# Exploring stakeholders' perspectives of the influences on student learning in cooperative education

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Fundamental to cooperative education is a philosophical commitment to learning through the experience of work. The workplace can be viewed as a social environment and provides a context for learning that is very different from that provided within a university. The aim of this research was, through an interpretive case study, to explore the influences on student learning in a sport cooperative education context. Learning in the workplace was influenced by the direct guidance and support given by industry supervisors, as well as the attitude of the student. Academic supervisors facilitated the development of reflective practice and helped students to integrate the knowledge gained in both the university and workplace environments. Yet, through developing relationships and social interactions with workplace colleagues, students were able to learn about the culture and values and contributed towards deepening their understanding of what it means to be a professional in the sport and recreation industry. (Asia-Pacific Journal of Cooperative Education, Special Issue, 2015, 16(2), 109-119)

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Cooperative education is based upon the concept of integration of academic learning from the university with that gained from experiences in the workplace. Through the cooperative education experience, when the two different environments become integrated, it provides opportunities for legacies to be created (Billett, 2009). Yet, the workplace can be viewed as a social environment and provides a context for learning that is very different from that provided within a university (Hughes, 1998). While learning is not the fundamental aim of most workplaces it is through participating in the authentic activities of the host organization that students can learn in different ways and gain access to different types of knowledge. In order to be able to better prepare students for their cooperative education experience it is important to understand more about learning in the context of the workplace.

The workplace or host supervisor is generally considered as having a major influence on learning in the workplace (Billett, 2001; Cooper, Orell, & Bowden, 2010). The roles and responsibilities of the workplace supervisor have been described as complex and multifaceted (Rowe, Mackaway, & Winchester-Seeto, 2012) and vary with the placement structure and discipline context. Workplace supervisors can be considered as making a contribution to the learning process through negotiating and managing the allocation of appropriate tasks and responsibilities that facilitate learning, role modeling, and providing direct guidance, support, and feedback to the student. Recently several studies have highlighted a lack of clarity and understanding of the roles and expectations of the workplace supervisors (Patrick et al., 2008; Rowe et al., 2012) and this has the potential to impact on the quality of the learning that can be gained through a cooperative education experience.

While the supervisor has a significant role to play, the influence of the physical and social environment is often overlooked as contributing to student learning. Vygotsky (1978)

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considered that the social environment and the way that learners interacted with other people and objects within that environment were critical for learning. Advancing the ideas of Vygotsky are the theories of situated learning, where learning is viewed not merely as being situated in practice but as, "an integral part of generative social practice" (Lave & Wenger, 1991, p. 35). Situated learning shifts focus away from the individual as the learner, and moves towards a focus on the importance of participation. Lave and Wenger (1991) contend that learning occurs through human social activity. Their emphasis is, "that learning, thinking and knowing are relations among people engaged in activity in, with and arising from the socially and culturally structured world" (p. 51). Being situated alongside workplace colleagues, students are able to encounter new knowledge and behaviors that make up the professional environment.

Another sociocultural perspective of learning that underpins cooperative education is the notion that workplace knowledge is distributed throughout an organization (some explicit, some tacit) and is accessed by participants in different ways (Salomon & Perkins, 1998). It is the sharing of knowledge and artifacts amongst participants that affords the opportunities for students to learn the practice of the community, and gain access to knowledge that they may not otherwise be able to learn (Eames & Bell, 2005). These views are similar to Lave and Wenger's recognition of the importance of social relations with other members in a community of practice.

Much of the research on the influences on learning in the workplace has been conducted in contexts whereby the learner was employed full-time (Billett, 2001; Eames & Bell, 2005; Eraut, 2007). While it was likely there would be many similarities, it was considered important to gain an understanding of the influences on learning in the context of university students undertaking part-time, unpaid cooperative education placements. To this end, the aim of this research was to explore the influences on student learning in a sport cooperative education context. The data presented here brings into relation the voices of the students, industry and academic supervisors through their perceptions on the cooperative education experience.

## **METHODS**

A qualitative case study approach was used to gain insights into the experiences and perceptions of the students, workplace supervisor (referred to as industry supervisors), and academic supervisors from the university. Case study as a methodology is commonly used in educational research settings as it has the potential to capture and accommodate issues and problems as they occur in practice (Coll & Chapman, 2000; Linn, Howard, & Miller, 2004). An *intrinsic* case study design was used in this study, as this method draws the researcher to what is important about that case within its own world and aims to amplify recurring issues and themes from within the specifics of the case (Merriam, 1998). Using this approach Stake (1995) argues that case study researchers can generalize the themes generated through their case to inform other and future settings. In intrinsic designs the case is normally predetermined. As such, in this study the case was identified as the cooperative education program within the Bachelor of Sport and Recreation (BSR) at Auckland University of Technology (AUT). This created the 'boundaries' for the study. Within the case three groups were identified as being students, academic supervisors, and industry supervisors. Ethics approval was gained for this study from the university ethics committee.

The data collection occurred in two stages. Initially data was gathered through the administration of qualitative questionnaires. For details of the participants see the description of the case in the next section. Open-ended, as well as 'complete the sentence' questions were used as this enabled the participants to use their own words to describe their experience. This was important to create the 'voice', as the purpose of the questionnaire was not to quantify their opinions but to gain their views and perspectives. Key questions for students included: In co-op I learnt by...? My learning in co-op was influenced by...? I could have learnt more in co-op if...? What do you see as the role of the co-op industry supervisor? What do you see as the role of the co-op academic supervisor? Similar questions were given to industry and academic supervisors.

The second stage of data collection involved semi-structured interviews. The combination of strategies provided for 'triangulation' of data sources to increase validity. The interviews were used to gain an in-depth view of the perceptions of the participants, to probe further into themes that had emerged through the questionnaire analysis, and to provide an opportunity for unexpected themes to emerge that may not have been revealed within the structured nature of the questionnaires. Qualitative interviews assume, "that the perspective of others is meaningful, knowable, and able to be made explicit" (Patton, 1990, p. 278). Interviews were conducted with six BSR students, five industry supervisors, and five academic supervisors.

The questionnaire responses and interviews were transcribed verbatim and coded thematically (Braun & Clarke, 2006; Miles & Huberman, 1994), using QSR NVivo 9 software. Transcripts were coded into themes or 'nodes' that were generated prior to analysis or inductively through the coding process. Selective coding was used to identify representative and confirmatory quotes. Questionnaire responses were numbered and labeled: SQ for students, AQ for academics, and IQ for industry supervisors. Pseudonyms have been used for the responses from interview participants: students with names beginning with 'S' (e.g., Steve, Sean, Stan, Sally, Susie), Industry supervisors with 'I' (e.g., Isaac, Ian, Irene, Ingrid), and Academic supervisors with 'A' (e.g., Alice, Alan, Amy).

## THE CONTEXT FOR THE CASE

The case was determined as the cooperative education program within the BSR, at AUT. The cooperative education program within the BSR involves students undertaking 350 hours of placement within one sport and recreation organization over two semesters, each being fifteen weeks in duration. The placement is generally undertaken two days per week during the final year of the degree. In most cases the students are unpaid. Within this arrangement the cooperative education experience is given academic credit and makes up half of a full-time program of study in the final year of the BSR. Students attend university classes for the other half of their load during this time.

Students are supported in their cooperative education program by an industry supervisor and an academic supervisor. The industry supervisor is expected to negotiate appropriate work related activities with the students and to provide guidance, support and feedback in the workplace. The part-time placement structure enables students to meet their academic supervisor on a regular basis (ideally every two weeks) for one-to-one mentoring when they are both on the university campus. A key role of academic supervisors is to encourage students to share their reflections and critically analyze their experiences. Academic

supervisors also provide comments on student's online journal and give feedback on assessment tasks.

Questionnaire responses were gained from 91 BSR students, who had recently completed their cooperative education experience (response rate 79%), 18 AUT academic supervisors, (response rate 68%), and 28 industry supervisors (response rate 44%). The students had completed their cooperative education experience and had met the requirements for awarding of their degrees. Students had undertaken their placements at a range of workplace settings with non-profit organizations in the sport and recreation industry. Industry supervisors were drawn from the sport or physical education departments in schools and a range of sport or recreation organizations, across both the non-profit and commercial sectors. Industry supervisors had a range of experience in hosting students. The average supervision experience was 3.2 years (SD = 1.8; range 1 to 8 years). All academic supervisors had completed at least one year of supervision, with the average being 5.3 years (SD = 3.6; range 1 to 11 years).

#### **FINDINGS**

Learning through cooperative education involves much more than just 'doing or having the experience'. Drawing on both questionnaire and interview responses from students, industry, and academic supervisors the findings presented in this paper focus on their perceptions of the influences on student learning. Key themes that emerged were: direct guidance from industry supervisor; dialogue and social interactions with co-workers; the attitude of the student; academic support and feedback; and critical reflection. These themes will be discussed in the following section.

Stakeholders agreed that industry supervisors were a key influence on 'what and how' students learnt in cooperative education. The nature of the environment industry supervisors provided in the workplace was perceived as a major factor contributing towards the learning that could be achieved. The industry supervisors were there to help students to, "set goals and then assign responsibilities to achieve these goals" (IQ27). Providing, "appropriate, relevant and challenging work activities" (AQ8), where students were able to develop, "a sense of belonging" (AQ3), were also considered important roles of the industry supervisor.

Students described that initially they learnt through the direct guidance from their industry supervisor through first observing or being shown what to do, and then having the opportunity to put what they had learnt into practice. Sean described that he learnt initially through:

Observing. Mainly observing my own supervisor [a high performance trainer], how he goes about talking to the team... I learnt from hands on as well, like helping, teaching lifts or correcting technique.

Supervisors provided access to procedural knowledge that was often 'hidden' and would be difficult for a student to learn without assistance. The initial observations not only helped students to learn 'what to do' but also helped them to learn the behaviors that were part of the workplace culture.

Having access to both routine and more challenging tasks with added responsibility was perceived as important. For Steve, he initially began with just shadowing the outdoor education teacher, but in the end he took responsibility for the planning and running of a

three-day outdoor excursion. He acknowledged being able to learn from the implications of his actions:

This was a big step up, as previously I had worked with colleagues, but this was down to my own ability, my resourcefulness. So being given that chance was a good thing and if it went wrong it was on my head and I would learn from that.

Steve noted how friendly his supervisor was, and he commented how much value he gained from the interactions not only with his industry supervisor but with his academic supervisor and colleagues as well. He felt:

It is important that if you need to ask a question you are not scared to go and talk to your supervisor, because you need to be able to ask those questions. I learnt from the very in-depth discussion with both my academic and industry supervisors and colleagues as well. To me those discussions highlighted what I learnt because I was able to bring through the knowledge I had learnt.

Ian highlighted the importance of developing a good relationship between the student and supervisor:

If the student has a good relationship with their industry supervisor they can keep on top of everything and do everything the way the organization needs it to be done. Just left to their own devices that is when the trouble comes in... Regular feedback is important.

Through managing the operational aspects of the placement, Ian was able to provide support and monitoring of the student experience. Not all industry supervisors shared the same perspective, as Isaac had a different view of the relationship:

I try to streamline the process as much as possible where my interactions with the student become as minimal as possible so I can carry on with my own work. So that is, for me to be planned and prepared to get projects into place before they arrive with a template of what they are supposed to do and then leave them to do it. That is a way to do it because they either sink or swim.

Isaac's view suggests he expects a greater level of autonomy where students are encouraged to take ownership and responsibility for specific tasks or a project. Isaac also admitted that he found it challenging to give feedback to students as, "you are not paying them to do the job, so to be critical of them is quite harsh in front of them". The roles of the industry supervisor are clearly complex, and the findings suggested that the nature of workplace activities dictated differing levels of supervisor involvement across the range of host organizations that participated in this study.

While the industry supervisor was considered responsible for providing a positive learning environment, students consistently identified workplace colleagues as having a key influence on their learning. Students commented that they were influenced by, "the people I worked with" (SQ80), 'the people I met" (SQ35), and the, "people around me" (SQ7). Students acknowledged that it was often the support from a 'helpful colleague' that was considered to have influenced their learning the most. Industry supervisors agreed that students gained most when, "working with experienced practitioners in a busy environment" (IQ8) and, "the interaction and confidence building that came from working in a team environment" (IQ15) were important influences on learning.

As the students became involved in tasks of increasing responsibility they acknowledged it was often through the feedback from their co-workers that they were able to compare their

own performance with what was an expected standard. As Sally mentioned, "as my confidence grew I started asking others, trying to gain more feedback from others". However, students needed to be critically engaged and aware that the so-called 'experts' did not always model best practice. While a critical awareness is important for learning, students are often placed in a difficult position where it is not appropriate for them to openly challenge the accepted practices of the workplace.

Developing personal connections and relationships with staff both within and outside their own organizations were also seen as a valuable part of the cooperative education experience. Susie acknowledged the importance of personal relationships and developing friendships with other staff, which gave her a sense that she was part of the organization:

They were just so welcoming... they made me feel comfortable, they became our friends, we would chat to them about the weekend when they asked, but you knew when to do your work. They definitely made you feel part of the team... I feel I have gained so many relationships, although it is a small thing, that is your foot in the door.

Sean also valued the networks that he had made within the industry as evident in his comments about his experience:

So getting out there, getting to know people in the industry so that when you do finish you are not just stuck with a degree and nothing else.... Just being in [the organization] as much as I could I ended up meeting most of the staff and some of the external staff that come in for certain roles. I knew what I wanted to do.... and this kind of opened the door for me.

Sean felt that through his time in the workplace he was able to make key connections and for him this provided the ultimate benefit in that he was able to, "find his way into the industry".

Stakeholders consistently identified that the attitude of students was a major influence on learning. As one industry supervisor commented, "the degree to which a student engaged with the environment and their willingness to learn and participate" (IQ3) were important. Academics had similar views and it was acknowledged that learning was influenced by:

The student's own enthusiasm and pro-activeness to structure the opportunity to gain from it want they want to. So being assertive and a good negotiator is an important attribute for students to have to get the best out of co-op (AQ15).

Students also made similar comments in the realization that their attitude, work ethic and personal motivation were important influences on learning. Students were aware that they needed to take responsibility for negotiating their own learning through, "expressing what I wanted to do and my co-op industry listening to this" (SQN34). For the supervision relationship to work well, students need to take ownership of their learning. Alan, an academic supervisor had these views:

I think it depends very much on how proactive the student is in terms of interacting with the industry supervisor and the academic supervisor. It really should be driven by the student and determined by them... If the student is active, gets feedback from the industry supervisor, gets feedback from the academic supervisor, really the industry and the student wins.

Alan's comments were consistent with those also expressed by students and industry supervisors.

For some students they considered that it was the end goal that was a key influence on their learning. Examples given were, "wanting to be a teacher in the future" (SQJ24), "finishing

my degree" (SQN41) and, "wanting to achieve a high grade and get the most out of it" (SOI27).

Amy, an academic supervisor had these views:

I think the students are heavily influenced by grades and particularly in that third year wanting a high mark for this paper. I think that drives most of them. The second thing that I think drives a lot of them, they see an opportunity to get an industry reference from their co-op. Others see a pathway into the industry; there may be an opening for them through their co-op work.

Amy's views that grades were a key motivation were not consistent with the majority of the responses from students. However, students consistently reinforced the importance of gaining a pathway into industry and the chance of, "getting a foot in the door" (Sean) as a motivation for learning.

Learning was also influenced by, "how much trust an industry supervisor was willing to have in them" (IQ23). Industry supervisors cautioned that a student showing a positive attitude to learning was not always seen as enough. As supervisors, they needed to have confidence that the students had the skills and professionalism necessary to undertake the tasks they were being assigned.

All three stakeholders acknowledged academic supervisors as being an important influence in the learning process, through the support and guidance they provided. Alice, an academic supervisor, described the importance of her role:

I see the academic supervisor as a key link between the student, the industry and the university. My role is to really ensure that the student has a good experience out in industry and that they are able to deal with any hurdles they may come across on the way and that they have someone outside the industry or even their own peer group that they can talk to about the way their co-op is going and that is through the reflective process. My role is very much a mentor ... to guide the student, helping them with their academic writing and their critical reflection... There is a fine line between mothering and allowing the student to grow themselves. It is hands on, but hands off at the same time.

Students clearly identified the specific role that academic supervisor played in developing their reflection skills. Students confirmed that it was their academic supervisor, "pushing for more critical analysis" (SQN28) that helped them learn. Academics recognized that it was students, "ability to reflect" (AQ9) that influenced their ability to learn from their cooperative education experiences.

Students consistently commented that reflecting on their experiences helped them to learn. Students were required to complete a reflective journal as an academic requirement and were expected to share their reflections with academic supervisors during regular meetings. Sally confirmed the value of keeping a reflective journal:

The reflective journal, which we had to do was really helpful. I actually wrote in that nearly every week and I was able to reflect on what I was doing and how I could improve so that helped, that helped a lot... Well it helped me to learn from my mistakes and how I could do things better.

Some students initially had difficulty in understanding the value or purpose of critical reflection but once they 'had got it' found that it contributed to their learning. For example, Stan commented:

At the start of the first semester, I didn't really see the point, but as we kept going, my academic supervisor kept telling me to go back and make sure you thought about what happened and say what happened and say why it happened and all of that. So definitely critical reflection helped. Helped with most of the learning, because then you could go back, ... and look at what you did... and see what you learnt.

Similar to the student views, Alice was realistic and aware that not all students initially understood and were clear on the process of critical reflection:

I think some of them don't understand what critical reflection is for initially, and then as time goes on and we try and encourage that side of their learning to bring those steps and stages into the way that they look at their learning. I think many of them come away realizing at the end that it's good to look at what you've been doing and why you've been doing it, and how it's worked, and what could be improved.

Even though it was perceived as challenging for students, Alice was very clear on her views of how critical reflection contributed to student learning:

They are learning from their experiences and they learn through reflection or critical reflection to make those links, so rather than just going through the process of having an experience but looking at that experience and saying well what actually happened here, why did it happen, would I do anything different, am I going to change the way I do things in the future.

Alice felt that if students were better prepared in their critical reflection skills then this would potentially enhance the overall learning that could be gained through the cooperative education experience.

Three of the industry supervisors interviewed made some reference to the importance of critical reflection for learning. Irene, when asked what contributed to student learning her response was:

I think the critical reflection is a really good way for them to learn because they actually have to write down what they've done and explain what outcome that has been achieved and whether it's positive or negative and if they were to do it again, what would it be.

Ingrid also acknowledged that critical reflection helped students to learn, but felt that it was more the academic supervisor's responsibility to encourage this rather than being her role. Developing the ability to critically reflect is not easy, and as mentioned previously, the role of the academic supervisor can be instrumental in assisting the student to engage in the reflective process.

#### DISCUSSION

The stakeholders perceived that industry supervisors had a major influence on supporting student learning and these findings are consistent with what is expected of a supervisor's role (Billett, 2001; Cooper et al., 2010; Rowe et al., 2012). Industry supervisors provided direct guidance enabling students to access procedural knowledge that would be difficult for students to learn without assistance. Industry supervisors were responsible for creating an authentic environment that supported 'learning' rather than just working and this can be considered to be the difference between a cooperative education experience and students getting 'a job'. Students may be placed in a workplace setting without really experiencing or learning about the 'real world'. If the supervisor provides tasks with little consequence and

where students are shielded from the tensions and politics of the organization this influences the extent of the learning to be gained.

Students were expected to be motivated and willing to learn, yet at the same time the industry supervisor needed to have confidence and a level of trust in their abilities. Earlier research in this context has confirmed it takes time in a workplace to build trust and develop relationships (Fleming & Eames, 2005).

The findings of this study also bring to our attention the importance of the interactions and developing relationships with workplace colleagues. The voices of the students illustrated that learning occurred in the workplace by observing the actions of co-workers and through being shown and told what to do by their colleagues or supervisor. However, it was through social interactions, meaningful discussions and developing relationships with workplace colleagues where students were able to learn both the procedural knowledge (the knowhow) and the dispositional knowledge (the values and attitudes) that contributed towards deepening their contextual understanding of what it means to be a professional in the sport and recreation industry.

Developing a good relationship with others in the workplace enabled students to be more comfortable to ask the 'silly questions' of their co-workers rather than their supervisor. Students are often in a position where they want to impress their supervisor with their abilities rather than reveal their inadequacies. Students may be seeking a reference or employment with the organization at the completion of their placement and the supervisor is generally required to complete some form of appraisal or feedback on the student's performance. Hughes (1998), points to a potential conflict of interest in the student supervisor relationship and considers that the role of a supervisor as a facilitator of learning is often problematic. Encouraging workplace colleagues to be part of the learning process seems a positive solution to this conflict. However, it must be acknowledged that learning through interaction with workplace colleagues may not always be feasible. Limiting factors could be cultural and hierarchical constraints or where there is a lack of understanding or willingness of the co-workers to support the student learning experience.

Students valued the support of their academic supervisor particularly in developing the skills to enable them to reflect and make meaning of their experiences. An advantage of the part-time BSR cooperative education model is that it enables students to meet regularly, on campus with their academic supervisor. Reflection is a key strategy that facilitates learning from experience (Raelin, Glick, McLaughlin, Porter, & Stellar, 2009). It was through dialogue and feedback from academic supervisors that helped students to integrate the knowledge gained in both the university and workplace environments. The findings provide support to the argument that the most successful cooperative education programs are those where academic supervisors are involved (Martin, 1998; Matson & Matson, 1995; McCurdy & Zegwaard, 2009). However, it has been raised as a concern that in some universities the inclusion of academic supervision is challenged as not cost efficient within current workload constraints (Patrick et al., 2008). It is clear from this study that academic supervision needs to be an integral and valued part of cooperative education.

### LIMITATIONS

There are a number of limitations that are inherent when using a qualitative case study methodology. It is acknowledged that the findings of a case study may not be generalizable to other contexts. However, in this study transferability is enhanced, by providing a 'thick' description of the data. Presenting the findings in this way enables the reader to comprehend their own interpretation and determine if the findings are applicable within their own settings. Trustworthiness is another key limitation of qualitative studies and this was minimized by using multiple sources of data from which to determine key themes. As mentioned earlier, response bias is also a limitation of this study as those participants that had a good experience or relationship may have been more likely to volunteer to participate.

#### CONCLUSIONS

The quality of industry supervision, the nature of the activities, and, the attitude and motivation of the student were key influences on 'what and how' students learn. These are no different to the influences on workplace learning identified from research conducted in contexts where the learner is in full time employment either on placement or in a permanent position (Billett, 2001; Eraut, 2007). Yet, there is generally little acknowledgement of the learning opportunities that occur within the social context of the workplace. All stakeholders need to be aware of how the quality of learning can be enhanced through increasing opportunities for students to have meaningful interactions with workplace colleagues. A key advantage in the part-time model of cooperative education is the significant role of the academic supervisor. The findings affirm the influence that academic supervisors have through facilitating the development of reflective practice and helping students to integrate knowledge gained in the university with what they are learning in the workplace environment.

The findings of this study have painted a positive picture and highlighted the workplace environments where the BSR students were placed as supportive of student learning. This may be a factor of response bias and the participants who had a positive learning experience were more likely to volunteer for this study. Importantly, we must acknowledge that some workplaces are contested environments. Learning through interaction with workplace colleagues may be limited when there are cultural and hierarchical constraints or where there is a lack of understanding or willingness of the co-workers to support the student learning experience. Further research needs to be undertaken to gain the perceptions of how workplace colleagues understand their roles and contribution to the workplace as a learning environment for cooperative education students.

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# REFERENCES

- Billett, S. (2001). Learning in the workplace: Strategies for effective practice. Sydney, NSW, Australia: Allen & Unwin.
- Billett, S. (2009). Realising the educational worth of integrating work experiences in higher education. Studies in Higher Education, 34(7), 827–843. doi:10.1080/03075070802706561
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi:10.1191/1478088706qp063oa
- Coll, R. K., & Chapman, R. (2000). Qualitative or quantitative? Choices of methodology for cooperative education researchers. *Journal of Cooperative Education*, 35(1), 25-34.

- Cooper, L., Orell, J., & Bowden, M. (2010). Work-integrated learning: A guide to effective practice. London, England: Routledge.
- Eames, C., & Bell, B. (2005). Using sociocultural views of learning to investigate the enculturation of students into the scientific community through work placements. Canadian Journal of Science, Mathematics and Technology Education, 5(1), 153–169. doi:10.1080/14926150509556649
- Eraut, M. (2007). Learning from other people in the workplace. Oxford Review of Education, 33(4), 403–422. doi:10.1080/03054980701425706
- Fleming, J., & Eames, C. (2005). Student learning in relation to the structure of the cooperative experience. *Asia-Pacific Journal of Cooperative Education*, 6(2), 26–31.
- Hughes, C. (1998). Practicum learning: Perils of the authentic workplace. Higher Education Research and Development, 17(2), 207-227. doi:10.1080/0729436980170206
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge, England: Cambridge University Press. doi:10.1017/CBO9780511815355
- Linn, P. L., Howard, A., & Miller, E. (2004). Handbook for research in cooperative education and internships. Mahwah, NJ: Lawrence Erlbaum Associates.
- Martin, E. (1998). Conceptions of workplace university education. *Higher Education Research and Development*, 17(2), 191–205. doi:10.1080/0729436980170205
- Matson, L., & Matson, R. (1995). Changing times in higher education: An empirical look at cooperative education and liberal arts faculty. *Journal of Cooperative Education*, 31(1), 13–24.
- McCurdy, S., & Zegwaard, K. E. (2009). Faculty voices: What faculty think about work-integrated learning. *Journal of Cooperative Education and Internship*, 43(1), 36–53.
- Merriam, S. B. (1998). Qualitative research and case study applications in education. San Francisco, CA: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL (work integrated learning) report: A national scoping study*. Brisbane, QLD, Australia: Queensland University of Technology. Retrieved from <a href="http://eprints.qut.edu.au/44065/">http://eprints.qut.edu.au/44065/</a>
- Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage.
- Raelin, J., Glick, L., McLaughlin, K., Porter, R., & Stellar, J. (2009). Reflection-in-action on co-op: The next learning breakthrough. *Journal of Cooperative Education and Internships*, 42(2), 9–15.
- Rowe, A., Mackaway, J., & Winchester-Seeto, T. (2012). 'But I thought you were doing that'- Clarifying the role of the host supervisor in experience-based learning. Asia-Pacific Journal of Cooperative Education, 13(2), 115–134.
- Salomon, G., & Perkins, D. N. (1998). Individual and social aspects of learning. *Review of Research in Education*, 23(1), 1–24.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.

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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.

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 (<a href="www.apjce.org">www.apjce.org</a>), 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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