COPYRIGHT NOTICE

Federation
UNIVERSITY • AUSTRALIA

FedUni ResearchOnline

http://researchonline.federation.edu.au

The impact of work-integrated learning experiences on attaining graduate attributes for exercise and sports science students

MELINDA HALL[1]
DEBORAH PASCOE
MEGAN CHARITY
Federation University Australia, Victoria, Australia

Exercise and Sports Science (E&SS) programs at Federation University Australia provide work-integrated learning (WIL) opportunities for students to develop, apply and consolidate theoretical knowledge in the workplace. This study aimed to determine the influence of WIL experiences on achieving common graduate attributes for E&SS students. From a larger study cohort (*N*=80), semi-structured interviews (*n*=4) delved into participant perceptions of graduate attributes and the impact of positive and negative WIL experiences. Using constant comparative analysis, interviews were coded and arranged into lower and higher order themes using the Graduate Employability Skills publication as a framework and the process validated by a WIL colleague. Results showed three out of four essential graduate attributes were developed during all WIL experiences regardless of whether they were positive or negative. These findings have implications for E&SS higher education providers and WIL agencies in ensuring the development of key graduate attributes during all WIL experiences. (*Asia-Pacific Journal of Cooperative Education, Special Issue, 2017, 18(2), 101-113*)

Keywords: work-integrated learning, exercise and sports science, graduate attributes.

Work-integrated learning (WIL) is an important, and in some cases compulsory, aspect of many undergraduate programs within higher education, including Exercise and Sports Science (E&SS) at Federation University Australia. These external placements provide practical opportunities for students (Billett, 2009) and present an avenue for students to gain experience within the E&SS profession as a result of time spent under the guidance of a supervisor (Tinning, Jenkins, Collins, Rossi, & Brancato, 2012; Vågstøl & Skøien, 2011). This practical experience allows students to apply, develop and consolidate the theoretical knowledge that is introduced in the classroom, and is an important activity to prepare students to enter the workforce (Huq & Gilbert, 2013; Lester & Costley, 2010). The term 'work-integrated learning' has been defined in various ways according to the profession in which it is taking place (Patrick et al., 2008). 'Fieldwork' is a common term used in occupational therapy (Crowe & Mackenzie, 2002; Haynes, 2011; Keller & Wilson, 2011), 'internship' has been aligned with sports management programs (Stier, 2013; Young & Baker, 2004) and nursing programs refer to WIL as 'clinical experience' (Cooper, Taft, & Thelen, 2005). Regardless of the key word or phrase used to describe the process, the underlying factor that draws WIL experiences together is that they are designed for students to bridge the gap between their educational setting and entry into the working environment (Haynes, 2011). In this study, the term work-integrated learning (WIL) was used to refer to the experience of undergraduate E&SS students whilst undertaking practicum hours in a workplace setting, under the guidance of an external supervisor.

---

[1] Corresponding author: Melinda Hall, m.hall@federation.edu.au

Work-Integrated Learning and Graduate Attributes

Graduate attributes, sometimes referred to as employability skills (Bowman, 2010), are transferable, non-discipline specific learning outcomes that a university graduate is expected to achieve through their university learning that can be applied in study, work and life (TEQSA, 2012). Graduate attributes are considered to be generic skills, qualities and understandings that are developed by higher education students throughout their time at university (Bowden et al., 2000; Bowman, 2010; Precision Consultancy, 2007). Work-integrated learning provides an opportunity for students to apply their knowledge and skills within a professional setting whilst under supervision (Tinning et al., 2012) and allows the development of key graduate attributes that are transferable across an industry (Huq & Gilbert, 2013). A 2007 Graduate Employability Skills publication (Precision Consultancy, 2007) and a more recent analysis of 36 of 40 listed universities on the Australian Universities website, identified the four most common graduate attributes across the higher education sector. These were, communication, global citizenship, discipline specific knowledge and lifelong learning.

Although graduate attributes are determined at the higher education provider level and embedded at a discipline level (Bowman, 2010; Bridgstock, 2009), the national accreditation bodies who govern specific professional disciplines also play a role in advocating desirable graduate attributes within higher education programs (Nagarajan & McAllister, 2015). Accordingly, graduate attributes derived from higher education providers to meet the specific learning and teaching outcomes of the discipline must also meet the external demands of accreditation bodies.

The E&SS professional accrediting body, Exercise and Sports Science Australia (ESSA), commenced a review in 2008 to create nationally supported accreditation criteria for exercise scientists (Selig et al., 2011). The 2008 review identified the importance of developing specific elements within the exercise science accreditation that aligned with graduate attributes (Selig et al., 2011). Although alternate terms were used throughout the review, the recommended graduate attributes were strongly aligned with three of the four common university graduate attributes. Exercise and sports science graduate attributes currently include communication, discipline specific knowledge and lifelong learning (Selig et al., 2011). The inclusion of graduate attributes in the ESSA accreditation standards assures that higher education providers who deliver E&SS programs take into account and deliver these standards when developing and implementing curricula.

The Australian government, higher education providers and accreditation bodies all advocate that graduate attributes should be key learning outcomes for undergraduate students. However, within an E&SS context, further research is required to determine whether students do, in fact, obtain the desired graduate attributes through completion of an undergraduate E&SS program. Furthermore, research is needed to identify which undergraduate learning settings, lectures, university-based laboratories and/or applied learning settings, such as WIL, contribute to the acquisition and enhancement of graduate attributes.

Theoretical Perspective

Developed in 2002, Illeris' Learning Theory (Illeris, 2003) provided a lens through which this study explored the elements of WIL. Developed from a constructivist perspective from theorists such as Piaget and Dewey (Knowles, Holton, & Swanson, 1998), Illeris' Learning

Theory presents the concept that emotional, motivational and social experiences impact learning and are just as important in the learning process as the cognitive experience (Illeris, 2003). Illeris also considered that learning takes place due to the interaction between the learner and their surrounding environment (Illeris, 2003) which is supported by more recent research (Crebert, Bates, Bell, Patrick, & Cragnolini, 2007; Vågstøl & Skøien, 2011).

This study was based on the experiences of E&SS students who were completing WIL as part of their usual undergraduate program. In order to view WIL from a student perspective, it was important to understand that each student may learn uniquely during WIL due to their past life experiences, the specific WIL environment and their current cognitive, social and emotional levels (Illeris, 2003).

Aims

The data analysed and discussed in this paper was drawn from a larger study which investigated WIL experiences of final year E&SS students and the impact on career choice. This paper focussed on the perspectives proffered by a subset of those participants (*n* = 4) from the broader study.

This study provided an in depth view of E&SS students' perspective of the key graduate attributes developed while on WIL placements. Additionally, this paper explored the ideas and concepts from the student participant perspective to determine what made a WIL experience positive or negative and the impact this may have on attaining graduate attributes.

METHOD

Participants

Following Human Research ethics approval (A13-108), final year E&SS students at Federation University Australia were invited via email to participate in this study. The participants (*n* = 80) were targeted as a sample of convenience due to their current enrolment in the 3rd year WIL course HMPRC3007/3008. This course required students to complete a minimum of 150-WIL hours during their enrolment, including an 80-hour major WIL placement. Prior to enrolling in this final year course, participants had completed a minimum of 150-WIL hours within the E&SS industry during their first and second years of the program.

Phase one of the study involved 20 students who had already completed, or were in the process of completing, their 80-hour major WIL placement within the E&SS industry, completing an online WIL survey. Four of these students volunteered to participate in phase two of the study, the individual interview process, which is the focus of this paper.

Interview

Individual interviews were conducted over a six-week period using either face to face or phone interviews. An interview guide was used (Appendix A) to ensure that the same questions, topics and issues were explored with each participant (Patton, 2002). A combination of semi-structured and open-ended questions allowed the researcher the flexibility to adapt the interview process according to the responses provided. This flexibility also allowed each participant to freely discuss and explore their WIL experiences in greater depth (Patton, 2002).

Each interview was audio-taped and later transcribed verbatim by the researcher. The completed transcripts were sent back to the participants for any corrections, comments and final approval to improve the integrity of the data (Mertler, 2016) before thematic analysis commenced.

Data Analysis

Using constant comparative data analysis (Creswell, 2012), transcripts from the interviews were read and re-read to search for common themes, patterns and significant quotes. Each interview response was coded line by line, with coding memos noted alongside individual transcripts (Skeat, 2010). Raw data was formed into indicators, tabulated for frequency, and then further grouped into several codes (Creswell, 2012). The codes were then grouped into categories that aligned with the Graduate Employability Skills publication (Precision Consultancy, 2007). This process was substantiated by a WIL colleague for investigator triangulation (Patton, 2002), to assess the data and compare results to ensure the data was considered from multiple angles and to remove any potential 'blind spots' (Denzin, 1978; Patton, 2002). This method of analysis built confidence in the results and ensured that bias from the interpretation of raw data was minimized (Patton, 2002).

RESULTS

Descriptive Statistics

The interview participants were three males and one female (Table 1), with a mean age of 21.75 ± 0.5 years. Three out of four participants were studying the rehabilitation minor stream and one participant the coaching stream. This distribution of the minor stream choices of the participants were reflective of the exercise and sports science cohort at the university.

TABLE 1: Descriptive statistics of interview participants

	Gender	Minor Stream Choice	Style of Placement	Site of Placement
Participant 1	Male	Rehabilitation	Strength & conditioning	Regional VFL*
Participant 2	Male	Coaching	Strength & conditioning	Metro VFL
Participant 3	Female	Rehabilitation	Strength & conditioning	Regional netball club
Participant 4	Male	Rehabilitation	Health & wellness	Corporate setting

*Victorian Football League

All interview participants relocated from their home town (home address) to Ballarat (term address) to study the E&SS program at Federation University Australia. The relocation distance ranged from 70 to 3,640 kilometres, the WIL placements varied, and therefore individual experiences differed for each participant. Participant 1 completed all WIL placements, including their major WIL placement, at their term address while Participant 3 completed all WIL placements, including their major WIL placement, at their home address. Participant 4 completed WIL placements at both their term and home address while

Participant 2 initially completed placements at his home address, progressing to term address and finishing his major WIL placement in a completely different city.

Developing Graduate Attributes During WIL Experiences

The first question in the interview process related directly to the attainment of graduate attributes during a WIL placement. Following thematic analysis it was evident that graduate attributes were described by the interview participants throughout the remaining five questions (Table 2).

TABLE 2: Frequency of reporting major themes associated with key graduate attributes responses (n=4).

Graduate Attribute	Communication	Global citizenship	Discipline specific knowledge	Professionalism
Interview question				
1	4	3	3	3
2	0	5	3	0
3	0	3	1	0
4	0	2	1	0
5	1	1	4	1
6	0	2	2	1
Total times reported	5	16	14	5

In response to question one "can you describe what key employability skills you developed while completing your major WIL placement that you could use in other areas of employment?" all four participants listed *communication* as being a key graduate attribute that was developed throughout their major WIL placement. Participants stated that "there were a lot of times when you would have to email a group of people to ask what they were interested in, so you have to know how to send the right emails and talk in the right way" (Participant 4) and "when an athlete came to me there was a sort of interview process - how you hurt yourself? What hurts? Why? and then conveying your information back to them" (Participant 2). Both written and oral communication skills were highly valued by participants to both convey their knowledge and ensure a high level of organisation in their work during their WIL placement.

Global citizenship was reported by three of the four interview participants in response to question one. Participant 1 stated that WIL was about "being out in the world" and completing hands-on tasks while Participant 3 mentioned that their WIL placement was about "learning to interact with different groups of people." Participants reflected that it was their ability to understand and interact with "different personalities" and developing a reliance on other people within the WIL agency that exposed them to working in a global

world. Participant 1 also identified that WIL was an opportunity to work within a business, and with the respective athletes, where the "welfare of those people [athletes]" were part of the student's responsibility. It was apparent that WIL was an opportunity for participants to understand global citizenship by the way in which they, as a current student, were positioned within a workplace and to "understand what people are about" (Participant 4).

Discipline specific knowledge was also mentioned by three of the interview participants in response to question one. Participant 2 summarized the attainment of this graduate attribute with the comment "l would say the employability skills that were enhanced were the actual technical skills that l had [sports trainer]." Work-integrated learning afforded the participants an opportunity to acquire 'hands on' experience by applying the theoretical knowledge they had learnt in the classroom in a practical, real world setting.

When developing lower order themes into more encompassing higher order themes, *professionalism* was a key graduate attribute recognized by participants as being developed throughout WIL placements. The term professionalism was attributed to behaviours such as, how to conduct one's self within the working environment and bringing a positive work ethic into the WIL agency.

When analysing all interview questions for responses that related to graduate attributes, global citizenship through networking and building relationships was reported most frequently. Global citizenship was described 16 times throughout the four interviews (Table 2). Participants stated that "I got to work with a broad range of people that I hadn't done before" (Participant 2) and "I made so many new connections meeting new people…. they will, after placement, come and see me" (Participant 3). Global citizenship was followed closely by discipline specific knowledge and technical skills (mentioned 14 times) (Table 2). Comments such as "I got to fill the role of the head [trainer] so l actually designed the training sessions and designed the progressions and regressions for all the drills" (Participant 1) and "yeah, all the training principles that we're covering at the moment [at the WIL agency] is certainly what l learnt at uni" (Participant 1).

Targeted analysis of the data failed to identify any reference to lifelong learning which has been identified in the literature as one of the common graduate attributes (Precision Consultancy, 2007).

Positive WIL Experiences

Interview participants were asked to consider and describe any positive experiences they had while completing their major WIL placement (question 2). Three key themes emerged following thematic analysis: applying practical skills in an employment setting; networking; and, internal reward.

Two of the participants acknowledged that applying technical and practical E&SS skills in an employment setting was a positive experience, which aligned with the third most common graduate attribute of discipline-specific knowledge. Work-integrated learning placements were recognized by interview participants as an opportunity to practice skills learned at university and as Participant 3 stated, "putting what I've learnt into practice has been huge." The positive experience of applying technical and practical skills during placement was also supported by Participant 2 who reported that "I just practiced actual skills that I needed to perhaps enhance."

The second positive experience theme that emerged was networking within the E&SS industry. Making new connections and meeting new people within the industry was a positive experience for half of the interview participants. Participants identified that networking occurred with agency staff where the major WIL placement was completed and also with clients who used the agency's services. Participant 4 described that "meeting different people, having a chance to talk to people you wouldn't normally interact with if you weren't in that situation" was a key positive experience from WIL. Participant 3 agreed, stating that they "made so many new connections meeting new people."

The final theme that emerged as a positive WIL experience was internal reward and satisfaction. Participants viewed being involved with and influencing clients who used the services of the WIL agency in a constructive manner as a positive experience. Participant 1 stated that "the reward will come from satisfaction from doing a good job." Internal reward and satisfaction was also more important than financial reward for Participant 1, who stated that "the financial reward was not at all there" as a reason for a positive experience. The opportunity to gain employment was indicated by another participant as being a positive experience gained through WIL and stated that "the biggest positive for me was being able to get the employment out of it" (Participant 4).

Negative WIL Experiences: Conflict and Relationships

Interview participants were asked to consider and describe any negative experiences they had while completing their major WIL placement (question 3). This question enabled interview participants to reflect on and discuss openly any undesirable experiences they had faced.

The key theme to emerge as a negative WIL experience was centred on personal conflicts. This included conflicts with the WIL supervisor, other staff at the agency or the clients with whom they worked. Three out of four interview participants considered that "it's the people you work with" (Participant 1) and "I didn't have the best relationship with some of the other people" (Participant 2) which emerged as the key negative experience of WIL placements for E&SS students.

Further exploration of negative experiences revealed how a personal conflict during their major WIL placement impacted their experience, with each participant identifying conflict with a different individual, including the agency supervisor, agency staff and clients. Participant 1 experienced conflict with their supervisor and stated "I went home [after placement] and …was talking to my family and my girlfriend how bad this person was and how it really affected me." Participant 1 approached the personal conflict issue by going about their business and remaining happy and upbeat throughout the placement although the negative feelings continued throughout the WIL placement. However, they considered that if the same situation arose again throughout a WIL placement or future employment, they would be more confident to approach their manager to sort out the situation earlier.

Participant 2 experienced personal conflict with other staff members at the agency and considered the negativity received from other staff came from them feeling threatened by the student's presence. Participant 2 identified two possible reasons for this. Firstly, the participant considered the commencement date of the placement and missing the pre-season tasks [at a VFL club] had a negative impact on their relationship with the WIL agency staff. Secondly, the positive results that Participant 2 achieved with the clients compared to the results achieved by the ongoing staff may also have played a role in creating personal

conflict. Participant 2 stated, "I think there was a bit of negativity from them as they [staff] saw me [student] as an outsider just coming in and taking their sort of jobs even though it was volunteer work."

Personal conflict with clients attending the WIL agency was experienced by Participant 3. Participant 3 reflected that due to completing their major WIL placement in their hometown, in a remote Victorian region, the clients had preconceived knowledge of the WIL student. The participant felt that prior personal knowledge of them led to the need to work harder to gain the professional respect required from the clients with whom they worked. Upon being asked if they would change their major WIL agency if they knew there would be a negative experience with the agency clients, Participant 3 was confident that they would not change or alter where their major WIL placement took place. Participant 3 stated that "I suppose through the club I learnt the things I wouldn't have learnt going to a different club that didn't know me. It sort of helped me with what I needed to improve on."

To a lesser degree, the location of the WIL agency and needing to travel distances to get there was considered to have a minor negative impact on the major WIL placement of one interview participant. The "really high workload" (Participant 4) and being able to balance university, paid employment, WIL and a social life was also considered a negative part of the WIL experience for one interview participant.

DISCUSSION

Developing Graduate Attributes During WIL Experiences

This study explored the development of key graduate attributes during WIL experiences for E&SS students. The impact a positive or negative experience of WIL on graduate attribute development was also examined. Communication (Crebert et al., 2007; Tinning et al., 2012), global citizenship (Davies et al., 2011), and discipline specific knowledge (Tinning et al., 2012) were clearly identified in the current study as graduate attributes that were acquired during WIL placement.

Previous research confirms that these graduate attributes are regarded as essential for higher education providers (Precision Consultancy, 2007) and the E&SS accreditation body (ESSA) (Selig et al., 2011). While there was consensus that three out of the four common graduate attributes were attained during their major WIL placement, different participants focused on different graduate attributes. The varying focus could be attributed to Illeris' Learning Theory (Illeris, 2003) and the perspective that students learn due to unique emotional, motivational and social experiences while on WIL placements. As each participant completed their major WIL placement at a different agency, no two placements were alike, therefore creating a unique environment for each participant to attain various degrees of the four common graduate attributes.

Although three out of four common graduate attributes were identified during the interviews, the depth of participant responses relating to global citizenship are regarded with caution. Global citizenship is an umbrella term that includes aspects of cultural awareness, diversity and community engagement (Bosanquet, Winchester-Seeto, & Rowe, 2014). Interview participants identified that they developed the ability to work alongside people in the world and assisted clients during this process, however did not acknowledge the broader perspective of global citizenship which includes cultural awareness, diversity (Bosanquet et al., 2014), rights, and social justice (Davies, 2006).

Lifelong learning, a commonly identified graduate attribute (Precision Consultancy, 2007), was not mentioned or implied as being important by the participants of the current study. Past research with undergraduate students in E&SS (Tinning et al., 2012) and other allied health disciplines (Keller & Wilson, 2011) also failed to indicate that lifelong learning was identified as a graduate attribute developed through WIL. In contrast, research with multiple post graduate cohorts at Griffith University was able to identify the importance of becoming lifelong learners during post-graduation employment (Crebert et al., 2007). Lifelong learning is currently included in the E&SS accreditation standards for ESSA (Selig et al., 2011) and is a key graduate attribute for many higher education providers (Precision Consultancy, 2007). Although the E&SS study participants failed to identify lifelong learning as being acquired through WIL, in support of Crebert et al (2007) research, lifelong learning may be an attribute that is developed following graduation. Lifelong learning is expected and required as part of the ongoing accreditation process for health professionals, affording students the opportunity to acquire this graduate attribute during post-graduate employment where it may be considered more important.

Positive Experiences During WIL

Participant opinions on what they considered a positive WIL experience varied. Some participants considered applying technical skills in a practical setting as a key positive experience. The current study's results are comparable to Keller and Wilson (2011) and Tinning et al. (2012). Keller and Wilson (2011) identified that 75% of OT students reflected positively on the final WIL placement as an opportunity to augment theory learned throughout their undergraduate program within a practical setting. Directly related to the E&SS industry, research by Tinning et al. (2012) also identified that WIL was an opportunity for final year E&SS students to practice technical skills with clients.

A further positive experience for half the current study's participants was networking. Although research within the physiotherapy field revealed similar findings regarding the use of the term networking, physiotherapy student networking tended to occur across other disciplinary areas rather than with physiotherapy staff alone (Davies et al., 2011). Conversely, research with OT students (Crowe & Mackenzie, 2002; Keller & Wilson 2011) and E&SS students (Tinning et al., 2012) failed to identify similar results regarding the positive aspect of networking across interdisciplinary disciplines; rather networking occurred only within their own discipline.

Participants cited similarities within their key positive experience and some noted differences, which may be explained by the impact of diverse emotional, motivational or social experiences of the participants. Illeris' Learning Theory takes into account the impact of learning due to the interaction between the student and their environment (Illeris, 2003). Similarities noted within the positive experience could be attributed to participants having a comparable role within their WIL placement, such as a strength and conditioning coach, and therefore experiencing WIL in a similar environment.

Negative Experiences During WIL

Supporting the statement "not all WIL experiences are positive" (Nagarajan & McAllister, 2015, p. 285), three out of four participants identified personal conflict as their key negative experience during their major WIL placement. While the overall theme of the negative experience was the same, each participant identified personal conflict with a different individual, including their supervisor, other agency staff and agency clients. Participant

reports of conflict within a WIL placement are consistent with previous research. Tension with WIL supervisors and negative supervisory experiences (Crowe & Mackenzie, 2002; Keller & Wilson, 2011), conflict with other staff members (Keller & Wilson, 2011) and conflict with agency clients (Crowe & Mackenzie, 2002) have all been reported within OT studies.

The unique aspects of a personal conflict experienced during a major WIL placement may be elucidated by the participant's previous life experiences or their current cognitive, social or emotional levels (Illeris, 2003). Respectively, moving across the country to complete an E&SS program with minimal social networks (Participant 1) or completing all placements within the home town where the student is well known (Participant 3) could characterize differences in WIL experiences and therefore learning outcomes. Understanding the origin and impact of a negative WIL placement may be an opportunity for higher education providers of WIL to prepare students to meet these challenges. Previous research has suggested that developing student capabilities to manage a negative WIL experience may assist with improved learning opportunities (Nagarajan & McAllister, 2015). Also, higher education providers should aim to maximise positive outcomes of WIL through directed curricula design (Billett, 2009). Despite an opportunity for higher education providers to maximise student learning through a positive WIL experience, a negative WIL experience may not mitigate the opportunity to embrace valuable learning outcomes.

Regardless of a WIL experience being considered positive or negative, all interview participants reported that key graduate attributes were developed throughout their major WIL placement. The differing views held by E&SS students regarding their WIL experience is supported by Illeris' Learning Theory and his definition of 'experience' (Illeris, 2002). Illeris stated that an experience is shaped by an individual's cognitive, social and emotional dimensions, thus creating a unique experience and individualized learning outcomes from each WIL placement for every E&SS student.

Limitations and Delimitations

This study was subject to a number of limitations and delimitations. Limitations included the survey response rate for phase one of the study, resulting in only four interview participants for phase two. Although interview numbers were not large enough to establish statistical significance, the semi-structured nature of the interviews elicited preliminary data that could direct further research. Delimitations included the use of a sample of convenience from one regional university in Australia. Therefore the results of this study may not apply to other population groups and the cross-sectional research design produced results specific only to the point in time that data was collected.

CONCLUSION

The results from this study have provided insight into the influence of WIL experiences on the development of graduate attributes for E&SS students. Results from the individual interviews determined that the key graduate attributes of communication, discipline specific knowledge and skills, and to some extent, global citizenship, were attained throughout WIL experiences, regardless of an experience being considered positive or negative. The fourth most common graduate attribute, lifelong learning, was not identified by E&SS students as being acquired through their WIL experiences. Given participants deemed that three of the four key graduate attributes were developed through WIL placements, a further avenue to explore would be to identify at which stage (if at all) of an undergraduate E&SS students'

career is the fourth key graduate attribute, lifelong learning, recognized or acquired. Considering that the E&SS accreditation body (ESSA) has labeled lifelong learning as an attribute of exercise scientists, ESSA, alongside higher education providers of E&SS, may be required to delve further into how future exercise scientists can achieve this graduate attribute.

Review and improvement of WIL courses within higher education must also take into account the graduate attributes that are developed, or not developed, throughout WIL, to ensure that they remain at the forefront of curriculum renewal. The monitoring of the achievement of graduate attributes at a course and program level must also be addressed to ensure higher education programs meet external accreditation requirements. Also, taking into consideration the findings that personal conflict may occur during WIL, the inclusion of conflict management and resolution skills within WIL courses may assist students to deal more effectively with negative WIL experiences.

Work-integrated learning is an important component of an E&SS student's undergraduate journey. Ensuring that WIL experiences assist students to achieve both university graduate attributes and those of external accreditation bodies is paramount to the ongoing development of the E&SS industry.

REFERENCES

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

Bosanquet, A., Winchester-Seeto, T., & Rowe, A. (2014). Conceptualising global citizenship: Analysing intended curriculum in Australian universities. In A. Kwan, E. Wong, T. Kwong, P. Lau & A. Goody (Eds*), Research and Development in Higher Education: Higher Education in a Globalized World, 37* (pp. 48-60). Hong Kong, China: 37th HERDSA Annual International Conference.

Bowden, J., Hart, G., King, B., Trigwell, K., & Watts, O. (2000). Generic capabilities of ATN University graduates. Canberra: Australian Government Department of Education, Training and Youth Affairs.

Bowman, K. (2010). *Background paper for the AQF council on generic skills*. Retrieved from http://www.aqf.edu.au/wp-content/uploads/2013/06/Generic-skills-background-paper-FINAL.pdf

Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development, 28*(1), 31-44.

Cooper, C., Taft, L. B., & Thelen, M. (2005). Preparing for practice: Students' reflections on their final clinical experience. *Journal of Professional Nursing, 21*(5), 293-302. doi:10.1016/j.profnurs.2005.07.002

Crebert, G., Bates, M., Bell, B., Patrick, C. j., & Cragnolini, V. (2004). Developing generic skills at university, during work placement and in employment: Graduates' perceptions. *Higher Education Research & Development, 23*(2), 147-165. doi:10.1080/0729436042000206636

Creswell, J.W. (2012). Education research: Planning, conducting and evaluating quantitative and qualitative research. Boston: Pearson Education, Inc.

Crowe, M. J., & Mackenzie, L. (2002). The influence of fieldwork on the preferred future practice areas of final year occupational therapy students. *Australian Occupational Therapy Journal, 49*(1), 25-36. doi:10.1046/j.0045-0766.2001.00276.x

Davies, K., Harrison, K., Clouder, D.I., Gilchrist, M., McFarland, M., & Earland, J. (2011). Making the transition from physiotherapy student to interprofessional team member. *Physiotherapy, 97*, 139-144.

Davies, L. (2006). Global citizenship: Abstraction or framework for action? *Educational Review*, *58*(1), 5-25.

Denzin, N. K. (1978). *Sociological methods*. New York: McGraw-Hill.

ESSA. (2013). A career in exercise and sports science. Retrieved from https://www.essa.org.au/essa-me/essa-students-careers-guide/

Federation University Australia. (2015). Statement of graduate attributes. Retrieved from http://policy.federation.edu.au/university/general/statement_of_graduate_attributes/ch01.php

Haynes, C. J. (2011). Active participation in fieldwork level I: Fieldwork educator and student perceptions. *Occupational Therapy in Health Care, 25*(4), 257-269.

Huq, A., & Gilbert, D.H. (2013). Enhancing graduate employability through work-based learning in social entrepreneurship: A case study. *Education & Training, 55*(6), 550-572.

Illeris, K. (2002). *The three dimensions of learning*. Florida, USA: Krieger Publishing Company.

Illeris, K. (2003). Workplace learning and learning theory. *Journal of Workplace Learning, 15*(4), 167-178.

Keller, S., & Wilson, L. (2011). New graduate employment in New Zealand: The influence of fieldwork experiences. *New Zealand Journal of Occupational Therapy, 58*(2), 30-36.

Knowles, M. S., Holton III, E.F., & Swanson, R.A. (1988). *The adult learner* (6th ed.). London: Elsevier.

Lester, S., & Costley, C. (2010). Work-based learning at higher education level: Value, practice and critique. *Studies in Higher Education, 35*(5), 561-575. doi:10.1080/03075070903216635

Mertler, C. A. (2016). *Introduction to education research*. United States of America: Sage Publications, Inc.

Nagarajan, S.V., & McAllister, L. (2015). Integration of practice experiences into the Allied Health Curriculum: Curriculum and pedagogic considerations before, during and after work-integrated learning experiences. *Asia-Pacific Journal of Cooperative Education*, *16*(4), 279-290.

Occupational Therapy Australia Ltd. (2016). Where do occupational therapists work? Retrieved from https://www.otaus.com.au/about/where-do-occupational-therapists-work

Patrick, C-j., Peach, D., & Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008, December). *The WIL [Work Integrated Learning] report: A national scoping study* [Australian Learning and Teaching Council (ALTC) Final Report]. Brisbane: Queensland University of Technology eprints website: http://eprints.qut.edu.au/44065/1/WIL-Report-grants-project-jan09.pdf

Patton, M. Q. (2002). *Qualitative research & evaluation methods*. United States of America: Sage Publications, Inc.

Precision Consultancy. (2007). *Graduate employability skills*. Retrieved from http://aces.shu.ac.uk/employability/resources/GraduateEmployabilitySkillsFINALREPORT1.pdf

Selig, S., Torode, M., Otago, L., Pascoe, D., Charity, M., Raymond, J., & Groeller, H. (2011). *Curriculum renewal in exercise science (Final Report)*. Retrieved from http://www.olt.gov.au/resource-library?text=Curriculum+renewal+in+exercise+science

Skeat, J. (2010). Using grounded theory in health research. In P. Liamputtong (Ed.), *Research methods in health: Foundations for evidence-based practice* (pp. 106-122). Australia: Oxford University Press.

Stier, W. F. (2013). Sports management internships: From theory to practice. *Strategies: A Journal for Physical and Sports Educators, 15*(4), 7-9.

TEQSA. (2012). TEQSA glossary of terms. Retrieved from http://www.teqsa.gov.au/media-publications/glossary

Tinning, R., Jenkins, D., Collins, J., Rossi, T., & Brancato, T. (2012). Major practicum as a learning site for exercise science professionals: A pilot study. *European Physical Education Review, 18*(2), 239-244.

Vågstøl, U., & Skøien, A. K. (2011). "A learning climate for discovery and awareness": Physiotherapy students' perspective on learning and supervision in practice. *Advances in Physiotherapy, 13*(2), 71-78.

Young, D. S., & Baker, R.E. (2004). Linking classroom theory to professional practice: The internship as a practical learning experience worthy of academic credit. *Journal of Physical Education, Recreation & Dance, 75*(1), 22-24.

APPENDIX A – INTERVIEW GUIDE

The interviews will be semi-structured, with the interviewer exploring the topics raised by the participants.

1. Can you describe what key employability skills you developed while completing your major WIL placement that you could use in other areas of employment?

2. Can you describe what positive experiences you had whilst completing the major WIL placement?

3. Can you describe what negative experiences you had whilst completing the major WIL placement?

4. Can you describe your most significant experience whilst completing the major professional practice placement? Can you explain why you felt it was significant?

5. Do you believe your degree adequately prepared you for your professional practice placements? Can you give examples to explain your answer?

6. Do you have any further comments in regards to your professional practice, whether it's based on your major placement or your three years of progression?

This APJCE Special Issue was sponsored by

Articles in this special issue derive from presentations[1] delivered at the

Australian Collaborative Education Network 2016 Annual Conference, Macquarie University, Sydney, Australia

About the Journal

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

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

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

Submitting Manuscripts

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

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

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

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

Types of Manuscripts Sought by the Journal

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

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

Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research.

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