

# Issues and strategies for establishing work-integrated learning for multidisciplinary teams: A focus on degrees in sustainability

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This study was conducted to identify challenges and potential strategies to streamline work-integrated learning placements for multidisciplinary teams of students undertaking degrees in sustainability. Face-to-face interviews using a semi-structured questionnaire were conducted with 15 academics and senior university staff, from four universities in Australia, who had extensive experience conducting WIL programs for undergraduate students. Key findings were that placing small teams of students was uncommon but partnerships with established specific professional vocational degrees are feasible. Management of multidisciplinary teams require four components: a central portal with a designated person(s) to coordinate and oversee all WIL programs; a university committee with representatives from each school and a chair that rotates between schools to vet WIL projects; a generic work-ready skills program that commences in the first year; and a project-based WIL placement with students self-mentoring and host supervisors providing generic supervision. (*Asia-Pacific Journal of Cooperative Education, 2015, 16(4), 355-366*)

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## WORK-INTEGRATED LEARNING IN GENERAL

To better prepare students for the workforce it is desirable for them to have completed a work-integrated learning experience (WIL) (Patrick, Peach, Pocknee, Webb, Fletcher, & Pretto, 2009). The benefits are well documented with the prime goal being enhanced employability (Abeysekera, 2006; Fallows & Stevens, 2000). WIL is defined by Patrick et al. (2009) as “an umbrella term used for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum”. It is applied in this paper to activities that require a student placement in the workforce that integrates theory with workplace practice (Smith, 2014). Ultimately WIL aims to prepare students for the workforce and establish or enhance effective networks and collaborations between all stakeholders: industry, universities and students.

The literature on WIL is extensive and reflects the commitment of academic communities. It ranges from a focus on design and implementation (Abeysekera, 2006; Dickson & Kaider, 2012), processes and intended outcomes (Smith 2014), student preparedness and expectations (Cord, Bowrey, & Clements, 2011; Cord, Sykes & Clements, 2011; Le Maistre & Paré, 2004), assessment (Bandaranaike & Willison, 2010; Dunn, Schier, & Fonseca, 2012; Ferns & Comfort, 2014; Ferns & Zegwaard, 2014; Simmons & Williams, 2012; Smith, 2014), partnerships and the role of the host-supervisor (Hall, Draper, Smith, & Bullough, 2008; McDermott, 2008; Richardson, Jackling, Kaider, Henschke, Kelly, & Tempone, 2009; Rowe, Mackaway, & Winchester-Seeto, 2012), and realities and responsibilities of WIL for the education providers (Bates, 2011; Patrick et al., 2009) most of which focus on single disciplines and not cross-disciplinary studies.

## WORK-INTEGRATED LEARNING FOR DEGREES IN SUSTAINABILITY

A cross-disciplinary approach within academia that actively engages students and staff from different faculties is relatively new (Diamond, Middleton, & Mather, 2011; Marchioro, Ryan,

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& Perkins, 2014) and creates new challenges for WIL placements. A Bachelor of Sustainability is a new discipline requiring cross-disciplinary skills. The set of skills developed in the discipline of sustainability involve science, social science, business, engineering and political science. The role of graduates in the workforce from this degree will be to identify and assess sustainable performance from an environmental, social and business perspective and identify and implement sustainable policies, practices and technologies to achieve sustainable outcomes. Due to the multidisciplinary nature of this degree it is proposed that small teams of students, with different focuses within sustainability, would enhance a work-integrated learning (WIL) placement to the benefit of both students and the host institution. This creates a new challenge as much of the literature on WIL is based on specific vocational degrees, associated with a single discipline and involves individual placements (Abeysekera, 2006; Cord, Bowry, & Clements 2011; Rowe et al., 2012).

WIL within an undergraduate degree in sustainability offers new opportunities for reciprocal partnerships between industries and universities. The concept of sustainable technologies and practices is new to many industries as their prime objective is economic development. There is urgency for all organizations to manage resources better and graduates from degrees in sustainability can potentially lead the way in assisting organizations to do so. This is where there may be an opportunity for students undertaking a degree in sustainability to partner with host organizations that are already offering WIL placements to students undertaking degrees in areas such as nursing and education.

In the context of a degree in sustainability a WIL model will involve multidisciplinary teams with students from different majors (business, science, social science, engineering, political science) working together in partnership with industries on joint projects. An advantage of multidisciplinary teams is shared learning and support within teams, and an enhanced opportunity to integrate knowledge into the real world (Epstein & Hundert, 2014, p. 227 assessing competency). In sustainability this will involve the integration of psycho-social (well-being), communication, business and scientific technical skills and strategies (Dunn et al., 2012). An important part of the skill-set for such students is working in and with cross-disciplinary teams. The best forum to develop team and managerial skills is through WIL.

There are few papers that address interdisciplinary WIL groups and none that address multidisciplinary WIL placements with host institutions. Two papers that focus on interdisciplinary WIL activities are by Rutherford, Austin, Wilson-Medhurst, and Davies (2012) who integrate engineering, architecture and building within the Department of Civil Engineering, Architecture and Building, and Marchioro et al. (2014) who integrate marketing, urban planning and business communication within the Faculty of Business; both these studies were conducted on-campus. Such WIL placements were managed within the same faculty and not across faculties as required of multidisciplinary teams. This study aims to identify the challenges and potential approach for WIL placements where small student teams are derived from different disciplines such as science, business, social science, engineering and political science.

## METHOD

A semi-structured questionnaire was used to obtain data from face-to-face interviews with 15 academics and senior university staff, who had been conducting WIL programs for undergraduate students for more than five years. Respondents included 11 academic staff

from James Cook University (JCU) involved in specific vocational degrees in Planning (2), Education (2), Social Science (1), Nursing (1), Business/Law (2), and non-specific vocational degrees in Environmental Studies (2) and Geography (1). In addition, the same questions were asked of two staff from Griffith University, Queensland who were coordinating and administering WIL for the university, and two academic staff from Murdoch University, Western Australia one of whom spoke of her experience at Deakin University, Victoria where a WIL placement is offered to science students. These universities were selected for this study as they are members of the 'Innovative Research Universities' which is an Australian partnership that is addressing policy, pedagogy and development of workplace ready graduates through WIL programs (Innovative Research Universities, 2015). An important scoping study on WIL that provided a baseline for this research was conducted by Griffith University, Australia (Patrick et al., 2009). Their study explored the development of a skill-based pedagogy with a framework to enhance collegial and administrative support (Bates, 2011; Patrick et al., 2009). Griffith University is the national brokers for WIL in Australia and they manage a national portal of organizations willing to be involved in WIL. They place approximately 1,200 students per year across a wide range of disciplines.

The questionnaire explored evidence of small three to four student teams in placements, the setting up of a WIL placement, structure of the respondents program(s), challenges and solutions to maintaining successful WIL outcomes, applicability to small cross-disciplinary teams and the potential to team students from a degree in sustainability with programs designed for specific professional vocations. Respondents were asked to describe the procedures they employed to liaise with stakeholders, to keep stakeholders informed and to track student progress. They were also asked the types of industries that were accommodating WIL students and where applicable, size of groups placed with an industry, number and length of WIL placements per year and the level of support to students during WIL. In addition, respondents were asked about administration, management and workloads associated with their WIL program. The data collected was qualitative and collated by grouping themes associated with student teams, preparation of students, setting-up, management and issues associated with WIL placements.

## FINDINGS

### *Student Teams*

Student teams were uncommon across disciplines except in nursing and social work where up to two students were placed together. The length of time students spent in a work placement in third year ranged from two weeks per subject to three months. In business/law 100 hours were allocated for a WIL placement with an additional 30 hours for preparation, whilst in planning and environmental science WIL placements were for 210 hours or six weeks per subject (Respondents from JCU). It was common for this to be spread across a semester. Alternatively, students undertake their placement during semester breaks. Several respondents commented that time allocated to actual placement must not encroach on time for other studies (Social Work, Planning, Business/Law and Creative Arts, JCU).

### *Preparation of Students*

The preparation of students for a placement differed across disciplines and universities. A preparatory briefing prior to each placement was delivered where students had multiple placements throughout their degree (Education, Nursing, JCU). Four approaches were suggested to prepare students for WIL placements. The first was to provide an on-line unit

that could be taken any time in first or second year. This would involve how to write a covering letter and resume, respond to selection criteria, write a report and reflective writing skills. The second approach was for all students to take a Technical Writing Skills unit, containing similar material to the first approach, prior to undertaking a WIL program. This would involve tutorials and student presentations. The third approach was for students to have undertaken a course in writing skills, as proposed above, and also to have undertaken a service-learning experience prior to an independent work placement in their final semester of their degree. A service learning experience would involve working in teams on a community project that may be conducted on campus.

The fourth approach was to integrate work skills, as identified above, within the core subjects offered in each year of the degree. In first year to provide instruction on writing job applications, as many are applying for part-time work. In second year, possibly undertake an industry-based unit at the university that addresses teamwork that is a service learning project. In the third year, students need to be able to write a professional diary that critically analyses their performance and how they integrate theory and practice. 'Third year needs to be rigorous – with an emphasis on reflective learning such as a professional diary' (Business, Law, JCU).

#### *Setting up of Work-Integrated Learning Placements*

General issues identified that were common to all disciplines were the time required to set-up the placements and the workload involved. Respondents in nursing, education and planning stressed 'don't under estimate time to set up'. Finding placements in some disciplines was also an issue so WIL in these disciplines is only offered to high achievers for example in Planning and Environmental Studies. This was identified as an issue in smaller urban areas such as Cairns, Queensland, and Perth, Western Australia, where there are fewer large organizations than in large cities.

Identification of placements was managed differently in different disciplines. Placement of students in well-established professions, where large numbers of students were being placed, involved students selecting placements based on a list of options provided by staff (Nursing, Education, JCU). Students from remote areas also had the capacity to organize their own placements in consultation with their advisors. In law, business and creative arts, projects were identified by industry and agreed to by staff (JCU). In planning and environmental science projects were identified by industry or students and agreed to by staff (JCU). In the latter respondents commented on issues of personalities of some students as a problem in finding host partners.

At Deakin, Griffith, James Cook, and Murdoch Universities, Australia, WIL is offered as an elective in degrees that do not target a specific professional vocation with varying success. This section summarizes the comments from interviews with senior staff who are champions in developing and managing WIL for degrees at these universities.

Finding placements is conducted in different ways. Either the students organize their own placements or are slotted into a project based on the suitability and interest of the student and need of the industry (Deloitte and Macquarie University). Deloitte offer placements for up to 60 students to work on projects in multidisciplinary teams. The general consensus across universities was for WIL to be project-based and associated with a firm that is well structured and established. An established firm has more expertise and greater capacity to supervise cross-disciplinary teams than small businesses (Griffith University). They also are

more likely to have a well-structured and implemented Occupational Health and Safety program ensuring the duty of care to the student.

Projects are usually associated with professional practice. One respondent stated, that for undergraduates, learning how to work in the workplace was the primary goal of WIL. This includes following protocols, professional behavior, team-work, and taking responsibility. However, respondents also stressed the need for students to work on projects and to integrate the work experience with university study in line with the philosophy of WIL.

When large groups are to be placed it helps to work through an external coordination center (Griffith University). For business in Australia this may be the Chamber of Commerce. Two universities were liaising with the Chamber of Commerce in their states to find placements for students undertaking degrees that do not target a specific professional vocation (Murdoch University and JCU). Additional sources of placements were government departments and larger non-government organizations (NGO).

All respondents agreed that with multidisciplinary teams it is necessary to have a central coordinator/convenor on campus. The role of the convenor is to initiate and formalize placement arrangements and to follow-up with stakeholders after a placement. Two respondents estimated that WIL takes 20% more time for an academic to run than an on-campus unit; this was an estimation from academics who have a well structured protocol in place for managing placements (Griffith and James Cook University).

#### *Management of Work-Integrated Learning During Placements*

For a WIL program to be sustainable, all respondents were adamant that it requires dedicated staff with a strong commitment both in the university and in industry. The time commitment of academics, administration and industry providers also needs to be realistic and recognized by the university and industry respectively. Respondents from Griffith University stated that the success of WIL is reliant on acknowledging the high workload of both academic and administrative staff associated with managing WIL and the high cost of resourcing. Further details on this topic have been reported in a review conducted in 2006 (Bates, 2011).

Different monitoring systems to track WIL placements were in place in different disciplines and across universities. Griffith University have a more centralized and refined system to monitor student progress during a placement than other universities. This involved a tracking system where students gauge where they are with the project on a scale of 1-10; those that consistently score six or below need to be monitored (but this could also mean that some students are more critical than others of their achievements). A common procedure across disciplines and universities was to visit students on site and build stakeholder engagement and feedback from both. At least one visit per placement was considered desirable.

In certain disciplines such as engineering, students were paid to work on a project depending on their skills. Griffith University has a system where they charge a company or industry for certain activities. Money from these projects is put into a pool to be used across all activities so students choose a project based on interest in a project rather than payment. A new program 'Greensteps' conducted out of Monash University, Victoria, is selecting high achievers from across disciplines to work in small multidisciplinary teams on projects related

to sustainability that assist companies to reduce costs. Some of these student teams are also paid depending on the company, the expertise of the students and the project.

### *Issues*

Finding placements for students from areas that were not related to a specific professional vocation was identified as a problem and appeared to be related to discipline (Murdoch University and JCU). In a regional city, experience has found that finding enough professionals to supervise students in particular fields can be a challenge (Social Work, JCU). Finding work-space within the host organization for a student may also be an issue for some organizations. A further concern was some workplace supervisors do not understand the philosophy behind a WIL placement.

Despite the limitations of finding sufficient WIL placements in some locations, particularly in rural areas, respondents did identify several project areas suitable for cross-disciplinary teams of students addressing sustainability. These included environmental audits; environmental risk assessments; editing and reviewing industry documents with the objective being to update documents or policy; designing business models – create plans for small business and community groups; working with mining companies– design a rehabilitation program that enhances and restores habitat for fauna that considers provenance, soil type, aspect, exposure, water, long-term maintenance, cost of different options.

Site visits during placements can be difficult when there are many locations to visit. However, it is possible to have several students in a big organization as occurs at Griffith University. This would certainly be the case with cross-disciplinary teams.

Respondents also raised the lack of readiness of students to undertake a WIL placement. This was in relation to third year students undertaking a Bachelor of Social Sciences. Staff did not consider the third year students ready to engage with stakeholders or able to offer what stakeholders wanted. A capstone subject was considered to be a better option in this instance. However, other schools found preparatory sessions conducted as online tasks, by tutorials or as a service-learning unit alleviated this problem (see comments above on pre-WIL preparation).

WIL has been offered in some areas of science not related to a specific professional vocation, for example within the School of Earth and Environmental Science, JCU, but it has been limited to a small number of students and offered for a few years then withdrawn from the syllabus. The reasons for this are primarily related to:

1. the time and effort required by the academic staff to maintain a working relationship with stakeholders and to monitor students' progress during their placement;
2. monitoring the wide range of different areas in which students are participating in a WIL placement (a professional degree focuses on one area), and
3. matching the personality of some students attracted to environmental science degrees to organizations willing to offer placements. The respondent stated that 'environmental science has attracted personalities that can be difficult to place in a formal work environment'.

Primary considerations identified for students were the time they allocated for the actual placement and number and quality of assessment tasks. This needed to be part of an agreement with all parties prior to the commencement of the WIL placement. Students need to be aware that there is a certain time allocation and that they need to manage their time accordingly. A three credit point unit which comprised 100-120 hours (3-4 weeks) in actual placement appeared acceptable to both academics and industry partners (Unpublished internal report 2011). If conducted as a cross-disciplinary placement then this will probably need to be in a block to overcome timetable clashes.

#### *Combined Placements for Specific and Non-Specific Professional Vocations*

In some professional areas such as social work, the addition of mixed-disciplinary teams of students undertaking a sustainability degree were considered a potential bonus for industry partners as they could improve energy efficiency and working conditions in the work environment. However, a major concern was that an increase in the number of students may compete for limited placement opportunities within an organization; this was independent of disciplinary focus and related to host-staff available to supervise and workspace at the host institution. A second concern was that stakeholders may not understand the benefit of mixed-disciplinary teams and this would require clarification. A new initiative at JCU involving cross-disciplinary linkages was between the School of Dentistry and the School of Education. Students from Dentistry were teamed with Education students to provide oral health instruction in schools.

## DISCUSSION

Placement of small teams of students with host institutions was found to be uncommon but several benefits of such an approach for both universities and host institutions were identified. These included reduced number of site visits, students self-mentoring and thus reduced pressure on host supervision. Evidence of self-mentoring was reported by participants in a study by Marchioro et al. (2014) where interdisciplinary learning and team building skills were identified as outcomes of working in small interdisciplinary teams. In cross-disciplinary teams self-mentoring will be particularly important as host supervisors may not have the disciplinary skills requires across all pillars of sustainability. It is envisaged that the host-supervisors for cross-disciplinary teams will provide generic and not disciplinary specific supervision.

Several challenges were identified in preparing and managing small cross-disciplinary teams. To address the main challenges identified by education providers during this study several strategies need to be put in place upfront (Table 1). Some risks are common to all disciplines and strategies to address them have already been identified (Cooper, Orrell, & Bowden, 2010). One of the main challenges is coping with a significant number of students and their requirements where students may be at different levels. Restricting placements to the final year of the degree and implementing compulsory preparatory units may reduce the latter.

WIL is a compulsory component of the course in degrees that educate people for a specific profession such as nursing, pharmacy, medicine, dentistry and education and is required for accreditation. In degrees designed for specific professions WIL placements have well established protocols and procedures. They benefit from strong professional linkages between tertiary institutions, professional bodies and institutions that host WIL students, in

particular in hospitals and schools. In a new discipline such as sustainability this framework has not previously been identified but there may be opportunities for linkages between established professional networks as is occurring with Dentistry and Education at JCU in providing oral health instruction in schools.

TABLE 1: Addressing some of the challenges of small cross-disciplinary teams and potential strategies

Challenges	Strategy
Students not ready for WIL placement	Students undertaking a WIL placement must have completed a preparatory unit and a service-learning program. A work-ready skills program needs to be implemented at first year.
Available placements and matching students	Identify projects with industry – create a focus group; work through a government convener e.g. Chamber of Commerce; build a database of projects; students identify a project for an industry based on their skills.
Adequate space in the workplace	Time share space – possibly start early or work later in the day; schedule placements for least busy periods for industry.
Professionals that are able to supervise cross-disciplinary teams	Identify projects that match students' competency and do not require supervision of equipment. Professionals provide generic supervision.
Visits to workplace during placement	One or more small teams in an organization will reduce number of places that need to be visited.
Workplace supervisors not understanding what WIL is or have unrealistic expectations	Set-up an on-line training program for industry or a training workshop.
Negative impact on workplace community from poor performance of students.	Ensure competency level of students matches the expectation of the workplace. Set-up a feed-back system i.e. between university coordinator or academic and work supervisor (weekly phone call or email). Ensure work supervisor has a contact number at the university. Student teams self-evaluate e.g. they meet and review their performance each week and report on teams performance to university supervisor so issues can be identified and rectified early. Students score their performance on a weekly basis as proposed by Griffith University.
Students resistant to WIL due to distance of workplace or limited time availability.	Clear guidelines and expectations of students provided in unit guide. Students to undertake on-line training course prior to placement that clearly outlines expectations and time management.
Students committing too much time to placement	Clear work plan with timelines and completion date signed off by all parties.



Opportunities for cross-disciplinary teams working with students undertaking degrees for a specific vocation were also identified although respondents were concerned they did not compete for work-space. Some of the suggested synergies were projects that assist in developing climate mitigation within an institution. These included energy audits (Centre Link, Cairns has experienced an influx of emergency relief applications in the tropics with some people with air-conditioning bills of \$3,000 during summer); addressing how we can improve people's well-being and thermal comfort with climate change; examining energy efficiency of different sized businesses and develop mitigation procedures, costing and policy; addressing implementation of vision statements of organizations with a view to ensuring sustainable resource use; and design, implementation and on-going maintenance of Community Gardens which has the potential to build a business plan, environmental impact assessment, community/social assessment.

Respondents from all universities saw management of placements through a common portal, as occurs at Murdoch and Griffith Universities, as highly desirable particularly for multidisciplinary teams. This may also have a benefit of identifying new areas of placement for cross-disciplinary teams. Importantly, it will avoid bombarding and annoying placement providers, and wasting time. A central portal also tends to unify people (C-J Patrick, personal communication, 9 September, 2011) and build confidence with industry partners. It also streamlines administration but the workload for this is considerable and requires a dedicated person to implement.

A joint schools committee, as proposed by Murdoch University (Associate Professor John Bailey, personal communication, 13 May, 2011), with a representative from each school and a chair of the committee that rotates each year has several advantages. This committee would be used to resolve issues prior to industry placements. It would spread the load and lessen the chance of multiple approaches to the same industry. It would also enable early vetting of projects, understanding of expectations of the different disciplines and input into how the different mixed-disciplinary groups integrate in the workforce. However, it requires a champion within each discipline to advise the chair and for the chair to delegate the person to liaise with placement partners.

Additionally, there needs to be a designated position to oversee WIL programs at each campus. Their role would be as a coordinator - and include setting up the meetings between teams involved with the students, mentoring all parties, visiting the industry partners, reporting back to stakeholders, and organizing the timing of placements to fit in with industry and academic timetable (requires flexibility).

Placing students in projects or having students design their own projects to suit an organization will depend on the maturity of the student team and the requirements of the industry partners. To be sustainable a plan of the project objectives, actions, resources requirements, workload, timeline and outcomes need to be articulated (Kozma, Intel, Microsoft, & Cisco Education Taskforce, 2009; Patrick et al., 2009). This should form part of an agreement that all parties sign prior to the commencement of the placement. It is common practice to set-up a memorandum of understanding (MOU) with large organizations.

Other studies have identified the need for pre-placement training for both industry partners and students to bridge cross-cultural and generational gaps and to enhance experiences (Crumpacker & Crumpacker, 2007; O'Reilly, McCall, & Khoury, 2010). This study has identified different approaches which address this requirement. In particular, a service

learning activity as conducted within the Planning Degree at JCU may improve the success of WIL for multidisciplinary teams. This provides experience and confidence for students to take responsibility for a WIL project. During such an activity potential personality clashes, social problems and the matching of students and projects can be identified and resolved prior to the WIL placement.

This study did not aim to address the content or assessment items of a WIL experience of multidisciplinary teams. However, several respondents commented on the need to ensure the integration of the WIL experience with the students' university studies. A common approach is for students to write a diary that consists of a critical analysis of their experience throughout the WIL placement (Doel, 2009; Dean, Sykes, Agostinho, & Clements, 2012). An alternative approach is for students to reflect on their experience and write a literature review relevant to the project at the end of the placement and incorporate this into their final report (C-J Patrick, Griffith University personal communication, 9 September, 2011).

## SUMMARY

There will be considerable challenges of implementing WIL placements for multidisciplinary teams. Many of the challenges are in common with single and interdisciplinary WIL placements but are exacerbated in that cross-disciplinary teams do not have a targeted professional network and may require more space within the host institution during a placement. However, for multidisciplinary teams in sustainability a lack of professional networks could potentially be an advantage as they may work in any industry and may benefit from already established professional networks used by single disciplines. The major challenge for establishing multidisciplinary student teams will be to manage and work across faculties. This may be best accomplished with a central university portal handling WIL placements that is advised by a schools committee composed of representatives from each faculty. It is recommended that students undertake a preparatory work-skills program and a service-learning program prior to a WIL placement. In the domain of sustainability all industries may benefit from small multidisciplinary teams.

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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.

## Submitting Manuscripts

Before submitting a manuscript, please ensure that the 'instructions for authors' has been followed ([www.apjce.org/instructions-for-authors](http://www.apjce.org/instructions-for-authors)). All manuscripts are to be submitted for blind review directly to the Editor-in-Chief ([editor@apjce.org](mailto: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 will 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](http://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.



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