improvements to current teaching, learning and curriculum practices in allied health disciplines prior, during and after WIL. This paper provides practical suggestions on ways to apply the Billett framework to student preparation and support for learning, before, during, and after placement.

ALLIED HEALTH CURRICULA

Allied health courses provide students with learning opportunities inside and outside university with importance placed on on-campus activities, as well as WIL placements. Carefully designed learning activities, in a variety of settings, provide allied health students with opportunities to develop abilities to integrate conceptual and procedural knowledge obtained during their on-campus studies with the know-how to make decisions about applying knowledges (such as propositional, procedural, personal, ethical, and cultural knowledge) gained. Allied health courses typically provide multiple placements for students. Students are expected to demonstrate increasing competency from one placement to the next. There is also evidence of transfer of learning occurring between placement types. For example, a recent study in speech pathology reported that students' competencies developed over a duration of one year of clinical placements irrespective of the type, context or intensity (daily or block mode) of placements (Sheepway, Lincoln, & McAllister, (2014). There are increasing levels of expectations for cognitive, technical and interpersonal skills on each placement linked to clearly defined learning goals and outcomes. Universities use a range of methods to evaluate the 'quality' of WIL experienced by students, including student debriefs with clinical academics, reflective journals or reports from students and formal assessments of students' performance on placements conducted by on-site supervisors and/or university clinical academics.

Billett (2009) argues that curriculum is something experienced by learners, not just what is enacted by educators in campus and or in practice settings. Billett (2006) describes three conceptions of curriculum which can be applied to allied health – *intended curriculum* - planned course syllabus with identified purpose (intent) set out in course objectives, *enacted curriculum* - allied health educators enact the curriculum based on their interpretation of what the curriculum is and *experienced curriculum* - what allied health students experience. Allied health students who have experienced the curriculum construct their own meanings from those curricular experiences which may or may not align with the intentions of the curriculum or the intentions of the allied health educators who enacted it. This signals the importance of providing good student learning and curricular experiences that are crucial to the achievement of student learning goals, and clear statements and guidance for educators. Enhanced opportunities for review when students return from placement would assist in alignment of the experienced curriculum and the intended curriculum, as well as promote critical reflection (Mezirow & Associates, 1990) on the placement experiences. Educators could:

> … provide explicitly critical and strategic insights and prepare students to use these insights. But, beyond what educators intend and enact, learners will necessarily be engaged in adaptive and critical thinking as they apply what they have learnt through participation in educational programs into practices and settings that are quite distinct from those in which they have learnt them. ... Hence, a key role for university educators is to guide this criticality so that it is directed in productive ways, rather than leading to disillusionment from confronting or uneasy experiences in workplaces, for instance. (Billett, 2009, p. 834)

We acknowledge above the multiple forms of knowledge, but for the purposes of this paper draw on Billett's framework focused on three forms of knowledge for practice. He argues that abilities such as developing critical insights, adapting to different situations and knowing how to apply what is already known are important for students' professional practice.

1. *Allied health occupation-specific conceptual knowledge* (concepts, facts and complex conceptions of discipline-specific topics) that all allied health graduates in a discipline are expected to acquire and which is usually gained through attending lectures and tutorial.
2. *Allied health occupation-specific procedural knowledge* is about 'knowing-how'. That is, about being able to follow occupation-specific procedures and adhering to occupational requirements as they should be followed in a health practice setting. This type of knowledge is usually gained from WIL where students learn about the procedures of health workplaces for specifics as well as strategic issues.
3. *Dispositional knowledge* is based on individual allied health students' values, beliefs and attitudes towards functioning as an allied health professional and is constructed by individual allied health students seeking to learn from and through their own experiences both during the learning of the allied health occupation-specific concepts as well as practicing of the allied health occupation-specific procedures.

INTEGRATING WIL INTO ACADEMIC EXPERIENCES

Billett suggests that the impact of student learning as preparation for practice is fully realized only when there is integration of theory and practice-based experiences into the curriculum

(Billett, 2009). To achieve this, allied health students need to be prepared for both the opportunities and the factors which limit learning when undertaking WIL. We elaborate on these factors later in the paper.

WIL for students underpinned by a range of learning theories (e.g., situated learning by Lave & Wenger, 1991, communities of practice by Lave & Wenger, 2002, peer learning by Vygotsky, 1978, and experiential and reflective learning by Kolb, 1984) are needed to ensure that students: proactively seek learning by increasing their interactions with staff at workplaces; find productive tasks to complete/take part in; actively seek out information, resources and people who may assist with progressing their learning; contact their relevant university educators in a timely manner to alert/inform that their learning has been impacted due to poor quality WIL experiences; and proactively seek rectification of the obstacles to their learning goals. Such students would be what Billett (2009) refers to as 'agentic learners'; this is discussed in detail in a later section.

To understand integration of WIL into curriculum we need to consider all three phases of WIL (pre-WIL, during WIL and post-WIL). Billett's (2009) pedagogical and curriculum considerations for promoting integration of students' experience in both academic and practice settings is a useful framework to understand how integration of allied health student's experiences in academic and practice settings could be achieved. We now reflect on pedagogical and curriculum considerations used in allied health disciplines during pre-WIL, during WIL and post-WIL experiences. Some areas for improvement and new ideas for consideration are included based on Billett's framework, the literature and our experience as WIL educators and managers.

Pre-Work-Integrated Learning

Students are taught a range of discipline specific skills (e.g., how to assess a client, how to provide treatments/interventions for various conditions and client needs) in on-campus classes in order to prepare them for off-campus WIL placements and to ensure they will be safe in their interactions with clients. Preparation for practice also addresses generic topics such as workplace health and safety, infection control, looking after yourself on placement, professional communication skills, ethics and ethical conduct, professionalism, learning on placement, reflective learning, team work, and interprofessional practice (Stagnitti, Schoo, & Welch, 2013). One key aspect of integration of WIL experiences is the design of pre-placement curriculum which is informed by employer work readiness requirements as articulated in competency based occupational standards for allied health professions, for example, Speech Pathology Australia (2011) and accreditation requirements for allied health courses, for example, Australian Physiotherapy Council (2006).

Another key aspect of integration of WIL experiences is based on the notion of students as agentic learners (Billett, 2009). Allied health educators can be seen as mediators of student learning with students being ultimately responsible for deriving meaning from their academic and WIL experiences. Such student learning is directly related to the experience opportunities provided to them and their engagement in taking up those experiences. Billett (2009) states that students need to develop active engagement and learning skills (see points 4 and 5 in Table 1) as they require these skills beyond university in professional practice. Therefore, universities have a responsibility to not just provide or organize experiences for students but focus on preparing students as 'agentic learners'. Curriculum and pedagogic

considerations for allied health academics that need to be considered prior to WIL experiences are provided in Table 1.

TABLE 1: Curriculum and pedagogic considerations for pre-WIL experiences

Prior to WIL (Billett, 2009)		**Curriculum and pedagogic considerations**
1.	Establish theoretical bases for experience in practice settings including developing or identifying capacities in practice settings	• Learning goals are clearly identified and mapped to the curriculum requirements in all allied health disciplines. • Increased emphasis is placed on problem solving skills leading to shift towards problem based education and reflective practice. • Management/sharing of placements may become necessary as placements are becoming a scarce resource. Consider if increase in number of placements is possible through different models of supervision (Bithell, Bowles, & Christensen, 2010). • Opportunities for teamwork placements in interprofessional contexts are considered. Even well-established allied health disciplines seem to be using occupation-specific placement sites instead of considering alternative placement models using interprofessional contexts or simulation. • Simulated learning environments, placement in non-traditional settings and alternative models of placements, role-based or role-emerging also need to be considered to increase placement capacity and work readiness of graduates.
2.	Clarify expectations about purposes of WIL, support for WIL, responsibilities of WIL supervisors.	• Learning goals are identified and provided to students in advance of their practice experience. • Consider if pre-placement workshops, unit outlines and induction programs are included in the course to inform students about these expectations and clinical educator support workshops and professional development opportunities are provided to assist with clarification of responsibilities of WIL supervisors. • How can support for WIL educators be provided using group discussions, reflections on supervisory practice through journals, portfolios, debriefing sessions, professional and peer supervision, mentoring, self-evaluation, student feedback, formal student evaluation and access to online resources (Rose, Edwards, & Best, 2010)? Currently support is limited for WIL educators in comparison to that provided for their university counterparts (Higgs, Amery, & Gorman, 2010) for example, training in use of ICT and education tools. • Consider utilization of library or non-academic university departments for supporting students pre-placement (Higgs et al., 2010) to develop students' information literacy skills, time management skills, ability to balance work-study-life and cope with curriculum schedules and location expectations.
3.	Inform students and clinical supervisors and placement sites about purposes, roles and expectations regarding placements	• Consider if student and supervisor roles are clear and their expectations of each other are aligned. Lack of clarity and mismatch in expectations are minimal in well-established allied health disciplines compared to the new allied health disciplines. • Considerations given to allied health student needs, field educator needs, university educator needs when selecting a particular WIL education model allowing for collaboration and negotiation of expectations of university, student cohort and site-specific requirements (Hummell, Higgs, & Mulholland, 2010).

Prior to WIL (Billett, 2009)		**Curriculum and pedagogic considerations**
		• Consider extent of student input. Students need to be active participants in collaboration and negotiation processes. Consider having some representation through student advisory bodies, student consultation groups and information obtained during student debriefing sessions and from student surveys and course experience questionnaires. Consider types of exemplars and their inclusion within course materials. Expectations can be understood using exemplars where possible for effective student learning (Rose et al., 2010).
4.	Prepare students as agentic learners (develop their personal epistemologies) including the importance of observations, interactions and activities through which they learn	• Preparation of students to be active learners. In most allied health disciplines, students are recipients of knowledge who practice skills and knowledge learnt from university when they commence placement. This is definitely an area where there is major potential for improvement. • Pre-placement preparation of students for having difficult conversations with their supervisors during placement. This level of preparation does not always occur consistently in all allied health courses. • Consider ways for increasing student awareness of different learning contexts (peer learning, learning from participation with other professionals) in workplaces. • Consider use of reports and case studies, videos, online resources, allied health books and journals and library support for pre-placement focusing on personal knowledge areas to assist students develop their personal epistemologies.
5.	Develop the procedural capacities required for practice	• Consider how, and at what point during the course, all allied health students have opportunities at university to practice the procedural skills that are required for practice during workshop and lab sessions on campus (using case studies, role plays, simulation etc.) prior to the commencement of WIL.
6.	Prepare students for contestations	• Preparation of students for handling conflicts that involve WIL supervisors. Pre-placement workshops could cover topics on dealing with difficult situations, negotiation techniques, and what support is available (mentoring/counseling). Students need to be able to make their own judgments about what is good and bad practice when they encounter placement experiences that are confronting and/or noticeably lacking in evidence-based practice. This level of preparation does not always occur during the first year or prior to the first placement and is usually offered as topics in advanced communication skills courses during the later years of their university studies. Consider if such preparation should occur prior to their first placement. • Consideration is given to how and where in the course information from past student de-briefing sessions and student journals of experiences could inform preparation of new students.

During Work-Integrated Learning

Good integration of WIL experiences in allied health curricula is critical to realize the full potential of the WIL undertaken by allied health students. This can be realized only when

sufficient support for, and facilitation of, learning occurs during placement, and learning that has occurred in practice settings is supported to transfer to the classroom.

Not all WIL experiences are positive. Educators need to understand experiences that may present challenges to student learning (lack of support, inadequate clinical supervision and facilitation of learning required to develop a good understanding of occupation-specific procedures and standards). Some WIL experiences can also inhibit the development of positive occupational identity. For example, some allied health students who were placed in rural areas for WIL decided not to choose rural settings for their employment in the future because of their first hand experience in observing stressed allied health professionals and the unrealistic expectations placed by hospitals and clients on rural allied health professionals (Brockwell, Wielandt, & Clark, 2009). Correction of any learning of bad habits or dangerous shortcuts is hard to address if allied health educators do not gain a full understanding of the learning that has occurred during an allied health student's WIL experience.

Some WIL experiences can limit the learning opportunities for students. For example, a supervisor who is too controlling can limit students' opportunities to practice while another supervisor may actually open up many possibilities for student learning to occur. A poorly organized educator can be a bad role model for an allied health student undertaking placement and may not only limit learning opportunities but also place stress on the student due to incoherent and unstructured tasks and insufficient supervision. Therefore, a key challenge for on-campus preparation of students is to develop student capabilities that will assist them to deal with any negative or limiting experiences they might encounter on placement. Further, curricula design and educational efforts should attempt to maximize the positive outcomes for students learning and reduce or eliminate (if possible) the occurrence of unhelpful or limiting WIL situations (Billett, 2009). Some activities such as asking questions, getting information, locating resources and people, listening, observing, reflecting, learning from mistakes and giving and receiving feedback all assist with student learning (Eraut, 2007). Curriculum and pedagogic considerations for allied health academics that need to be considered during WIL experiences are provided in Table 2.

TABLE 2: Curriculum and pedagogic considerations during WIL experiences

During WIL (Billett, 2009)	**Curriculum and pedagogic considerations**
1. Direct guidance by more experienced practitioners	• Importance of having scheduled meetings between students, WIL educators and University academics. One-to-one meetings between student and WIL educator combined with group meetings with WIL educators and university academics are common in allied health. • Amount of supervision provided to students needs to be considered. In some allied health disciplines there may be too much supervision due to concerns regarding client safety, breaches of code of ethics and insurance matters. How much is too much? • Insufficient supervision in some allied health disciplines due to staff resource issues, lack of clarity of expectations, roles etc. How little is too little? • Consider developing a risk matrix to determine amount of supervision required given student level, competence, patient complexity and setting.

During WIL (Billett, 2009)	**Curriculum and pedagogic considerations**
2. Sequencing and combinations of activities	• Structured placement tasks and activities that provide increasing levels of student learning opportunities and skill development are common. Does the sequencing of placement tasks and activities contribute to increasing skill development? • Good supervisors facilitate learning of information that relates to the understanding of the allied health profession not just the student placement tasks. Does supervision on placements facilitate learning of information as it relates to the profession?
3. Active engagement in pedagogically rich work activities or interactions	• Access to variety of learning experiences while on placements. Allied health students should have an array of student learning experiences including participation in case conferences, client assessments, shadowing senior clinicians in action, direct engagement with clients, peers and other professionals. • The richness of those learning experiences is not always well utilized for enhancing student learning outcomes. It is important to design, facilitate and monitor placement tasks and activities that prepare students for engaging with work and develop work ready skills such as coping with high workloads, decreased staffing, interprofessional practice and capacity to engage in independent practice. Consider how engaging the placement tasks and activities are, and if they contribute to development of work readiness skills. • Ideas for active engagement could be used: use of ICT tools (blogs, wikis), online learning communities, videos, video conferencing and interactive quizzes; these actively engage students and make experienced clinical educators accessible to allied health students. • Consider engagement of remote students (if applicable). Allied health clinics can actively engage remote students who face travel and cost constraints (Jones, McKenzie, & Wong, 2010) by providing flexible learning experiences.
4. Effective peer interactions	• Consider facilitation of peer learning. This does not always occur during allied health placements. Peer-assisted learning sessions, use of team-based placement activities, providing opportunities for allied health students to gain experience with working in interprofessional teams, ability to work in culturally diverse teams are key to successful WIL experience. Is peer learning encouraged and facilitated? • Consider using experienced WIL educators from outside of students chosen allied health area for supervision, facilitation and assessment. • Consider facilitation of student learning about each other's role, learning in mixed student teams, learning in structured events, learning to become independent practitioners and knowing how to balance between profession-specific work and interprofessional work (d'Avray & Forrest, 2010).
5. Active and purposeful engagement by learners in workplace settings	• Student engagement with other stakeholders. Most allied health supervisors provide students with access to tasks that allow engagement with other staff in the work setting, clients,professionals from other allied health or medical disciplines. • Consider including inductions from different professions to bridge gaps between different professions' preparation for WIL. • Consider providing students with tasks that develop a sense of ownership of work, accountability and independence. • Consider which of the following collaboration strategies could be used to

During WIL (Billett, 2009)	Curriculum and pedagogic considerations
	achieve active and purposeful student engagement: encouraging students to have dialogic collaboration (questioning, clarifying, exchanging, participating in rich and co-constructive dialogues) and activity-based collaboration (modelling, rehearsing and reviewing) (Baldry Currens, 2010).

After Work-Integrated Learning

The rich learning opportunities afforded by WIL seem to be under-utilized after students return to campus from their placements (Ferns & Moore, 2012). For example, more could be done post-WIL to enhance the impact of reflection activities and debriefing sessions. Follow-up workshops that assist students to share their experiences with each other and learn from peers and senior students about how they coped with tensions during their WIL experiences would greatly enhance agentic learner capabilities as well as develop individual students' critical reflection, as well as personal values, beliefs and attitudes and professional identity. Preparing students to be active learners is key to superior learning experience because poor student engagement adversely affects student learning even if the quality of WIL opportunity is high (Biggs, 2003). Interprofessional education, exchange and sharing of WIL experiences can assist with post-WIL learning (Thistlethwaite, 2012). Such approaches need to be considered for not only increasing placement capacity but also preparing students to understand the health professional context outside of their own discipline. Curriculum and pedagogic considerations for allied health academics that need to be considered after the WIL experiences are provided in Table 3.

TABLE 3: Curriculum and pedagogic considerations for after WIL experiences

After WIL (Billett, 2009)	Curriculum and pedagogic considerations
1. Facilitate the sharing and drawing out of experiences	• Student reflection requirements. Student critical reflection (Mezirow & Associates, 1990) on their placement experience is part of all allied health courses. Reflective learning tasks cater to different levels of reflection in writing (descriptive writing, descriptive reflection, dialogic reflection, critical reflection) (Jones et al., 2010). • Consider having a dedicated 'reflective week' (Whitehill, Yu, Kwan, & Ho, 2010) at the conclusion of WIL that provides for non-client contact WIL learning opportunities; use of clinically experienced students as peer supervisors of junior students; use of oral presentations and de-brief sessions to compare each other's WIL and common and different experiences that can aid in the development of situational knowledge. Could these ideas be used to improve student reflection?
2. Explicitly make links to what is taught (learnt) in the academy and what is experienced in practice settings	• Consider authencity of assessments. Most allied health courses use authentic assessments that resemble and are relevant to student's future work. • Consider link between theory and practice. The curriculum design and accreditation criteria guide opportunities for embedding theory components within WIL tasks. However, providing opportunities for reflection on WIL and relating it to theory by developing attitudes to challenge knowledge and or practice-based assumptions (McAllister, Lincoln, Ferguson, & McAllister, 2010) is still lacking and inconsistent across allied health disciplines. Consider strategies to raise student

After WIL (Billett, 2009)	Curriculum and pedagogic considerations
	awareness of how theoretical knowledge is used in practice, raising awareness amongst students by asking how they have used what they have learnt at university and educating students on learning related to their specific allied health profession, as well as other allied health and non-allied health professions is needed.
3. Emphasize the agentic and selective qualities of learning through practice	• Consider maximizing utilization of student learning experiences. An array of student learning experiences are provided but they are not well utilized for the development of allied health students' personal epistemologies. • Consider developing agentic learning student capabilities. For example, better use of information from debriefing sessions and student reflection journals should occur to emphasize and develop agentic learner capabilities, for example, by asking students to share their experiences (post-placement) about confrontations and contestations they have experienced and how they reconciled those contestations. Such exercises enable student to develop abilities to interpret meanings from their experiences and distinguish good practice from bad practice and form their own judgements about how to deal/cope with work situations where their understanding/ notion of evidence-based practice is challenged.
4. Generate critical perspectives on work and learning processes in students	• Emphasis on reflection post-placement. Facilitation of skills such as critical reasoning could also be improved in many allied health courses by utilizing reflection strategies post-placement. • Consider developing student learning outside local contexts. Case studies, simulations and role plays from different countries can enable students develop occupation specific learning outside of local contexts and will emphasize that what they have learnt at university does not always match with what is experienced in the real world. • Consider providing opportunities for students to identify their strengths and weakness and areas for self-improvement.

CONCLUSION

This paper contributes to the discussion of issues that need to be considered in allied health education to promote good integration of WIL and academic experiences. We have framed this discussion and suggestion around Billett's work on curriculum and pedagogic considerations for good integration of academic and practice experiences, and suggested ways in which this can be used to inform improvements to current teaching, learning and curriculum practices in allied health disciplines prior, during and after WIL. We highlighted some educational initiatives that seek to improve quality learning outcomes in WIL. Focus on development of students' personal epistemologies is not always explicit in allied health accreditation requirements. Systematic approaches for development of agentic learning capabilities of students across allied health courses is critical. If allied health, university and clinical educators channel their future efforts to address some of the suggestions for better integration identified in this paper there is huge potential for more fully realizing the full educational worth of student WIL experiences, providing a superior and engaged learning experience for allied health students. This should result in good preparation of graduates for practice.

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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.

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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).

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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.

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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.

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