Realizing the professional within: The effect of work integrated learning

KIRSTEN MACDONALD
CRAIG CAMERON
MARK BRIMBLE
BRETT FREUDENBERG[1]
DIANNE ENGLISH
Griffith Business School, *Griffith University*, Brisbane, Australia

With a government agenda to increase university participation, and larger numbers of students being 'first-in-family' to attend university, students have a limited understanding and appreciation of their chosen profession. Adverse implications include reduced motivation towards study and non-appreciation of the required skills to succeed in the work force. Work integrated learning (WIL) can provide these career skills and understanding. This article analyses whether students undertaking an external off-campus internship in their 2nd and 3rd years of a business degree assists in 'realizing the professional' within. Building on prior research for 1st year students, the article examines the effects on students' professional skills and professional identity of an off-campus internship while studying part-time. The results demonstrate the important role of WIL, with WIL students demonstrating greater improvement in professional skills and professional identity. Resources for WIL should be provided to conform to the government's aspiration for greater university participation. *(Asia-Pacific Journal of Cooperative Education, 2014, 15(2), 159-178)*

Accounting and financial planning in Australia are positioned at different points of the professional spectrum. Whilst accounting is an established profession with a rigorous educational framework, financial planning is in the process of establishing its professional identity through improvements to formal education and training standards (Australian Securities and Investments Commission [ASIC] , 2011; Financial Planning Association of Australia [FPA], 2011). The involvement of financial planners and advisors in corporate collapses such as West Point, Opes Prime and Storm Financial has been a catalyst for the movement towards professionalization. Students commencing a business degree in both accounting and financial planning, particularly those students who are first in family to attend university have limited awareness of re their chosen profession. A lack of professional awareness can negatively impact student self-efficacy, academic performance, generic skills development, motivation and retention as well as increase the risk of students pursuing an "uncongenial calling" (Dewey, 1916). Work integrated learning (WIL) programs, when developed and delivered in conjunction with industry and professional associations, can improve professional awareness, generic skills and student work readiness (Brimble, Cameron, Freudenberg, Fraser, & MacDonald, 2012) which in turn could improve specific constructs such as self-efficacy.

This article reports the findings of a WIL business degree, during which students undertake an external off-campus internship in financial planning or accounting while completing their business studies part-time. Self-reported measures of student development over two years in terms of professional identity, professional skills and confidence within the students' chosen profession were used. The literature review presents the importance of professional identity and understanding and the potential WIL has in its development. The design of the professional degree(including internship) as well as the research method is

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[1] Corresponding author: Brett Freudenberg, b.freudenberg@griffith.edu.au

then discussed. This is followed by a discussion of the results. The final sections consider limitations and the potential for further research, before concluding.

THEORETICAL BACKGROUND

What it means to be an accountant or financial planner has changed in the post global financial crisis environment. The foundations of both accounting and financial planning have been rocked in the wake of large corporate failures due to fraud and mismanagement. Importantly, professional error is less often associated with deficient knowledge and skills and more to do with judgment, values and professionalism. In other words, "'who they are influences how they practise" (Forsythe, 2005, p. S112). But, in describing the molding of an ideal accountant, Coffey (1993) and Haynes (2006) emphasize the importance of the whole package, including the technical, behavioral and embodied attributes required. The challenges in creating well-rounded professionals are captured in the practical and theoretical debate which highlights multiple conceptualizations of graduate attributes, a divide between employer needs, graduate student attributes and students' understanding of employer expectations, and heterogeneous skills demanded by different employers (Barrie, 2007: Kavanagh & Drennan, 2008; Tempone et al., 2012). An important determinant of graduate success in the workplace has been described as 'graduate attributes' rather than a student's specific degree (Harvey, 2000). Graduate attributes are also known as core competencies, transferable skills or generic attributes of graduates (Barrie, 2007).

PROFESSIONAL IDENTITY AND SKILLS

Studies of professional socialization examine the way in which professional identities are formed (Anderson-Gough, Grey, & Robson 2000, 2001, 2004; Coffey, 1994). Professional identity varies at the individual level because individuals define themselves according to their own attributes, beliefs, values, motives and experiences (Ibarra, 1999). Additionally, professional and organizational discourses constrain and shape professional identity through history, culture, values and the expectations adopted (Anderson-Gough, Grey, & Robson, 1998a, 1998b; Ibarra, 1999; King & Ross, 2004). King and Ross (2004, pp. 53-54) define professional identity as being:

> …constructed through interactions and relationships between people. It is not a fixed 'label' that comes ready-made with membership of a particular group, demanding the acting out of a set role content. Rather, it is an on-going process in action, whereby people recreate and negotiate role performance with each social encounter.

Professional identity therefore develops over time and through stages of career progression (Levinson, Darro, Klein, Levinson, & McKee, 1978; Super, Savickas, & Super, 1996). Yet evidence on active development techniques suggests that the university curriculum can be designed to actively foster professional identity by providing opportunities to reflect on feedback and increase self-awareness, develop students' capacity to interact with the complexities of their environments and to experiment with trial identities (Boud & Falchikov, 2006; Hall, 2002; Ibarra, 1999; Kegan, 1994). Since professional identity and skills are interrelated, curriculum design can also be used to address deficiencies in professional skills. Franz (2008) notes the importance of skills transfer and adaptability, with Hall (2002) noting that only with a sufficient level of identity awareness can adaptability be fully exploited.

Following the agenda set by bodies such as Business Industry Higher Education Collaboration Council (2007) and Australian Joint Accounting Bodies (2008), universities have attempted to embed graduate attributes and non-technical skills in the business curriculum. Several studies have addressed which skill areas to address. Goetz, Tombs, and Hampton (2005, p. 232) raise concerns that financial planning students "often graduate with little understanding of the realities of the financial planning business". Similarly, Kavanagh and Drennan (2008) identified 'business awareness' and 'awareness of the real world' as two of the top three employer concerns. Their work revealed that both employers and students believe that tertiary programs in accounting are failing to sufficiently develop the non-technical and professional skills of students. Tempone et al. (2012) identify the top four skill areas as the ability to exercise judgment, communication, teamwork, and self-management. Although their ranking of skills differs from Kavanagh and Drennan (2008), they reveal different contextual settings of employers' expectations. Arguably, students are more employable with an established foundation in a wide range of skills, since Tempone et al. (2012) identified firms as having limited ability to train. Consequently, the challenging and authentic experiences provided by WIL are ideally suited to developing professional identity and skills in professional education (Forsythe, 2005; Jackling & Sullivan, 2007).

WORK INTEGRATED LEARNING (WIL)

WIL is typically described as "educational programs which combine and integrate learning and its workplace application, regardless of whether this integration occurs in industry or whether it is real or simulated" (Atchison, Pollock, Reeders, & Rizzetti 2002, p. 3). There are a number of terms used to describe WIL, including cooperative learning, service learning, and industry based learning, however, the term WIL is used in this article for consistency. The contemporary view has a stronger focus on industry partnerships. "Professional learning is the development of professional capabilities through teaching and learning experiences and activities that integrate academic, discipline-specific and industry-referenced knowledge, skills and attitudes" (Lawson, Fallshaw, Papadopoulos, Taylor, & Zanko, 2011, p. 63).

Benefits of WIL have been well documented and reviewed in studies by Freudenberg, Cameron, and Brimble (2009, 2010 & 2011) and Brimble, Cameron, Freudenberg, Fraser, and MacDonald (2012) who demonstrate the importance of an integrated WIL program incorporating strong disciplinary and industry links in both on and off-campus activities. Like Harrison (2010), they provide empirical evidence that students benefit from internship activities with a reflective focus and exposure to professional socialization opportunities. Reflection is a complex but necessary component of WIL. Not only does engagement in professional practice assist in developing reflective practice skills (Boud & Falchikov, 2006), but it supports the formation of new knowledge as students unpack their workplace experiences within the theoretical frameworks learned in their university studies. Nevertheless, students need support to develop these reflective capabilities (Fleming & Martin, 2007), which can be through mentoring and scaffolding.

A major difference between WIL experiences is the presence or lack of an integrated support structure and opportunities for professional socialization, including mentoring and networking. Kram (1985) identifies the cultivation of professional identity as one of the most important functions of mentoring. Although mentoring often occurs on a one-to-one

basis, interestingly, multiple mentor relationships are shown to be associated with work satisfaction, attitudes towards the workplace, organizational retention and promotion, and career success (van Emmerik, 2004; Baugh & Scandura, 1999; de Janasz, Sullivan, & Whiting, 2003; Higgins & Thomas, 2001). When coupled with social and structured support, professional socialization can improve students' fit with an organization and profession, better meet their learning needs and reduce dissatisfaction (Allen & Peach 2007; Coll, Pinyonatthagan & Pramoolsook 2003; Eames 2000; Harrison 2010). In a discipline specific context, WIL experiences that incorporate networking and mentoring improve confidence in job interviews and in commencing an accounting or financial planning career (Freudenberg et al., 2010).

This article extends the prior study of Freudenberg et al. (2009) by exploring the development of professional identity and skills during the students' two internship years. The following section will describe the research methodology, the design of the professional degree and highlight the ways in which it provides the necessary academic and social support, feedback and opportunities for reflection.

RESEARCH METHODOLOGY

This study employs a longitudinal survey methodology to examine the impact of the professional degree (years 1-3) and its internship experience (2nd and 3rd year) for the professional degree students (PDS) in terms of their self reported professional skills, vocational skills and professional identity. The instrument was administered at the start of the university year in 'orientation week' prior to commencing class. The instrument was re-administered at the start of second year, third year (after one year of the internship) and for a fourth time at the end of third year to gauge the level of student development. A control group of students (CG) in a similar degree not including an internship were surveyed at similar times. The data for the first 12 months of experience was reported elsewhere, and is briefly referred to here (see Freudenberg et al., 2009).

Two cohorts of PDS were surveyed, being those commencing in 2008 and 2009. Similarly, a number were surveyed for the CG. The data for these cohorts have been aggregated to allow for analysis of the overall experience of the students. This data is employed to examine two primary research questions. Firstly, does the internship improve students' confidence and skills in dealing with their chosen profession? Secondly, does participation in the internship increase students' identity with their chosen profession?

DESIGN OF THE PROFESSIONAL DEGREE

The Bachelor of Commerce (Professional) degree creates a meaningful link between study and career, and engages industry in the learning process (the professional degree). The professional degree is a three year degree offering majors in accounting and financial planning. The professional degree incorporates a two year paid internship together with the professional development program (PDP) as a continuing orientation program to ensure that students are adequately equipped and supported for the WIL experience. Students study in a trimester mode, completing 12 out of 24 courses towards their degree in their first year of full-time study. Towards the end of the first year, students may apply for paid internship positions with industry partners. Unsuccessful students complete their degree full-time within two years. Successful students convert to part-time study (2 courses per trimester) in their second year while undertaking their internship three or four days per

week. The trimester mode allows interns to complete their degree at the end of three years with the added benefit of an internship of at least 1920 hours.

The PDP is integrated, continuous and delivered to commencing and continuing students prior to the start of each trimester (known respectively as PD#1, PD#2 and PD#3). The PDP is designed for the support and systematic development of students' professional skills and awareness, industry knowledge, generic skills and self-efficacy by structuring activities based on students' progression (1st, 2nd or 3rd year). A critical element to the success of the PDP is industry partner involvement in delivering sessions and the inclusion of professional socialization opportunities. Through industry-led sessions such as 'Dealing with Clients: Phone and Email Etiquette' and 'Meeting Your Professional Bodies', participating as members of an industry-connect mentor group in both on and off-campus activities, attending networking breakfasts and lunches with industry, and presenting at student-industry conferences, students are exposed to professional possibilities and how to communicate as professionals, connect with others and maintain relationships. Students are required to write 18 short reflective pieces to develop skills for reflective practice. The students' WIL experience extends across on-campus and off-campus activities. The effects of the PDP and its on-campus WIL experience have been reported elsewhere, particularly the 1st year experience and how this contributes to the foundations of building a professional identity (see Freudenberg et al., 2009).

SURVEY INSTRUMENT

The survey instrument developed included four sections: standard demographic questions, questions about the students' satisfaction, perceptions of self-efficacy and generic skills. Questions relevant to professional identity and business knowledge and skills were extracted to build two measures to proxy for:

    i. Professional confidence and skills – measuring the students' confidence and ability to (a) interact with the profession; and (b) seek a career in the profession (referred to as 'Professional Skills' (PS)); and

    ii. Professional Identity – measuring the extent to which the student developed their professional identity. (Referred to as 'Professional Identity' (PI)).

Responses were in the form of a seven point scale from unacceptable (1) to excellent (7) for the satisfaction measures, while self-efficacy was measured on a five point scale from 1 (not confident at all) to 5 (very confident), adjusted to a seven point scale to allow for comparison with other measures. To determine generic capabilities, students were provided with a self-assessment tool to evaluate their level of skill development based on the one developed by Lizzio and Wilson (2004, p.115). Respondents self-evaluated each of the statements within the generic capabilities on a seven point scale, from (1) 'not at all a characteristic of me' to (7) 'very characteristic of me'.

DESCRIPTIVE STATISTICS

Given that the vast majority (98% to 100%) of PDS were domestic students (due in part to restrictions with study visas), 'international' students were filtered out. This was particularly important as the CG had a larger percentage of international students. International students' experience could skew the results and the entry and exit points of many international students differ. A total of 578 useable student surveys resulted (student participation was voluntary). From the PDS 124 were in first year, 61 second year, 33 from

the beginning of third year and 27 from the end of third year. For the CG there were 154 and 63 respondents in the first and second year respectively, with 81 and 35 for the beginning and end surveys of the third year. Summary descriptive statistics for the samples are provided in Appendix A.

Generally up to 70% of PDS were female respondents, with 60% for the CG. For the earlier years, a large percentage of students were in the less than 20 years age bracket, but expectantly as the longitudinal study progressed a larger percentage was between the 20 to 30 year age bracket. The students' average scores to enter university (referred to overall position in the relevant jurisdiction) were slightly better for the PDS ranging from 10 to 7.4; whereas the CG scores ranged from 11.44 to 9.3. It should be noted that the CG appears to commence university with a slightly better OP score than the PDS (9.9 cf 10), but by the end of the third year of study the sample of PDS have a better OP score than the CG (7.4 cf 11.44). Consequently, some caution needs to be had with interpreting the data, although overall the two groups are deemed comparable for the purposes of this research and generally representative of the student body.

RESULTS AND DISCUSSION

Summary results for Professional Skills (PS) and Professional Identity (PI) are presented in Appendix B and Appendix C respectively. These are summarized in Figure 1, which shows that while all students increase over the sample period in terms of both PS and PI, the PDS outperform the CG on both measures. The average PS score (out of seven) for the PDS across the 31 measures increased for 1st year from 5.63 to 6.10 at the end of their 3rd year. Interestingly, this overall gain is despite a slight decline in both PI and PS for the PDS at the end of the first year of their internship (discussed below). The overall PI average follows a similar pattern.
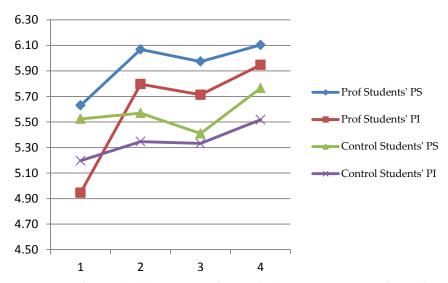

FIGURE 1: Professional skills (ps) & professional identity (pi) measures for professional students and control group (scale 1 to 7, where 7 is highest)

The CG follows the trend of the PDS in terms of their overall PS – although the overall average is not as strong as the PDS and the professional students grow at a stronger rate in years one and two and improve at a greater rate overall. The CG also declines over the course of the second year suggesting some issue is at play that influences both groups at this time. The CGs' PI overall averages were also lower than the PDS overall, despite starting in a stronger position. This suggests the internship and PD program have a positive impact on the students.

Professional Skills

Overall the PDS commence with higher self-reported professional skills than the CG and grow this difference in first and second year (statistically significantly) with the CG students regaining ground in third year (as indicated by a lack of statistically significant differences between the two groups in the final year of our data – see Appendix B). Within these averages, however, are five groups of variables; satisfaction, confidence, perceptions of importance, interest in skills development and vocational skills. This section will work through each of these areas referring to the data in Appendix B.

Student Satisfaction

In terms of student satisfaction, the PDS began 6% higher than the CG and had a percentage increase of 42% across the three years (particularly during the first year) compared to 22% for the CG. This led to the PDS ending their degree with 23% higher satisfaction than the CG students and the PDS group's confidence being consistently statistically significantly greater than the CG group in all time periods. Given the link between satisfaction and engagement/learning outcomes, and perhaps even more importantly retention in the first year, this is seen as an important outcome.

In terms of the individual items, a majority of the increase for both groups was in the first year for the measure "Contact with industry" with a 65% (36%) increase for the PDS (CG). This was followed by a smaller gain in the internship period (second and third year) of 5% (9%) for the groups respectively. The PDS started 11% ahead of the CG and finished 35% ahead. The second item, "relevance of my degree" followed a similar pattern, although not to the same extent, however, both are statistically significantly greater than the CG group. This suggests that the PDS had high expectations for the WIL degree in which they had enrolled and this was delivered upon.

Student Confidence

The CG commenced their studies with higher confidence than the PDS (10% higher), however, by the end of their program this had reversed to 9% in favour of the PDS students with a 25% increase over the 3 years compared to a 3% increase in the PDS students. All confidence items (items 3-7 in Table A2) were statistically significantly greater in period 2 than in period 1. The statistically significant differences between the control group and the PDS group. Also note that the statistically significant differences between the control group and the PDS groups are greater in the first and second year (see Table A2).

The largest gains over the period again occurred in the first year particularly in relation to confidence in the 'degree that you are studying' (36% over the degree) and in the relevant 'profession' chosen (35% over the degree). The CG had small gains in first year and slightly larger gain in second year and primarily in the two criteria above. During the internship period, the PDS make gains in confidence in "achieving career goals" (7%) while the CG

makes no progress. Therefore, it is clear that the WIL program has a significant impact on students' confidence in comparison to the CG with the internship further creating confidence around the chosen professional career and ability to achieve set career goals.

Importance of Generic Skills

The perception of the importance of generic skills starts high for both groups (average 6.28/7 for the PDS and 6.11/7 for the CG) and remains high over the duration of the program gaining 3% and 4% respectively. Interestingly the PDS group scores in first year are statistically significantly greater than the CG group at the start of the program. The largest gains made by the PDS are in oral communication skills, interpersonal skills (4%) and concept and analysis skills (6%) while the CG gain in oral communication and information literacy skills, written communication skills (7%) and team skills (6%), which reflects the focus of their programs (PDS applied workplace skills and the CG traditional academic environment). Overall, the high student recognition of the importance of generic skills is pleasing and it is interesting to note the statistically significant higher emphasis PDS place at the end of their program on learning and adaptability, concept and analysis, oral communication and team skills which are relevant to their WIL experiences.

Interest in Skills Development

Interest in developing skills is reported in a similar way to the perception of importance of generic skills. Both groups start with high scores (6.43 for the PDS and 5.84 for the CG), with minor shifts over the sample period. The PDS start 10% ahead of the CG and end 6% ahead, with the CG advancing 2% over the 3 years and the PDS declining 2%. There are no particular skills that are of more or less interest to the students. What is particularly of note is the very high interest (and expectations) that the PDS commence with in comparison to the CG. This is an issue which requires further investigation and consideration as this may not be fully appreciated by the academic community in the design of WIL programs and courses.

Vocational Skills

In terms of vocational skills, the PDS start 11% behind the CG (which is statistically significant) and regain this ground over the course of the degree (18% gain overall) to end level on average. The majority of gains made are in the first year, which corresponds with the substantial professional development and awareness activities entered into the PD Program in the first year. The internship period appears to confirm and retain these results and expectations. In contrast, the CG makes a small gain of 6% with most of this in the 2nd and 3rd year (10%). Notably, the CG declines in their vocational skills over the first year, which is concerning given the importance of this period for engagement and retention.

Overall, the PDS report a substantial 17% increase in professional skills over the three year study period with most gains made in satisfaction, confidence and vocational skills. In comparison, the CG gains by 7%, leaving the PDS reporting at 8% higher, suggesting that the WIL program had a positive influence, with particular impact on the PDS in the first year of their program.

Professional Identity

The summary survey results for PI also support the positive impact of the WIL program. Table A3 shows that the PDS commence their studies 5% behind the CG, however end up

8% ahead on their self-reported professional identity. In terms of satisfaction, the PDS increase by 33% on "the industry that I will enter once I graduate" which improves statistically significantly at each time period and is greater than that of the CG also. In relation to confidence, the PDS group starts significantly behind the CG group but regains this ground during the first year. Notable gains occur in the items "know how things work inside an organisation" (38% including 12% during the internship) and "know what is expected of you as a worker" (18%). Interestingly the CG gains in satisfaction with their career choice (17%), declines on "know what is expected of you as a worker" (-3%) and gains only 4% on "know how things really work inside an organisation". This highlights the benefit of both the WIL preparatory program and the internship to the development of professional identity and the particularly strong impact on student satisfaction in this regard.

The PDS make solid gains in first year, which moderate in second year and them improve slightly in final year once they have settled into their internship. This highlights both the importance of the preparation and the impact of the adjustment to the internship program and the reality of moving to the professional environment. Given the practical issues for the students (lifestyle, transport, time management etc.), complete or totally accurate perception of the reality of the working environment for the maintenance of scores and the gains in the final year are positive. It may be that the on-campus WIL experience through the PD program did not give studentsan internship off-campus. This may be evidence that while an on-campus simulated WIL program may have some benefits, it may not accurately reflect the working environment and how students will interact with it.

DISCUSSION

When considering the impact of the entire degree (including the two year internship), the PDS at the end of their three years of studies have improved both in terms of their PS and PI compared to the CG. For the PDS the overall change for PS and PI was 17% and 21% respectively, whereas for the CG, PS only increased by 7% (less than half of the PDS Experience) and PI by 6% (less than one third of the PDS experience). Of particular note and importance are the significant gains made by the PDS students in the first year in PI (all items) and PS (in satisfaction, confidence and vocational skills) which supports first year engagement and retention.

Looking at the individual measures of PS, the biggest difference between PDS and the CG, was #1 'satisfaction of contact with industry' (35% difference). Indeed, 20 of the 31 PS measures had 5% or greater difference. Interestingly, the CG exceeded the PDS for the measure #31: 'I have a strategy for learning from unsuccessful applications'. This may relate to the success of the PDS having gained employment after graduation, as there was nearly 100% postgraduate employment for the PDS. This may mean that they did not have to focus on strategies for failing to obtain employment.

The results indicate a 'lumpy' progression for the PDS from their on-campus simulated WIL in first year to their off-campus WIL experience in their 2nd and 3rd year. For the PDS their first year of study did not involve an internship but a simulated WIL experience through the continuous orientation program, known as the PD Program, which appeared to increase both the PDS' PS (10%) and their PI (18%) substantially as noted above. In fact, this data demonstrates there were large differences between the PDS and the CG in the first year for the individual measures for PS relating to satisfaction, confidence and career and

vocational skills. All of these measures experienced 10% or greater increase in the first 12 months for the PDS. We contend that this underpins the maintained and increasing PS and PI during the internship albeit at a slower rate. Furthermore, we suggest that without adequate preparation, the internship may have provided lesser benefit for students and may have even been counterproductive in areas such as confidence and vocational skills. For a complete discussion of this first year experience refer to the work of Freudenberg et al., 2009. All confidence items (items 3-7 in Table A2) were statistically significantly greater in period 2 than in period 1.

When trying to isolate the impact of the internship on the PDS, data at the beginning of their third year of study (after 12 months of internship) and at the end of their third year (after approximately 24 months of internship) demonstrates some mixed findings. It should be noted that the internship would not be the only factor that would potentially influence students, as the students are continuing with their academic studies and their involvement with the PD Program. However, it is suggested that the internship is likely to be the largest driving influence in this time period.

For example, in the first 12 months of the internship the PDS had decreases in the PS and PI measures (-2% and -1% respectively). It may be that the PDS' original perceptions about themselves and the profession were inaccurate, and it was not until they were immersed in the working environment that this was evident. The interaction with the workforce has made students reassess both their satisfaction and identity with their chosen profession.

When participants self-report there is always the problem/issue of them being able to reliably measure or ascertain their ability as there can be a case of 'over inflation'. This may be intentional or because participants have an inaccurate appreciation of their ability compared to others. When in an artificial (or removed environment), certain interventions may result in participants feeling a sense of growth as they consider their confidence/self-efficacy to have improved. This is because any initial inaccurate perceptions have not been corrected. That is not to say participants in this circumstance have not undergone growth or change, but they may to a certain extent be overconfident.

When placed in an external (real) environment their understanding/or appreciation of their skills may be corrected as they have a better sense of themselves compared to others. That is, participants gain a better sense of what their skills are, and how they are placed and thus an improved (or more accurate) sense of their skills and ability. What this means is that for researchers using self-reporting tools, they may consider that their participants are not improving with their self-reported measures (with pre and post surveys) as the data may demonstrate limited or no growth. However, what may be occurring is that the participants after the initial survey have obtained a more accurate sense of themselves and so internally they know they have improved but when reporting this on a survey tool they may record lower measures (as they are doing so according to their improved/more accurate frame of reference). This phenomenon has been observed elsewhere (Miller, 1997).

The PS measures that had the largest decreases in the first 12 months of the internship for PDS were 'relevance and desire to improve oral communication skills' (#18 & #19: both minus 7%) and 'relevance of self-management skills for future work career' (#10: minus5%). Nevertheless the relatively minor decreases in comparison to the reported scores out of seven (5.93 for PS and 5.71 for PI) which are both high nominally and in comparison to the CG (5.22 PS and 5.33 PI) suggests that the overall experience is positive.

LIMITATIONS AND FUTURE RESEARCH

There are five main limitations of the study: the variation in sample size of the two student groups; disciplinary and context specific factors; the greater emphasis on generic skills development during the second and third year of the CG; the student self-assessment of professional skills and identity and possible sample bias. First, the variation in sample size arises because the study does not track the same students during the three years of the degree. The study relies on students who are available and willing to complete the survey at each reporting point. Second, the disciplinary context of the study (financial planning and accounting) may limit the generalization of results to other disciplines. Further, the smaller class sizes enjoyed by PDS, the greater professional experience of teachers involved with PDS vis-à-vis the CG and geographical factors are relevant limitations. Third, accreditation requirements and strategic objectives required the business faculty from 2010 to embed more generic skills assessment and teaching and learning activities in the curriculum, offer credit bearing business internships and provide off-campus professional development activities for students in the CG. Second and third year students participating in one or more of these activities may have inflated the results. The fourth limitation relates to students self-assessing their professional skills and identity. The subjectivity associated with self-assessment may not reflect reality. Nevertheless, Lizzio and Wilson (2004), whose study formed the basis of the survey instrument, suggest that students can make meaningful judgments of their capabilities.

The fifth limitation concerns that the students undertaking the internship may be higher academically achieving students due to program restrictions and the internship placement process with weaker students dropping from the degree rather than struggling through. However, to this extent it should be noted that both the PDS and CG had very similar tertiary entrance scores at the beginning of their degree (10 vs 9.9 – with 1 being the best score). Although as their studies continue there is a trend for the PDS being surveyed to have improved tertiary entry scores compared to the CG: 8.5 vs 9.3; 8.4 vs 9.9; and 7.4 vs 11.44. Consequently, the comparison between the two sample groups needs to have this in mind. In the future, attempts should be made to control this potentially confounding factor, for example, by dividing the cohorts into similar tertiary entrance scores or grade point averages. Unfortunately, due to sample sizes it is not possible to this this with the current data.

Future research may entail surveying PDS 12 months after graduation and comparing the development of their professional skills and identity with a new CG, being graduates who did not complete a WIL business degree. As WIL continues to grow in business degrees, researchers may employ the survey instrument to measure professional skills and identity in their business disciplines and compare the results with the findings of this study. Higher education institutions would be particularly interested in future research which explores the relationship between professional skills and identity and student retention variables such as student satisfaction, academic performance and engagement.

CONCLUSION

Professional identity at a student level is influenced by personal characteristics, interactions with staff, colleagues and professionals as well as the university curriculum. WIL, when properly structured and supported, enables students to interact with professionals, develop their generic skills and apply their technical knowledge in an actual or simulated workplace

setting. These experiences can have a positive impact on personal characteristics such as student attributes, motivation and attitudes towards their chosen profession. This article examines the influence of a WIL business degree, comprising a two year internship and supported by a PD program, on professional skills and identity. The results suggest that WIL students have better developed professional skills and professional identity than their counterparts completing a traditional business degree. WIL students who realize the professional within earlier in their learning life cycle are more likely to successfully transition from university to the workplace and less likely to pursue the wrong career path. Based on our own experiences with the WIL business degree over the past five years, we argue that WIL activities can influence student retention and satisfaction and achieve positive externalities associated with positive graduate outcomes, an improved reputation and stronger industry relationships. In a competitive environment characterized by uncapped student placements in most undergraduate courses, WIL is worthy of further consideration and investment.

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APPENDIX A: *Descriptive statistics*

Cohort 1	PD Students								Control Group							
Item	1st Year		2nd Year		3rd year beg.		3rd Year end		1st Year		2nd Year		3rd year beg.		3rd Year end	
N		124		61		33		27		154		63		81		35
Gender																
Male	49	40%	19	31%	10	30%	8	30%	75	49%	28	44%	38	47%	14	40%
Female	75	60%	42	69%	23	70%	19	70%	79	51%	35	56%	43	53%	21	60%
Type																
Domestic students		100%		100%		100%		100%		100%		100%		100%		100%
International		0%		0%		0%		0%		0%		0%		0%		0%
Age																
Less than 20	77	62%	33	54%	22	67%	9	33%	93	60%	26	41%	14	17%	2	6%
20-30	36	29%	22	36%	9	27%	17	63%	49	32%	30	48%	52	64%	28	80%
31-40	7	6%	2	3%	0	0%	0	0%	11	7%	4	6%	5	12%	3	9%
>40	4	3%	4	7%	2	6%	1	4%	1	1%	3	5%	5	6%	2	6%
Entrance Score*		10		8.5		8.4		7.4		9.9		9.3		9.9		11.44

* Entrance score refers to the average OP (Overall Position) university entry score of the respondents. The lower the OP score the better the performance of the student

APPENDIX B : Professional skills for PD students and control group consisting of: (Panel A) student satisfaction; (Panel B) student confidence; (Panel C) perception of importance; (Panel D) interest in development, and (Panel E) vocational skills

No	Measure	PD Students				Control Group			
		1st yr	2nd yr	3rd yr	3rd yre	1st yr	2nd yr	3rd yr	3rd yre
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Panel A: Student Satisfaction Measures								
My current level of "Satisfaction" with my ……..is:									
1	..contact with Industry relevant to my Degree	5.41	6.10***	6.21	6.22	4.24***	4.51***	4.33***	4.60***
		(1.34)	(0.97)	(0.69)	(0.64)	(1.22)	(1.15)	(1.19)	(1.28)
2	..relevance of my Degree to my Professional needs	6.04	6.33**	6.24	6.22	5.49***	5.75**	5.51***	5.66**
		(0.92)	(0.77)	(1.00)	(0.89)	(1.15)	(0.94)	(1.05)	(1.06)
	Panel B: Student Confidence Measures								
How "confident" are you in your ability to…..									
3	..progress through the ranks in a new place of employment.	4.51	5.16***	5.30	5.29	4.90**	4.71**	4.98	4.96
		(1.40)	(1.07)	(1.20)	(1.05)	(1.26)	(1.26)	(1.25)	(1.45)
4	..achieve most career goals that you have been able to set for yourself.	4.84	5.39***	5.47	5.76	5.23**	5.24	5.15	5.24**
		(1.28)	(0.99)	(0.94)	(0.89)	(1.22)	(1.21)	(1.13)	(1.04)
5	.. begin a career in the Degree that you are studying.	5.06	6.10***	6.02	6.07	5.51**	5.16**	5.12**	5.64*
		(1.28)	(1.18)	(1.28)	(0.95)	(1.16)	(1.20)	(1.49)	(1.19)
6	.. network with Industry members of the profession that you are studying.	4.01	5.39***	5.35	5.44	4.73***	4.47***	4.57**	4.96
		(1.53)	(1.36)	(1.33)	(1.12)	(1.27)	(1.23)	(1.41)	(1.29)
7	.. be more effective in job interviews for your Profession.	4.26	5.44***	5.26	5.76**	4.88***	4.38***	4.50**	5.20**
		(1.43)	(1.32)	(0.99)	(1.05)	(1.22)	(1.34)	(1.49)	(1.38)

Panel C: Student Perceptions of Importance Measures

How relevant do you consider ….. will be to your future work or career

8	Interpersonal Skills	6.15	6.36	6.36	6.41	5.83**	5.97**	5.38**	6.17
		(1.00)	(0.98)	(0.92)	(0.79)	(1.10)	(1.06)	(1.19)	(1.04)
9	Self Management Skills	6.37	6.53	6.21*	6.37	6.06**	6.30*	6.20	6.14
		(0.91)	(0.59)	(0.99)	(0.84)	(1.05)	(0.83)	(0.96)	(0.88)
10	Learning & Adaptability Skills	6.21	6.27	6.09	6.41	5.85**	6.05	5.77*	6.15*
		(0.90)	(0.73)	(1.01)	(0.79)	(1.04)	(0.96)	(0.98)	(0.88)
11	Problem Solving Skills	6.30	6.32	6.24	6.44	5.93**	6.13	6.00	6.20
		(0.87)	(0.87)	(1.03)	(0.69)	(1.21)	(0.98)	(0.99)	(0.93)
12	Concept & Analysis	5.98	6.10	6.12	6.33	5.66**	5.84	5.71*	5.88**
		(1.12)	(0.95)	(0.93)	(0.78)	(1.09)	(1.08)	(1.08)	(0.97)
13	Oral Communication Skills	6.46	6.70**	6.24**	6.59	5.93***	6.25****	5.95	6.06**
		(0.94)	(0.56)	(1.03)	(0.74)	(1.13)	(1.04)	(1.07)	(0.97)
14	Team Skills	6.39	6.58	6.33*	6.63	5.91***	6.11**	5.88*	6.29***
		(1.00)	(0.59)	(0.82)	(0.63)	(1.16)	(1.05)	(1.31)	(0.83)
15	Info Lit' Skills	6.26	6.21	6.19	6.38	5.79***	6.11*	5.70***	5.94
		(0.91)	(0.94)	(0.99)	(0.94)	(1.31)	(1.05)	(1.35)	(1.01)
16	Written Communication Skills	6.34	6.53	6.24	6.46	5.80***	6.05**	5.88	6.18
		(0.96)	(0.72)	(1.09)	(0.85)	(1.36)	(1.09)	(1.28)	(1.01)

Panel D: Student Interest in Skills Development Measures

How interested are you in developing your........

17	Interpersonal Skills	6.43	6.36	6.30	6.22	5.81***	5.86**	5.66**	5.77
		(0.77)	(0.75)	(0.95)	(0.97)	(1.24)	(1.24)	(1.27)	(1.21)
18	Self Management Skills	6.48	6.32	6.24	6.37	6.08***	6.05	5.82*	5.94*
		(0.78)	(0.74)	(0.96)	(0.84)	(1.13)	(1.12)	(1.31)	(0.97)
19	Learning & Adaptability Skills	6.34	6.22	6.13	6.33	5.75***	5.76**	5.65*	5.97
		(0.86)	(0.88)	(0.97)	(0.92)	(1.31)	(1.16)	(1.24)	(0.99)
20	Problem Solving Skills	6.42	6.28	6.16	6.44	5.85***	5.87**	5.79	6.14
		(0.92)	(0.88)	(1.24)	(0.80)	(1.23)	(1.26)	(1.23)	(0.94)
21	Concept & Analysis	6.20	6.02	6.06	6.22	5.61***	5.68	5.58*	5.97
		(1.03)	(1.03)	(0.97)	(0.84)	(1.28)	(1.31)	(1.30)	(0.96)
22	Oral Communication Skills	6.54	6.62	6.15**	6.37	5.90***	6.10**	5.71*	5.91
		(0.88)	(0.61)	(1.23)	(0.96)	(1.38)	(1.21)	(1.39)	(1.29)
23	Team Skills	6.45	6.30	6.27	6.33	5.93***	5.95*	5.61**	6.00
		(0.87)	(1.05)	(0.97)	(1.00)	(1.28)	(1.31)	(1.54)	(1.18)
24	Info Lit' Skills	6.47	6.31	6.09	6.27	5.80***	5.90**	5.25****	6.03**
		(0.83)	(0.99)	(1.03)	(1.15)	(1.41)	(1.20)	(1.55)	(1.11)
25	Written Communication Skills	6.57	6.60	6.15	6.38	5.89***	6.06***	5.61**	6.09*
		(0.86)	(0.69)	(0.75)	(1.13)	(1.45)	(1.14)	(1.33)	(1.15)

Panel E: Student Vocational Skills Measures

No	Measure	PD Students				Control Group			
		1st yr	2nd yr	3rd yr	3rd yre	1st yr	2nd yr	3rd yr	3rd yre
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
26	I understand the requirements of the various types of selection methods (e.g., interviews, assessment centres, work tests)	4.69 (1.29)	5.70*** (1.16)	5.69 (1.17)	5.81 (1.13)	5.37*** (1.16)	5.44 (1.09)	5.14** (1.37)	5.76** (1.21)
27	I know how to develop and structure my resume and letter of application to make a positive impression	4.70 (1.36)	5.80*** (1.08)	5.69 (1.06)	5.65 (1.06)	5.30*** (1.36)	5.17** (1.19)	5.13** (1.31)	5.68** (1.19)
28	I have a strategy for researching positions or organisations in which I am interested	4.46 (1.54)	5.55*** (1.46)	5.56 (1.27)	5.54 (1.24)	4.99** (1.39)	4.79** (1.27)	4.90** (1.36)	5.53** (1.42)
29	I am able to project a confident and professional image of myself in an interview situation	5.11 (1.50)	5.78*** (1.10)	5.56 (1.21)	5.85 (1.08)	5.50** (1.21)	5.33* (1.42)	5.18 (1.37)	5.59 (1.10)
30	I am confident relating and presenting my background and experience in a way that matches the requirements of a particular employer or position	4.83 (1.41)	5.65*** (1.16)	5.56 (1.26)	5.65 (0.97)	5.41*** (1.28)	5.22* (1.32)	5.09* (1.31)	5.53 (1.35)
31	I have a strategy for learning from unsuccessful applications (e.g., asking for feedback, self-assessment) so as to make a better impression next time	4.60 (1.47)	5.28*** (1.46)	5.28 (1.55)	4.96 (1.34)	5.18*** (1.29)	4.79*,* (1.45)	4.81* (1.28)	5.53**,** (1.28)

- This table contains summary survey data in relation to student self-reported professional skills.
- Students in a professional development program are surveyed four times (at the start of 1st, 2nd, 3rd and the end of 3rd year
- Columns 3-6 present average scores out of seven (seven being highest) in terms of the items.
- Columns 7-10 present summary data for the control group over the same time period.
- Superscript asterisks indicate significant differences between means (independent samples t-test) of the groups year on year (ie in column 4 represents the difference between year 1 and year 2) where * = significant at the 10% level, ** at the 5% level and *** at the 1% level.
- Subscript asterisks in columns 7-10 indicate significant differences between the PD students and the control group in each time frame.
- Figures in the brackets are standard deviations.

APPENDIX 1: Professional identity

Item (1)	Category (2)	Measure (3)	PD Students				Control Group			
			1st yr (4)	2nd yr (5)	3rd yr (6)	3rd yre (7)	1st yr (8)	2nd yr (9)	3rd yr (10)	3rd yre (11)
	Satisfaction	..The industry that I will enter once I graduate	5.57** (0.98)	6.25***,*** (0.88)	6.06*** (0.89)	6.15*** (0.60)	5.17** (1.26)	5.18*** (1.23)	5.07*** (1.19)	5.28*** (1.17)
2	Confidence	.. know what is expected of you as a worker.	4.85*** (1.28)	5.48*** (1.05)	5.68 (0.99)	5.70 (1.16)	5.63*** (1.15)	5.58 (1.14)	5.47 (0.97)	5.44 (1.11)
3		.. know how things 'really work' inside an organisation.	4.06*** (1.46)	4.99*** (1.32)	5.35 (1.07)	5.6 (1.34)	5.01*** (1.27)	5.09 (1.13)	5.27 (1.24)	5.2 (1.25)
4	Career & voc'l skills	I have a clear sense of the specific type of work I would like to do in the future	5.29 (1.53)	6.02***,** (1.22)	5.56 (1.47)	6.00 (1.01)	5.27 (1.55)	5.38** (1.36)	5.29 (1.50)	5.71 (1.29)
5		The career decisions I have made to date are based on my own preferences rather than satisfying other people's expectations of me	5.62 (1.43)	6.21***,** (0.97)	5.81* (1.22)	6.15 (0.88)	5.41 (1.44)	5.67** (1.31)	5.53 (1.37)	5.79 (1.22)
6		I can explicitly and accurately describe my interests, values, and abilities and the type of "contribution" I would like to make	5.20 (1.37)	5.82***,* (1.11)	5.82 (1.06)	6.08 (1.05)	5.32 (1.33)	5.43* (1.16)	5.54 (1.21)	5.68 (1.19)
	Average (PI)		4.95 (1.34)	5.80 (1.09)	5.71 (1.12)	5.95 (1.01)	5.20 (1.33)	5.35 (1.22)	5.33 (1.25)	5.52 (1.21)

- This table contains summary survey data in relation to student self-reported professional identity.
- Students in a professional development program are surveyed four times (at the start of 1st, 2nd, 3rd and the end of 3rd year.
- Columns 4-7 present average scores out of seven (seven being highest) in terms of the items.
- Columns 8-11 present summary data for the control group over the same time period.
- Superscript asterisks indicate significant differences between means (independent samples t-test) of the groups year on year (ie in column 5 represents the difference between year 1 and year 2) where * = significant at the 10% level, ** at the 5% level and *** at the 1% level. Subscript asterisks in columns 8-11 indicate significant differences between the PD students and the control group in each time frame.
- Figures in the brackets are standard deviations.

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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.