Pre pre-service teacher training: Professional preparation and work-integrated learning pedagogy

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In order to compensate for a demise in New Zealand's pre-service teacher training, particularly in health and physical education (HPE), a work-integrated learning (WIL) course was added to a Bachelor of Sport and Exercise curriculum. This exploratory research provides insights into the outcomes of twenty-nine final year undergraduate PE students' involvement in teaching, coaching and management of school sports events and activities. The impact of initiatives resulted in enhanced participation, opportunities and engagement in physical education and sport activity for a range of children. Themes emerged from content analysis of student perceptions of individual's learning outcomes. WIL opportunities enabled students to build self-efficacy and career capability despite the COVID-19 restrictions and lockdowns. Findings indicated that from the students' perspectives, school-based initiatives enriched career capability, whilst also requiring adaptability, flexibility and resilience. The WIL experience enabled development of transferable skills and attributes in preparation for pre-service teacher training.

Keywords: Student capability, graduate attributes, teacher training, professional preparation

INTRODUCTION

Major Structural Change in Pre-Service Teacher Training in New Zealand

The positive impact and benefits of work-integrated learning (WIL) related to career education or professional development training in pre-service environments have been highlighted in a number of recent empirical studies (Muyengwa & Thuthukile, 2021; Weldon & Ngo, 2019). This current study expands on previous research by focusing on a case study approach within the localized context of health and physical education (HPE) curricula in New Zealand. Until the early part of this century a student in New Zealand wishing to become a teacher had several options to pursue. They could attend a university, complete an undergraduate or post graduate qualification and then undertake a one-year Graduate Diploma of Teaching. The other option was to enroll at a College of Education. Such colleges typically offered a three-year course for primary or pre-school teaching in the form of a Bachelor of Education, or in secondary teaching a conjoint Bachelor of Education and Diploma of Teaching in a four-year program. These courses provided both the content of the teaching subjects but also extensive teaching placements across three or four years. Such colleges no longer exist in New Zealand. They have amalgamated with universities and Graduate Diploma of Teaching courses, with entry based on completion of an undergraduate degree, are still offered. However, these programs have been somewhat marginalized within universities as the environment for academic staff has seen a shift to achieving research publications that leaves little time for pre-service teacher interaction with students in schools. Pope (2014) referred to this as teacher educator anguish in their changing roles and the difficulty of distinguishing as to "what counts" (p. 504) in their professional lives. He noted this was further compounded by the introduction of Performance Based Research Funding (PBRF) where most teacher educators, newly amalgamated into university environments, received R scores that indicated them as being, not research active. According to Pope, pressure to improve PBRF scores and the university environment resulted in teacher educators prioritizing research outputs over previous pre-

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service teacher education courses. This change in priority resulted in students in Graduate Diploma of Teaching courses in HPE commonly not receiving any practical instruction from academic staff on how to teach movement. All practical learning is now observed while on placement and the quality and diversity of those experiences depends on the three school placements a student undertakes in a single year.

Over the past 20 years, New Zealand has seen the demise in specific pre-service teacher training in almost all subjects, particularly HPE (Pope, 2014; Stothard, 2002). The exception for pre-service primary school teachers has been a focus on literacy and numeracy and to a slightly lesser extent *Te Ao Kori* (Māori language). To some extent this demise has been catered for by promoting integrated curricula where, for example, a mathematics unit covering statistics would include aspects of social studies or sports. However, given that the generalist primary school teacher in New Zealand is typically responsible for all aspects of the national curriculum, how well even this integration can be achieved in specialist subjects such as science, music, art, or PE is typically dependent on the interest of the generalist teacher. Despite or perhaps because of these declines in pre-service teacher training opportunities, universities internationally have continued to strategically increase WIL co-curriculum opportunities for students to enhance graduate attributes for future employability (Oliver & Jorre de St Jorre, 2018).

Enhancing Personal Growth, Capability and Professional Development

A particular outcome of WIL experiences in higher education is students' personal growth (self-actualization), "perceptions of themselves and their capabilities to deal with change and achieve results" (Freudenberg et al., 2013, p. 177). The development of professional capability involves boundary spanning competencies, transferable 'soft' skills, along with discipline specific knowledge (Martin & Rees, 2019b). An important part of the WIL process encourages students to critically reflect (Schön, 1991) through weekly journals on the development of these boundary spanning capabilities as well as gaining a depth of understanding of workplace systems (Gardner, 2017). Fullan and Scott (2014) provided examples of such transferable skills by developing the six Cs of deep learning characterized by Character (self-management - being confident and competent, professional and proactive), Creativity (enterprise - adding value where possible), Collaboration (leadership responsibilities - caring and cooperation), Citizenship (community of practice - developing connections), effective Communication (oral, written and digital) and Critical thinking (reflecting on your contribution).

While the focus of this article is on PE majors, the reality of a PE teacher is that they often coach sports but also the medium for teaching is frequently aligned with sport. Hence an understanding of coaching contexts is also important for PE teachers before they are placed in schools. The WIL course covers coaching contexts of the six Cs, which are highlighted by Stafford (2011, p. 84). "Coaches and athletes highlight the importance of communication in creating an environment that builds athlete Competence, Confidence, Connection, Character, Cooperation and sense of Community" (p. 84). Similarly, Mallett (2013) reinforced the six Cs of Creating, Competence, Confidence, Connection, Character and Caring, as important roles of a coach.

The WIL course also reinforces the four most common graduate attributes highlighted across the Australian higher education sector (Hall et al., 2017) ranked as communication, global citizenship, discipline specific knowledge and lifelong learning. Oliver and Jorre de St Jorre (2018) argued that there should be more emphasis placed on independence, critical thinking and problem-solving, as well as the fundamental foundational skills of written and spoken communication. It was stressed to the

students that the ability to self-assess work-related capabilities and develop insight into the realities of a profession are important outcomes of their WIL experience. It was also noted that these experiences have the potential to enhance confidence, networking, and career planning, as pointed out by Jackson and Wilton (2016).

CONTEXT

A Work-Integrated Learning Development for Physical Education Majors

At Massey University, New Zealand, in their Bachelor of Sport and Exercise degree there were existing WIL opportunities for exercise prescription major students (Hodges & Martin, 2020a, 2020b, 2021) and sport management/sport development major students (Martin & Rees, 2019a, 2019b). However, the previous curricula did not include WIL for PE major students. In 2020, a capstone final year WIL experience was added for PE majoring students in the Bachelor of Sport and Exercise. Previously, the PE major students in this undergraduate degree program have had scaffolded through their degree standard subjects associated with base content knowledge for someone trained in teaching PE. For example, they have completed courses in anatomy, exercise physiology, training principles, biomechanics, and motor learning. They have also been exposed to curriculum documents, as well as sociological and cultural components of the genre. PE majoring students have also received a rich and diverse toolbox of strategies associated with class management, methods and models of instruction, and practical experiences ranging from dance to games and sports, including supervised work in schools, across different age groups. Examples of these strategies have then subsequently been demonstrated by academic staff teaching in local schools. It was hoped that by intentionally embedding WIL, this would provide PE undergraduates with an additional and enhanced curricular experience and help address issues of students being underprepared for entry into Graduate Diploma of Teaching courses and employment post-graduation, due to the lack of well-designed WIL in the previous curriculum.

The WIL opportunities for PE majors have also been integrated with a final year pedagogy class. In this class students have time to reflect and explore aspects of their developing philosophies on what it means to be a teacher of physical education. They are challenged on the purpose of physical education delivered in schools and how they can integrate their developing philosophies into lesson planning. The WIL program has then given them an opportunity to go into schools and try to implement their ideas in lesson format under teacher supervision. The structure of the WIL program allows students to discuss their progress with academic staff as well as keep reflective diaries on their experiences.

The purpose of this paper is to examine how students (*n*=29) of a new WIL course within a Bachelor of Sport and Exercise program at Massey University in New Zealand developed learning opportunities from being placed in schools for their Sport and Exercise Practicum (SEP). The SEP requires students to complete a minimum of 200 hours work designed to provide WIL experiences in sport and exercise areas according to individual interests and experience. Students may choose to undertake a SEP in areas including, but not limited to, sport event management, sport coaching, sport coordination, sport performance, exercise prescription, athlete conditioning and physical education. The aim of this exploratory research is to examine PE major student's perceptions of learning outcomes and practice during their WIL placement in schools. This article reviews students' insights from initiatives that developed and promoted activities for a range of school stakeholders involved in sport and physical education activities.

In 2020 and 2021, sport and recreation activities were significantly limited in schools due to lockdowns and the restrictions enforced by COVID-19 with a need for physical distancing. Many students, particularly in schools, were withdrawn from their work placements due to the lockdowns and were unable to continue with their projects until restrictions were lifted. Many WIL placements were put on-hold, for example, pre-service teaching (Lucas et al., 2021). Placement completion, accreditation compliance and graduation became uncertain. This exploratory study examines the new curriculum introduction of a WIL experience for PE major students, and their learning opportunities and outcomes whilst placed in schools during the COVID-19 pandemic period in 2020 and 2021.

METHOD

The data in this exploratory study was collected from twenty-nine third-year SEP students' perceptions of their learning outcomes from being placed in schools in 2020 and 2021. While exploratory research may not be generalizable, it presents the opportunity to investigate issues and social phenomena that are relatively new, where the aim is to learn more about the topic (Stebbins, 2001), in this case, students' WIL experiences in schools. Nineteen of the respondents were female, and the majority of students aged 20-25 with one over 30 years of age. Students were asked by questionnaire to reflect specifically on three areas: their main work activity; perceived WIL learning opportunities; and overall experience during SEP. The project was approved and deemed to be low risk against the university's research ethics criteria (ethics notification number 4000025373), and information provided for the content analysis was anonymous.

Manual coding was undertaken independently by all three researchers to develop themes from the data from the students' perspectives of their practice (Spencer et al., 2014). The information was then reviewed, discussed and analyzed according to Huberman's (1994) well-established principles of data reduction, data display, conclusion-drawing, and verification to highlight and clarify key themes. All themes presented, were highlighted by each student. It is acknowledged that the small sample size and qualitative approach limits transferability, however given the unique opportunity presented by this initiative for PE students and the challenges of the COVID-19 pandemic lockdowns and restrictions, the data does offer useful insights into the students' learning outcomes from this placement in school WIL experience.

FINDINGS

Activities that the twenty-nine students (using the following student coding, Student X) completed were not limited to, but ranged from assisting with PE teaching, sport coaching, and school event management. For example, students commented that they were "walking away with a portfolio of experiences, new knowledge and knowing what it's like to be in a teaching and coaching environment" (S21), and "directing and managing the school's sport program and sports events (S1). Teaching and coaching opportunities are highlighted in the following student feedback:

Teaching classes provided me with the opportunity to learn about myself and gain a better understanding around my strengths and weaknesses... The people I worked with helped me to understand myself better and gave critical feedback on my projects. (S28)

Although it has been a challenge and frustrating at times, I have enjoyed coaching both the football and hockey teams.... I have gained a great deal of confidence in my ability as both a coach and a teacher. (S13)

Several themes were identified through content analysis of the data from students' responses. These included enhancing career capability and developing graduate attributes of character (self-management), creativity (enterprise), effective communication, citizenship (community of practice networking), and collaboration (leadership responsibilities). The experiential learning process involving critical thinking was also highlighted as an important theme of the WIL experience. Each theme will be discussed in turn, and example quotes are provided below using the following student coding (Student X).

Career Capability

The findings highlighted the importance of the work that students completed during this time, which added value for the school involved. Many of the initiatives provided activity that was new and not already available, for example sport coaching and event activity. This work added some normality and replaced planned activity that could not happen due to the COVID-19 restrictions around physical activity and sport. Each of the initiatives was targeted and group specific, for example coaching junior sport, lunch time and after school programs, and school sport events.

The following feedback illustrates development of the students' career capability. "This [WIL experience] has been great as it has allowed me to gain basic skills in this career, therefore moving forward into my profession I will be confident and somewhat experienced" (S6). "I have thoroughly enjoyed every moment of this [WIL experience]. I started with a lot of nerves and lack of knowledge but left with a great deal of skills and confidence" (S13). The WIL experience has provided students the opportunity to develop discipline area skills along with boundary spanning competencies, as noted in the following comments. "I have developed many skills that will be beneficial for my career in the sports industry for the future" (S1). "I have learnt a lot about the breadth and scope of this sector of the workforce" (S5).

The importance of this WIL course for the undergraduate PE major students is reflected in their comments relating to the extended experience of an authentic context and the application of the practical and theoretical experiences of their time at the university when placed in a school. A theme repeated in the review comments of students was related to career direction, as noted in the following typical comments. "This [WIL experience] delivered a hands-on experience of what it would be like to be a PE teacher across primary and secondary school years" (S30). "My placement gave me an insight into what it is like working in the school environment and what this career path may look like" (S5). The following feedback also highlighted that the WIL experience resulted in a change in career direction, which was regarded as a positive learning outcome:

I have been studying sport and exercise at (majoring in physical education) for nearly 3 years. Until my [school placement] I had no experience with being placed in a school. I had no experience with putting the theory into practice beyond with just my peers in class. This [WIL experience] gave me that opportunity which was something very positive, even though my general experiences were negative and I did not exactly enjoy PE teaching. This negative was actually a positive, because having that chance to put theory into practice prevented me from making the mistake of continuing down the PE pathway. I am now going to apply for postgraduate study in primary, and I am now confident on this decision. So overall, I wouldn't say I had a positive or a negative experience, it was a mixture between both, which resulted in a positive outcome for my long-term career. (S8)

Character

The WIL opportunity in schools enabled the students to work independently and increase their self-confidence, belief, and awareness, as indicated in the following students' comments. "This [WIL experience] has been hugely beneficial for my confidence in public speaking, improving my decision making and ... I have learnt many things about myself" (S1). "The most significant achievement has been growth in my confidence and capability, which is a direct result of the [WIL] experience developing my competency to perform these tasks to an outstanding level" (S29). Another important learning experience noted by many of the students was related to time management. When one must front a class to teach a lesson or coach a session there is no-where to hide. You must be prepared and that requires significant planning and organization. Many students commented that this aspect was at times challenging, but also rewarding, and it quickly became a habit-forming aspect of their WIL experience. "I learnt how to manage my workload and keep on top of my work" (S10). "Managing several projects happening at once allows opportunities to learn to prioritize tasks" (S24). "I learnt the importance of time management and being organized in order to get the best outcome" (S28).

Creativity

The government restrictions and requirement for social distancing (2m) ensured that students needed to be creative, proactive and push their comfort zones in developing appropriate physical activity. "The school year and sport particularly were interrupted because of COVID-19. I was able to have first-hand experience in working through such a challenging event, which may prove useful in the future" (S16). Examples of how the students adapted are noted in the following students' activities: "Updating student notices and school sports social media (created Facebook School Sports page during COVID-19 for students to stay engaged) for upcoming sports competitions/events" (S1). Another student "created online fitness programs [for the students] during the COVID-19 lockdown" (S4) while another found that:

My most enjoyable task of the whole [WIL experience] was taking the year 10 anatomy unit, as I planned it and ran it on my own which built my confidence hugely. It was awesome to do things my own way and to put my knowledge and skills to the test. (S6)

Citizenship

The students created networks and learnt "to build and maintain relationships with different stakeholders" (S15)... "students, staff, parents, coaches and the wider community" (S1). "I've gained an incredible, supportive network and encouraging group of teachers who have allowed me to grow and step outside my comfort zone" (S4). One student noted how they were able to learn how to "provide pastoral support to pupils across all years, especially as they navigate the 'new normal' post-COVID-19" (S29).

Effective Communication

A variety of communication skills were developed "with a range of unique and diverse staff members and parents" (S4). For example, communication opportunities involved "particularly public speaking, emails... interpersonal relationship skills and public relations (S1). "The experience taught me that confidence and communication is key to working with children" (S20).

Collaboration

Students were able to take leadership responsibility and ownership for their projects, as they were often working independently without direct supervisor input. For example, students taking responsibility and designing, creating and implementing initiatives included: "creating my own projects/ideas and implementing them throughout the school" (S22). "Working in a team and individually with internal and external individuals and organizations has made huge improvements in my self-confidence and abilities to take leadership in a wide range of situations" (S23). The WIL experience provided "opportunities to develop leadership skills through taking on new tasks which are challenging and outside of your comfort zone "(S24).

Critical Thinking

This experiential process has provided the students opportunities to develop as reflective practitioners. The benefits of reflecting on action are highlighted in the following comments. "Feedback and self-reflection have allowed me to see [areas of] weaknesses that I can develop in future" (S11). "I initially resented the reflection process but grew to love it as the [WIL experience] continued. It was great to see my development and constantly reflect and connect to prior learnings. This is something I would like to continue "(S5). "This experience has definitely been rewarding and worth my while. It has been awesome reflecting on my time spent at the school and on the positive comments I have received from the students and staff" (S6). "At the start of the year I had no coaching experience at all. This course has helped me work on self-reflection, which is the key reason for my coaching techniques improving" (S15).

DISCUSSION

Intentionally embedding WIL opportunities for undergraduate PE major students in schools has enhanced students' learning outcomes and practice and addressed issues of them being underprepared for entry into Graduate Diploma of Teaching courses and employment post-graduation due to the lack of well-designed WIL in the curriculum previously. These findings from the students' WIL experiences in schools have highlighted their development as reflective practitioners (Schön, 1991), and of boundary spanning competencies related to Fullan and Scott's (2014) six Cs of deep learning: Character (self-management) Creativity (enterprise), Collaboration (leadership responsibilities), Citizenship (community of practice, networking), Effective Communication and Critical thinking. This exploratory research supports findings related to attributes of sport and exercise graduates noted in previous studies (e.g., Hodges & Martin, 2020a, 2020b, 2021; Martin & Rees, 2019a, 2019b). The attainment of these learning outcomes, during the period of COVID-19 lockdowns and restrictions points to students' flexibility, adaptability and resilience, as noted by Lucas et al. (2021). While it is acknowledged that the small sample size is a limitation of this exploratory study, it is hoped that findings will inform further research focused on gaining insights into students' learning outcomes from similar WIL experiences in schools.

The current findings indicated that the WIL initiatives in schools enhanced students' self-actualization (personal growth) and provided the opportunity to enhance the students' credibility and reputation working in schools. Typical student comments highlighted that the WIL experience provided increased "self-confidence – learning to gain a voice to provide ideas where you can. Improvement of public speaking and self-belief. I have learnt so much more about myself including the improvement upon my self-confidence, independency, leadership and management skills" (S10).

The students were able to adapt to a rapidly changing sport environment and develop generic and specialist skills through this unique WIL experience. Lyons and Brown (2003) pointed out that such students are most likely to be well placed to take advantage of future change. The findings indicated that the WIL opportunity in schools enabled the students to work independently and increase their self-confidence, belief, awareness and appreciation of their 'normal' work and personal life. Enhancing such aspects of self-management (Leong & Kavanagh, 2013) and self-efficacy (Freudenberg et al., 2013) are central to professional capability development through WIL experiences (Gardner, 2017).

Throughout the WIL experience students needed to be creative, proactive and push their comfort zones in developing appropriate physical activity for their different school groups. Rampersad and Zivotic-Kukolj (2018) argued that the WIL experience is crucial in facilitating such opportunities, as it provides an experiential approach in nurturing innovation by creating new services.

The students' engagement with school stakeholders to learn professional skills provides an example of 'situated learning' (Lave & Wenger, 1991) in physical education (Kirk & Macdonald, 1998). The students' WIL experience provided career mentoring, development and networking (Jackson & Wilton, 2016) opportunities, which enhanced their 'community of practice' (Wenger et al., 2002). These relationships and professional networks are particularly valuable in the sport industry (Fleming et al., 2009) in terms of potential future employment opportunities.

A range of communication skills were developed, which are highly ranked graduate attributes (Hall et al., 2017). Both oral and written skills have been emphasized in enhancing employability (Oliver & Jorre de St Jorre, 2018), but this school-based opportunity also reinforced the importance of digital skills in the future of work (Jackson, 2018).

Students highlighted leadership responsibility and ownership for their activities whilst working independently of their supervisors. This is an interesting and positive finding as previous research by Martin and Rees (2019a) reported in their study that few students realized that their WIL experiences had developed their leadership, despite the students being placed in positions of responsibility during activity based at or through their industry workplace.

The WIL course provides an integrated learning opportunities for PE major students from an advanced sport pedagogy course. Work within that pedagogy course, based on an interpretation of Skains (2018) creative practice in research, requires students to consider their epistemological and ontological positions regarding the purpose and point of the teaching PE in a school context. The WIL placement then gives them an authentic context to test their beliefs. The positive endorsement from PE major students for this WIL program has largely focused on their immersion within the authentic context for learning. For example, although students had previously worked in other courses with school students, those earlier experiences have largely been a sheltered one, that is, controlled and directed by academic staff for short periods of time. Hence, a theme from the feedback was related to the benefit of developing career capability being in an authentic learning environment, as noted by the following student comment. "I learnt first-hand professional approaches to engaging with parents" (S2). Another factor that was noted by several students as a positive learning experience was to do with the withdrawal of the close guiding hand of academic staff, and the transition to a more mentoring approach by supervisors, as highlighted by Martin et al., (2019). This approach provided more ownership of their projects, as pointed out by the following student feedback. "The opportunity and responsibility of taking ownership of my work and teaching projects" (S3).

Another key component for PE major students in this WIL experience was learning to understand and how to negotiate their way within a department of experienced professionals. These insights highlight the importance of situated learning (Lave & Wenger, 1991) in WIL program design (Kirk & Macdonald, 1998). The mentoring and support that teaching staff provided have played an important role in the learning experience and provide further evidence of community of practice development (Wenger et al., 2002). These points are highlighted in the following student's feedback:

Colleagues who have taught me valuable skills and fundamentals that I never knew before. My support staff at [school] are great. They provide me with constructive feedback as well as offering plans and help to assist and guide me into the right direction. I have hugely benefited from watching my colleagues and seeing how they interact with students as well as how they structure their lessons. I have been able to incorporate those learnings into my own personal development. I have grown immensely as a teacher, coach developer and a person. I am very grateful for the opportunity. There have been so many challenges, yet so many successes and learnings that I will take away and cherish. I have been pushed outside of my comfort zone - as a teacher and coach I have grown immensely. (S18)

Minor school management aspects were also commented on too such as: "Oversee management and daily control of all sports equipment used by classes and PE shed. Liaise with office staff to ensure effective system operates with management, distribution and retrieval of all sports uniforms" (S22). Referee forms for students wishing to graduate from this degree to a Graduate Diploma of Teaching have as a base question: 'How do you think the student will work with colleagues in a school department?' Supervisor feedback from the WIL experiences allowed for a realistic appraisal to this question.

The WIL experience also fulfills another experience that until relatively recently was available to students in pre-teacher education programs that operated in Colleges of Education in New Zealand. Part of the value of these courses rested on lecturers from major subjects visiting students on their teaching placement. While the students were learning from on-site professional teachers, they also received feedback from their lecturers. This cross referencing to learning in authentic teaching contexts ensured pre-service teachers received the best of both worlds, namely the pragmatic context of how to make sure teaching took place but also perhaps the reflective position of a lecturer steeped in the practical and theoretical aspects of the profession.

Whilst the WIL experience, did not replicate exactly the previous College of Education experience it did offer to students in this program both a holistic learning experience with practicing teachers but also time for discussion and reflection on those experiences, with university classmates and academic staff. This WIL experience and related reflection are extremely important components of the WIL program in terms of helping the student to better understand their philosophy towards teaching PE and deciding whether to pursue a pre-service teacher program. The on-campus discussion also allows for cooperative planning between students and staff and the chance to review methods and models of learning taught previously and how to integrate them into their placement. The following comment by a student reflecting on their WIL experience provides a view of the experience commented on by many students linked to the development of graduate attributes focused on self-management and leadership, but also specific application of teaching theory into practice:

[The WIL experience] has developed confidence levels, extended my professional networks and my personal and professional identity. I made great improvements in self-confidence and ability

to display leadership in various situations. Through observation of my supervisor, I learnt through their actions and procedures to understand the reasoning behind these decisions as well as the effect they have. (S7)

CONCLUSION

This student-based research links learning outcomes to WIL experiences in a physical education context. Whilst the transferability may be limited to similar such practice, the data is nevertheless very useful to support future WIL program design. The impact of these school-based WIL experiences for students enhanced participation opportunities and engagement for the school children in a variety of physical and sport activity. The findings of this exploratory study indicated that from the students' perspectives the school-based WIL experiences were an effective way of enriching capability, adaptability, flexibility, and resilience. In particular, the development of boundary spanning transferable skills and graduate attributes such as self-management, enterprise, leadership, networking, and effective communication. The experiential learning process involving critical reflection and the mentorship of academic and school-based supervisors were also highlighted as an important part of the pedagogical WIL process. These new school-based WIL opportunities for PE major students provided opportunities for independent and innovative creative work, and enabled them to build self-efficacy and career capability despite the challenges relating to COVID-19 lockdowns and restrictions. The significance of these findings involve intentionally embedding WIL opportunities for undergraduate PE major students in schools, which have enhanced the curriculum and students' learning outcomes and practice in preparation for entry into Graduate Diploma of Teaching courses and employment post-graduation. Further research should focus on better understanding not just what but how students learn through eliciting more explicit descriptions of the nature of particular experiences from such curriculum-based WIL opportunities. Initial feedback from Institute of Education staff, regarding the WIL students who then enter the Graduate Diploma of Teaching course at both secondary and primary level has indicated that they display in general, greater confidence and initiative in their teaching, as well as familiarity with school management protocols than other students in this program. Subsequently, the feedback the Institute of Education received on these students from school placements was more positive than that of other students and helped in their ability to secure positions on graduating from the course.

REFERENCES

- Fleming, J., Martin, A. J., Hughes, H., & Zinn, C. (2009). Maximizing work integrated learning experiences through identifying graduate competencies for employability: A case study of sport studies in higher education. *Asia Pacific Journal of Cooperative Education*, 10(3), 189-201.
- Freudenberg, B., Brimble, M., Cameron, C., MacDonald, K., & English, D. M. (2013). I am what I am: Am I? The development of self-efficacy through work integrated learning. *The International Journal of Pedagogy & Curriculum*, 19(3), 177-192.
- Fullan, M., & Scott, G. (2014). Education PLUS: The world will be led by people you can count on, including you! Collaborative Impact
- Gardner, P. (2017). Flourishing in the face of constant disruption: Cultivating the T-professional or adaptive innovator through WIL. In T. Bowen & M. Drysdale (Eds.), Work-integrated learning in the 21st century: International perspectives on education and society (Vol. 32, pp. 69-81). Emerald.
- Hall, M., Pascoe, D., & Charity, M. (2017). The impact of work-integrated learning experiences on attaining graduate attributes for exercise and sports science students. *Asia-Pacific Journal of Cooperative Education*, 18(2), 101-113.
- Hodges, L. D., & Martin, A. J. (2020a). Non-placement WIL: The case of an exercise prescription clinic. *Journal of University Teaching & Learning Practice*, 17(4), 1-8.
- Hodges, L. D., & Martin, A. J. (2020b). Enriching sport and exercise WIL student capability during a global pandemic (Covid-19). *International Journal of Work Integrated Learning*, 21(4), 415-423.
- Hodges, L. D., & Martin, A. J. (2021). Enriching client's lives and student learning through a university WIL exercise prescription program. *International Journal of Work Integrated Learning*, 22(1), 97-105.

- Huberman, M. (1994). Research utilization: The state of the art. *Knowledge & Policy*, 7(4), 13–33. https://doi.org/10.1007/BF02696290
- Jackson, D. (2018, June 22). Work-integrated learning in support of digital futures. Education Technology Solutions. https://educationtechnologysolutions.com/2018/06/work-integrated-learning-in-support-of-digital-futures/
- Jackson, D., & Wilton, N. (2016). Developing career management competencies among undergraduates and the role of work-integrated learning. Teaching in Higher Education, 21(3), 266-286. https://doi.org/10.1080/13562517.2015.1136281
- Kirk, D., & Macdonald, D. (1998). Situated learning in physical education. *Journal of Teaching in Physical Education*, 17(3), 376-387. https://doi.org/10.1123/jtpe.17.3.376
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge University Press.
- Leong, R., & Kavanagh, M. (2013). A work-integrated learning (WIL) framework to develop graduate skills and attributes in an Australian university's accounting program *Asia-Pacific Journal of Cooperative Education*, 14(1), 1-14.
- Lucas, P., Wilkinson, H., Rae, S., Dean, B., Eady, M., Capocchiano, H., Trede, F., & Yuen, L. (2021). Knowing me, Knowing you: Humanitas in work-integrated learning during adversity. *Journal of University Teaching & Learning Practice*, 18(7), 159-176. https://doi.org/10.53761/1.18.7.10
- Lyons, K. D., & Brown, P. (2003). Enhancing the employability of leisure studies graduates through work integrated learning. $Annals\ of\ Leisure\ Research,\ 6(1),\ 54-67.\ \underline{https://doi.org/10.1080/11745398.2003.10600909}$
- Mallett, C. (2013). Roles and responsibilities of the coach. In F. Pyke (Ed.), Coaching excellence (pp. 3-11). Human Kinetics.
- Martin, A. J., & Rees, M. (2019a). Student insights: The added value of WIL. *International Journal of Work Integrated Learning*, 20(2), 189-199.
- Martin, A. J., & Rees, M. (2019b). Student insights: Developing T-shaped professionals through WIL. *International Journal of Work Integrated Learning*, 20(4), 365-374.
- Martin, A. J., Rees, M., Fleming, J., Zegwaard, K., & Vaughan, K. (2019). Work integrated learning (WIL) gone full circle: How prior work placement experiences influenced workplace supervisors. *International Journal of Work Integrated Learning*, 20(3), 229-242.
- Muyengwa, B., & Thuthukile, J. (2021). Contexts of work-integrated learning in schools for pre-service teachers: Experiences of field placement in Zimbabwe. *International Journal of Work Integrated Learning*, 22(1), 107-119.
- Oliver, B., & Jorre de St Jorre, T. (2018). Graduate attributes for 2020 and beyond: Recommendations for Australian higher education providers. *Higher Education Research & Development*, 37(4), 821-836.
- Pope, C. C. (2014). The jagged edge and the changing shape of health and physical education in Aotearoa New Zealand. *Physical Education and Sport Pedagogy*, 19(5), 500-511. https://doi.org/10.1080/17408989.2013.837440
- Rampersad, G., & Zivotic-Kukolj, V. (2018). Work-integrated learning on science, technology, engineering and mathematics: Drivers of innovation for students. *International Journal of Work-Integrated Learning*, 19(2), 193-204.
- Schön, D. A. (1991). The reflective practitioner: How professionals think in action. Arena.
- Skains, R. L. (2018). Creative practice as research: Discourse on methodology. *Media Practice and Education*, 19(1), 82-97. https://doi.org/10.1080/14682753.2017.1362175
- Spencer, L., Ritchie, J., O'Connor, W., Morrell, G., & Ormston, R. (2014). Analysis in practice. In J. Ritchie, J. Lewis, C. M. Nicholls, & R. Ormston (Eds.), *Qualitative research practice: A guide for social science students and researchers* (2nd ed., pp. 295–346). Sage.
- Stafford, I. (2011). Coaching children in sport. Taylor & Francis.
- Stebbins, R. A. (2001). Exploratory research in the social sciences. Sage.
- Stothard, R. (2002). Policy reports and physical education. Journal of Physical Education New Zealand, 35(1), 3-11.
- Weldon, A., & Ngo, J. K. (2019). The effects of work-integrated learning on undergraduate sports coaching students' perceived self-efficacy. *International Journal of Work Integrated Learning*, 20(3), 309-319.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). Cultivating communities of practice. Harvard Business Press.