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Encouraging students to draw on work experiences when articulating achievements and capabilities to enhance employability

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Encouraging students to draw on work experiences when articulating achievements and capabilities to enhance employability

Abstract

Employability drives higher education policy yet despite the investment in developing "rounded" graduates, students experience difficulties in articulating their achievements and capabilities during graduate recruitment. The purpose of this research was to trial and evaluate a career development intervention aimed at drawing on work experiences when applying for graduate roles. Students (N = 136) from two contrasting disciplines, Business and Physiotherapy, and two institutions participated in a two-staged intervention. A focus group was also conducted with career advisors (N = 9) to examine student engagement with career development learning. Findings indicated that students were confident in their ability to draw on relevant work experience in job applications and showed low levels of engagement in the intervention due to time constraints from their study commitments. Despite the varied contexts of the degree programs investigated, similarities in engagement and student feedback were noted. Factors contributing to weak engagement in career provision along with strategies for improvement are presented.

Introduction

There are ongoing changes to the world-of-work due to digital disruption, globalisation, and the emergence of the gig economy, where individuals may work independently for various employers on short-term contracts (Payton, 2017). The increased incidence of flexible and portfolio working, with individuals undertaking numerous short-term roles, has been the catalyst for a a greater need for individuals to self-manage their non-linear careers (Hooley & Dodd, 2015). A focus on individualism has seen a shift from relational to transactional employment arrangements, the former based on loyalty and respect, the latter on economic exchange (Jabeen, Behery, & Elanain, 2015). Bennett, Pitt, and Price (2012) argued that this

aligns with the dwindling relationship between employer and employee and the responsibility for career management shifting away from the organisation, although some believe this remains important through developing capacity and managing diversity (Clarke, 2017a).

Higher education's strategic priority of enhancing employability (Tomlinson, 2012) means the sector must contribute to career development learning (CDL), enabling graduates to navigate contemporary work and increase their chances of career success. This appears critical given the increasing number of student enrolments, weakening graduate labour markets, and rising underemployment (Karmel & Carroll, 2016). They identified that graduates in business have experienced declining full-time employment outcomes and relatively high levels of underemployment. In contrast, graduates from the health disciplines have fared relatively better (Health Workforce Australia, 2014, p. 38-41) with workforce dynamic indicators determining the majority of health professionals to be younger, indicating less workforce concerns. Despite this, the health sector is identified, alongside hospitality and retail, as an area of strong growth yet with increased dependence on casual employment in recent years (Gilfillan, 2018, p. 3). Graduates may be employed casually to ensure adequate supply in the health workforce yet shed in times of economic decline.

CDL in higher education may be understood using the four dimensions of the DOTS model: decision-making; opportunity awareness; transition learning; and self-awareness (Watts, 1977). Watts described "decision-making" as connecting self-awareness with available opportunities to formulate career development plans. "Opportunity awareness" enables students to understand employer preferences and identify trends and opportunities in relevant employment areas. "Transition learning" empowers students to appreciate challenges presented by particular opportunities and helps them to vary their self-presentation accordingly. Finally, "self-awareness" allows students to synthesise their knowledge, interests, personal strengths and weaknesses and visualise their utility in different contexts. With this model, graduating

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students may effectively engage in complex and less stable career pathways. They may adopt a protean career orientation where they are driven by internal values rather than extrinsic factors or may engage a boundaryless career which seeks high rewards through mobility, autonomy, and the development of rich networks (Briscoe & Hall, 2006).

The university careers service is a central resource and, in Australia, is established in every public university (Andrewartha & Harvey, 2017). The focus is on up-skilling students in the DOTS dimensions to enhance individual employability and prepare students for transition to employment (Taylor & Hooley, 2014). This often involves collaborating with graduate employers (Donald, Baruch, & Ashleigh, 2017) through embedded or extra-curricular activities aimed at counselling students on their career pathways while preparing them for employment through workshops, mentoring programs, and volunteering opportunities (Harvey et al., 2017).

Curriculum-integrated CDL is widely acknowledged as enhancing student workreadiness (McKenzie, Coldwell-Neilson, & Palmer, 2017). An increasingly popular pathway is work-integrated learning (WIL; Harvey et al., 2017; Smith, Ferns, & Russell, 2014) where students formally engage in, and are assessed on, collaborative learning activities with industry and community partners. WIL may be immersed, where students are based in workplaces such as in practicums, placements, and internships, or non-immersed, including client-based projects, simulations, and consulting. WIL has seen significant growth in recent years, driven by the National Strategy for WIL (Universities Australia et al., 2015) and industry calls for graduates with relevant work experience (Brooks & Youngson, 2016).

While quality WIL provides rich and highly-valued examples of experience in applying theory and non-technical skills in a real work context, it may not always guarantee improved employment outcomes (see, for example, Wilton, 2012). Billett (2015) asserted that post-WIL interventions are critical for enhancing student learning and maximising the return on both the personal and institutional investment in WIL. Interventions come in many forms (e.g., Billett,

Cain, & Le, 2016) and are focused on students critically appraising the WIL experience to better understand its value and impact on future development and learning (Billett, 2015). Billett argued that this process of evaluation and reflection can promote confidence among students and help them prepare for transition to the workplace.

Despite both higher education and students investing in the production of "rounded graduates", not all students will convert their engagement in employability-related activities to positive employment outcomes (Holmes, 2013). While this may be attributed to personal fit, a mismatch in role expectations, or reported bias in graduate recruitment processes (Clarke, 2017b; Davies, Edgar, & Debenham, 2016), some suggest that students lack the ability to comprehend and communicate their strengths and achievements (Elias, 2014). This study is therefore focused on gauging student capabilities in using their work experience to decode and articulate their capabilities to prospective graduate employers. The research objectives were to (i) examine student confidence and capabilities in drawing on WIL, or other relevant work experience, in their graduate job applications; and (ii) trial and evaluate an intervention to develop student capabilities in drawing on WIL, or other relevant work experience, to better articulate their capabilities when applying for graduate roles.

Objectives were addressed through a cross-disciplinary study, involving two higher education providers (both based in Western Australia) and a mixed methods research design. Data were gathered on student engagement with, and evaluation of, career development interventions in the areas of Physiotherapy and Business, in addition to a focus group with careers advisors from one institution. The paper is structured to provide a review of relevant background literature, followed by an outline of methodology. Results are presented and discussed with explicit consideration of implications for relevant stakeholders. The conclusion includes directions for future research and limitations of the study.

Background

Career development learning in higher education: Nature and challenges

If CDL is to adapt to the contemporary working environment where there is less focus on specific occupations and more on the development of skills and accrual of experience, it needs to enable flexibility and transferability within a particular job cluster (Foundations for Young Australians, 2016). It must "support young people and adults through transitions, to help them to internalise the need to take responsibility for their career and education and to enhance their employability" (Hooley & Todd, 2015, p. 6). The changing nature of work means students' opportunity awareness must broaden beyond tracking specific occupational data to trends across various professions, industries and sectors. This is at odds with some professional contexts however, such as healthcare, where industry training and accreditation bodies monitor only profession-specific data and provide professional development on graduation specific to their occupation. Further, encouraging students to consider a broader range of opportunities prior to graduation places additional pressure in terms of decision-making and transition learning, stimulating the need for greater career development support.

Employability is a key driver of higher education policy, and there is increasing focus on the rate of return from investing in a degree with post-graduation job attainment, a contested yet widely established measure of success (Author, in-press). Subsequently, higher education providers encourage students to participate in a range of activities deemed to enhance their personal capabilities, disciplinary expertise, confidence, and professional identity. Resonating with Jackson's (2016) model of employability, student access to, and engagement with, a broad range of communities in the higher education landscape of practice could enhance their employability, and CDL plays a key role in connecting students with relevant stakeholders through career chats, dialogues, and networking (Hooley & Todd, 2015).

As higher education enrolments continue to rise (Australian Bureau of Statistics, 2017), careers services must cater to a growing cohort amid a softening graduate labour market

(Karmel & Carroll, 2016). The careers provision model thus now extends beyond counselling to relationship building and employer engagement (Ahmadi, 2015) with, for example, volunteering hubs, careers fairs, workshops, and online training (Andrewartha & Harvey, 2017; Donald et al., 2017). It is important that students understand and can communicate to graduates employers their developed capabilities, how they enhance their employability, and how they apply in different contexts (Oliver, 2015). New graduates' ability to articulate their learning, skills, and experience is valued by employers (Dacre-Pool & Sewell, 2007), yet evidence suggests students require more development in this area (Lowden, Hall, & Elliott, 2011, p.15).

Another issue facing the higher education sector across developed countries - such as the UK and Australia – is poor levels of student engagement in CDL initiatives and activities (Pegg, Waldock, Hendy-Isaac, & Lawton, 2012). While evidence suggests that CDL enhances student employability, students can view careers advice as ineffective in enhancing their perceived employability (Donald et al., 2017). In Australia, the Student Experience Survey (Social Research Centre, 2017) indicated that only one-half of responding students (*N* = 192,737) gave positive ratings for the extent to which they found careers advisors available and for them being helpful. Enhancing engagement in CDL is a significant issue given it can influence academic success, learning, and employment prospects (Blau & Snell, 2013). *Improving articulation of achievements and capabilities through WIL*

In a general sense, WIL enhances career self-management competencies by helping students to identify their career goals and pathways to achieving them, enhancing self-awareness, and improving networking skills (Smith et al., 2009). As WIL is embedded, it is a valuable platform for implementing career development activities and developing the DOTS dimensions (e.g., Jackson & Wilton, 2016). Low SES groups, for example, are less likely to engage in extra-curricular CDL activities, which are predominantly held on-campus and during working hours (Simpson & Ferguson, 2013). The accessibility of WIL is thus important given

reported weak levels of student engagement with careers provision (Blau & Snell, 2013), particularly among those who most need support (Harvey et al., 2017).

Reflection and feedback underpin any quality WIL experience (Billett, 2011), providing a rich resource for students to draw examples of how they applied theory in practice, developed and demonstrated non-technical skills, networked, and gained a better understanding of their professional self (Jackson, 2017; Smith et al., 2014). Reflection during WIL has been linked to improved transition from student to graduate (Edgar, Francis-Coad, & Connaughton, 2012). Edgar and colleagues found that Physiotherapy graduates valued reflective tasks undertaken during WIL in their final year and their importance for development as a professional. Portfolios of completed work can be useful in the delivery and assessment of WIL, a medium to enhance professional identity through fostering workplace capabilities (McNamara & Ruinard, 2016).

Jorre de St. Jorre and Oliver (2018) advocated a "portfolio approach to learning" where students "systematically create and curate digital evidence of learning" (p. 46), presented within portfolios or, for example, in professional network media such as LinkedIn. Rather than simply summarising a range of achievements through different forms of evidence, students must reflect on *how* their activities, achievements, and experiences demonstrate a particular capability, and *which* pieces of evidence are best to highlight and communicate this. Their importance lies not in the final presentation of the portfolio elements but the process students have engaged in to better understand what they have learned, why, and how the tangible outcomes may align with the requirements of prospective employers. Portfolios and records of achievement have been associated with enhanced graduate outcomes (Kinash et al., 2015), although Jorre de St. Jorre and Oliver (2018) observed difficulties with usability and employer access.

Less explored is how well WIL students actually communicate their workplace learning to prospective graduate employers and the extent to which the benefits of WIL are translated to graduate recruitment and selection processes. There is growing evidence to support WIL improving full-time graduate employment outcomes (Silva et al., 2018), as well as attracting a higher starting salary in certain disciplines (Brooks & Youngson, 2016). Further investigation, however, is needed given some mixed evidence for unpaid work experience improving job attainment (e.g., Department of Employment, 2016; Wilton, 2012). This raises the question of whether participating students need additional support in articulating their knowledge and skills gained through their integration of professional and classroom learning to future employers. This formed the impetus of the current study, part of a national project exploring the use of post-WIL interventions to augment student learning (Billett, Cain, & Hai Le, 2016). *Forms of interventions in WIL*

Billett (2015) found the optimum time for engaging students in interventions aimed at integrating classroom and workplace learning was after the WIL experience. He found students critically appraised their experiences with others, leading to a process of what he later described as "transformation of practice experience into adaptable occupational knowledge through consolidation of these experiences" (Billett et al., 2016, p. 4). Billett and colleagues argued that students use "these experiences to assist them develop the understandings, capacities and values required for employment in their preferred occupations and promoting readiness to practice them" (p. 2). Billett et al.'s review of studies on post-WIL experiences highlights how the process of critical reflection encourages students to develop a deeper self-awareness, enhances occupational knowledge, and helps socialises them into the professional context.

With respect to designing purposeful and engaging interventions, Billett et al. (2016) explored the preferences of 365 higher education students in health care disciplines. Findings indicated a clear preference for activities that were facilitated by academics or experts, as

opposed to peers, and receiving feedback from a practising professional. These findings informed the design of the interventions trialled in this particular study. Developing student employability requires significant resourcing at both an institutional and personal level. This study questioned whether higher education is adequately preparing its students to draw on key employability initiatives, namely gaining relevant work experience in their pursuit of graduate-level employment. Further, it explored student engagement with, and the effectiveness of, using certain interventions after a student's WIL experience to inform future CDL and WIL design.

Method

A cross-disciplinary and multi-institutional research design was developed, facilitating the collection, analysis, and integration of both qualitative and quantitative data from multiple perspectives. Quantitative data were gathered through online and paper surveys before and after the interventions in each institution. These were to gauge student confidence and capabilities in developing graduate job applications and any improvement resulting from the interventions. Qualitative data were gathered through survey open responses and a focus group session to evaluate the effectiveness of the career development learning interventions. The purpose was to explore student engagement in CDL from the perspective of both students and a careers team to inform future intervention design and implementation.

Two contrasting disciplines, Business and Physiotherapy, were selected to facilitate data gathering in two very different WIL settings (described below). Implementing the interventions more broadly in both a generalist subject area and an occupation-specific subject area, with contrasting job sourcing and application processes, was considered appropriate to better inform the future use of interventions across different contexts.

Participants

Student participants from the first institution – a public university - were recruited from Business undergraduates completing WIL as an elective component of their studies. The 63 students had completed one-half of their degree program and undertook a 100-150 hour work placement in an area relevant to their course. The work placement was unpaid and completed on a part-time basis during the 13-week semester. Students were recruited via application and were supported in sourcing a suitable WIL opportunity. Thirty-nine of the students (62%) were females and almost one-third were international students, the majority of Asian descent. Student participants from the second institution (N = 73) – a private university - were final year Physiotherapy students, who had recently completed two five-week formal clinical placements. The students had, to date, completed approximately 800 hours of unpaid WIL in their degree program. Of these, 51 (70%) were females and all were domestic students.

Procedure

In the first institution, the 63 Business students were invited to attend a career development workshop scheduled towards the end of the semester and their WIL experience. Thirty-five attended the evening workshop, which was conducted by an industry professional experienced in graduate recruitment and designed to educate students on the importance of drawing effectively on their WIL/relevant work experience when applying for graduate roles. Live, advertised graduate roles were used as worked examples and the session was interactive with a high level of student engagement. Workshop materials were made available via the online learning management system for those unable to attend. Following the workshop, students were invited to submit a simulated job application where they drew on their WIL/other relevant work experience to address key selection criteria in a previously advertised public or private graduate position. Formal feedback was provided by the workshop facilitator to individual students, in addition to circulating a "tips and tricks" resource to the entire WIL cohort via the online learning management system.

To evaluate the quality of the CDL intervention (both workshop and selection criteria activity), the 63 WIL students were invited to complete a pre- and post-intervention survey.

The pre-intervention survey was conducted in paper format at the workshop and gauged student perceptions of their ability to apply for graduate roles. A link to the post-intervention online survey was circulated via email to students and intended to evaluate the usefulness of the CDL intervention (workshop and selection task). To better understand student engagement with CDL interventions, a semi-structured focus group was then conducted with nine members of the university's careers team (including their manager and careers advisors).

In the second institution, 73 final year students were invited to attend a half-day career development workshop, of which 61 attended. The workshop included guidance by two industry professionals responsible for recruitment in different employment sectors and was designed to educate students on the role and importance of drawing on WIL when applying for graduate roles. Examples of WIL experiences were discussed in an open forum with "how-to" guidance from the industry professionals. Similar to the first institution, students could then opt-in to complete a task responding to written selection criteria for a mock position in one of two sectors of their choosing. As before, selection criteria were established by the industry professionals from existing employment opportunities and were used to provide individual feedback to participating students. Following the activity, they circulated overall, generalised feedback with broad recommendations ("tips and tricks") to the year group via the online learning management system. A pre-and post-intervention survey was distributed at the workshop to gauge student abilities in applying for graduate roles and the usefulness of the workshop for CDL. Students who completed the selection criteria task were emailed a link to an online survey which evaluated their ability to apply for graduate roles and the value of the activity. Ethics approval was obtained in both institutions and the study conducted during 2017. Measures

In the first institution, a pre-intervention survey was conducted to gauge student confidence and capabilities in developing graduate job applications. Questions comprised those

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on individual characteristics and their experience in applying for professional roles. One item questioned students' level of understanding of how to address selection criteria in graduate job applications. Three remaining items asked students to rate their confidence in their ability to, (a) communicate their strengths against selection criteria; (b) use clear examples to meet selection criteria; and (c) draw on work experience to meet selection criteria.

The post-intervention survey comprised closed and open response questions to indicate and explain students' level of participation in the intervention and their engagement with CDL, including their understanding of tasks undertaken and their reasons for not participating (if applicable). For students that did participate in the intervention, they were asked to indicate their level of agreement on whether the workshop and the mock job application helped them to understand (a) how to address selection criteria more effectively and (b) how to draw on work experience more effectively when writing job applications. Five-point Likert scales were used in both pre- and post-surveys.

The questions for the careers team focus group were driven by the first research objective, exploring student confidence and capabilities in graduate job applications, with the purpose of identifying strategies for improvement. Questions focused on identifying trends among student groups for participating in voluntary career interventions; reasons for poor takeup; variations in student take-up; and strategies to improve student engagement with CDL.

An adapted approach was used to evaluate the Physiotherapy students' confidence and ability in addressing selection criteria. The pre-intervention survey comprised questions on individual characteristics and three items were used from a work readiness scale developed and validated by Smith et al. (2014). These evaluated, on a seven-point Likert scale, a student's ability to (a) apply for work relevant to their studies; (b) present themselves effectively in selection interviews and processes; and (c) judge the applicability of the knowledge gained in their studies to the workplace. Physiotherapy students follow a more prescribed degree program

and the majority have a clear understanding of their intended occupation and its related selection criteria. It was therefore considered more appropriate to evaluate broader capabilities using the work-readiness scale. The same items were used in the post-intervention surveys. *Analysis*

The pre-intervention and post-intervention survey data for both institutions were collated into separate files using SPSS Version 24. The seven-point Likert scales used for the work-readiness scale in institution two were collapsed to five points, *very poor* to *very good* (combining 'considerably below average' with 'slightly below average' and the same for above the average point). Means and standard deviations were computed where appropriate, in addition to percentage distribution ratings to gauge student capabilities and confidence in applying for graduate roles. A paired-sample t-test was conducted for each of the three items to compare mean ratings before and after the workshop. The focus group discussion was recorded and transcribed, complemented by any noted non-verbal expressions by the primary researcher. Guided by the principles of focus group research (Breen, 2006), thematic patterns were recorded in the responses to each of the posed questions, in addition to any unexpected commentary and noteworthy quotations which illustrate the different themes.

Results

Confidence and capabilities in applying for graduate roles

Overall, students demonstrated reasonable confidence in applying for graduate roles yet were not experienced in drawing on their work experience as part of the application process. *Institution 1.* Student responses from the pre-intervention survey indicated reasonable levels of confidence in their capabilities to address selection criteria. The mean rating for the 35 students' understanding of how to address selection criteria was 3.83 (SD = .75). The percentage distribution of ratings are summarised in Figure 1, showing that 80% of students believed they had either some or an excellent level of understanding. Table 1 shows they were

slightly less confident in their ability to communicate their strengths against criteria, lower again for drawing on their work experience to meet selection criteria, and the weakest ratings were recorded for using clear examples to meet selection criteria. Cronbach alpha was computed for the three confidence items (0.91), provided assurance of reliability.

[Insert Figure 1][Insert Table 1]

With respect to their "practice" at addressing selection criteria, 86% were working, and the same proportion stated they had applied for a professional position previously. Despite this, their experience in applying for other forms of work experience was limited. For 69%, this was their first episode of WIL, and 75% had not undertaken extra-curricular internships. Only 40% had received any form of training in submitting applications for professional roles. Of the 35 students in the first institution who attended the workshop, only five elected to undertake the mock job application process, one male and four females. The industry professional's feedback indicated there was considerable variation in student ability to draw on their relevant work experience with two students performing particularly well, one reasonably and two very poorly. *Institution 2.* The pre-intervention ratings for the relevant three items from the work-readiness scale are presented in Table 2. The ratings were fairly consistent across the three areas of successfully applying for graduate roles, with no students considering themselves to be "very poor", yet between five and 12.5% considered themselves below average. Again, there was similarity in the positive ratings with between one-half and one-third of the sample considering themselves above average in the three areas. Notably, either none or only an extremely small proportion felt they were "very good" in the three capabilities.

[Insert Table 2]

Of the 56 students who attended the workshop, only 20 (35.7%) opted to submit selection criteria for individualised review by industry representatives, 16 females (80%) and four males (20%). The industry professionals reported a few 'excellent' applications but

overall felt that students didn't target their responses specific to their WIL experiences and potential employment environment or sector, 'underselling' themselves. Specifically, one industry professional commented that students weren't open to discussing different WIL scenarios in each selection criteria to demonstrate the depth of their experience. The second industry professional wanted more 'real' examples in the applications, to get an understanding of their experiences and almost 'predict' how they would perform in the workforce.

Usefulness of the career development intervention

Students who participated in the CDL interventions generally found them useful.

Institution 1. Twenty-nine of the 63 WIL students completed a post-intervention survey. Of these, 25 had attended the workshop or had worked through the materials online, and their ratings on the workshop's usefulness are presented in Table 3. The computed Cronbach alpha for the three-item scale was .92. The five students who submitted a mock application agreed the activity would be useful for future job applications and that it helped them to understand how to address selection criteria and draw on their work experience more effectively.

Institution 2. Post-workshop ratings for the 56 participating students are presented in Table 2. Paired-sample t-tests indicated a significant difference in the scores for "apply for work relevant to your studies" pre-workshop (M = 4.77, SD = .87) and post-workshop (M = 5.39, SD = .71), t(55) = -6.03, p < .001, "present yourself effectively in selection interviews and processes" pre-workshop (M = 4.80, SD = .99) and post-workshop (M = 5.73, SD = .77), t(55) = -6.09, p < .001; and "judge the applicability of the knowledge gained in your studies to the workplace" pre-workshop (M = 4.82, SD = .86) and post-workshop (M = 5.43, SD = .81), t(55) = -5.37, p < .001.

There was a marked shift from the "slightly below average" and "average" category to the more positive ratings across the board. When reviewing the usefulness of the career development workshop, 46 students (88.46%) highlighted the discussion on selection criteria linked to WIL, facilitated by industry professionals, as being "very useful". For the 20 who opted to submit selection criteria for individualised review, improvement in their ability to apply for graduate roles was less apparent post-workshop. There were proportionately more "very good" ratings for student ability to apply for work relevant to their studies, and some evidence of improvement for this item across the higher rating categories. There was also a slight shift to more positive ratings for student ability to judge the applicability of the knowledge gained in their studies to the workplace. While there was some change in the proportion of ratings for student ability to present themselves effectively in selection interviews and processes experienced, there was little support for an overall improvement.

Engagement with the career development intervention

Overall, engagement with the career development intervention was poor.

Student feedback on engagement. Of the 29 students from the first institution who completed the post-intervention survey, 64.3% had attended the workshop and 21.4% could not attend in person but had reviewed the materials online. The remaining four students (14.3%) did not attend nor read any of the posted materials. When questioned why they did not participate in the workshop activity in any way, all stated this was due to lack of time and the activity being relatively less important than their other study commitments. One remarked, "I recall that I had at least three tests due during that period and hence it wasn't very high on my to-do list". Of the 14 students who responded to why they chose not to submit a mock job application, all but one attributed it to time constraints arising from their study commitments. One student stated, "finding time to complete assessments for three units has been hard enough, let alone finding time for extra activities". Only one did not feel the activity held sufficient value, stating it "seemed a little redundant to my personal and professional growth". Finally, there was variation in the regularity students participated in voluntary initiatives aimed at developing

career self-management, such as those delivered by their university's centralised career service. None attended frequently, 20.7% often, 37.9% sometimes, 17.2% not often, and 24.1% rarely. *Careers and leadership team perspective on student engagement with CDL*. The careers team in the first institution collectively felt that attendance at their extra-curricular activities was typically poor. While they did not note differences by age or gender, there was resounding agreement that international students and those in more vocational-focused degrees (such as Education, Engineering and Nursing) more actively participated. One team member commented that students feel protected at university and this prevents them from seeking assistance and encourages them to defer career action planning. In contrast, international students are "taken so far out of their comfort zone, and they know nobody, that they actually engage their services to actually, to meet somebody … They've made a much bigger investment so in theory there's a sense of urgency".

The careers team noted poor take-up of CDL interventions among students enrolled in "non-vocational degrees", such as Bachelor of Arts. They postulated that as these students were not working towards a particular occupation, they had greater apathy around CDL. One participant described this as, "I'll work it out when I finish my degree as opposed to recognising how important it is to be proactive throughout the degree". They also noted relatively less engagement among disciplines where employment is heavily reliant on networks and talent, such as the Creative Industries. Further, they observed that academically weaker students were more reluctant to engage, perhaps due to a lack of confidence, unless referred by a lecturer.

The careers team saw higher levels of engagement when activities were industryspecific and timed with a particular call from industry, such as a graduate program. Further, they noted anecdotally that attendance was cyclical with a higher proportion of school leavers attending activities at the academic census date when they were considering changing subjects or course. The team agreed that students often struggled to articulate their strengths and capabilities with far less enthusiasm for sessions on self-awareness than resume writing or developing LinkedIn profiles. They unanimously acknowledged that having a greater presence in a discipline area boosted student engagement with centralised CDL activities. While students' post-activity evaluations often indicated the usefulness of CDL activities, there were ongoing difficulties with student attendance. The provision of food and industry presence, particularly high profile employers, were important. Incorporating CDL interventions into the curriculum, particularly as part of assessment, was considered key to improving engagement.

Discussion and implications

CDL, in particular learning to understand and articulate one's achievements and capabilities, has a significant role in enhancing employability (Kinash et al., 2015), and there are key messages from the findings on strategies to amplify its impact in higher education. *Incorporate career development learning into assessment*

Even though both institutions delivered the career development intervention through a disciplinary area, neither was mandated nor formed part of a unit's formal assessment. Open responses by students in the first institution and informal discussions between students and the coordinating academic in the second institution indicated that time constraints - due to other study commitments - were problematic. The intervention in both settings appeared to have been perceived by students as an "add on" and of lower priority than other activities and assessments at that time. A further concern among Physiotherapy students was they anticipated the feedback from industry professionals to be general and not of significant use to them individually.

Findings therefore purport that significant value could be achieved by embedding CDL initiatives into the curriculum, referred to as "career infusion" (Millar, 1995), and as part of student assessment (Jorre de St. Jorre & Oliver, 2018). In support, Donald et al. (2017) promoted compulsory CDL sessions, given student motivation to learn is largely driven by assessment (Boud & Falchikov, 2007). Jorre de St. Jorre and Oliver asserted that "the most

reliable way of developing students' ability to self-assess, evidence and articulate their capabilities would be to design assessment in which it is specifically required. In other words, we should design 'assessment for employability'" (p. 51). Engaging students in career self-management is critical as "institutions need to foster students' sense of ownership of their educational preparation and professional advancement" (Granovskaya & Givens, 2016, p. 36). They highlight the importance of universities overcoming the obstacles of student engagement with CDL by integrating activities into the curriculum. This may have overcome participation issues in the current research, where students prioritised academic units over CDL.

Connect with centralised careers provision

Despite both institutions following the recommended practice of delivering CDL by someone with industry experience (Urbis, 2011), take-up remained poor. Urbis also recommended that careers advice be personalised. While individualised feedback was provided, the Physiotherapy students expressed concern that it would be targeted at a group level, perhaps prompting perceptions that the selection criteria task was of limited value. Donald et al. (2017) suggested that to improve student engagement with CDL, discipline areas need to cement a deep connection with careers provision, and careers staff need to be highly visible in Faculties/Schools. Involving careers staff with future CDL interventions, combined with more tailored individualised support, may improve take-up among students.

Educate students

Findings indicated there is room for improving student ability to draw on relevant work experience when applying for graduate roles, supporting further interventions to educate students – using e-portfolios or otherwise – in better moulding and articulating their responses to specific criteria. The need for further development is also reinforced by the varying levels of performance observed by the industry partners in the mock job application submissions. Greater clarity is needed around employer expectations of student ability to communicate their capabilities. It is important that students understand the value placed by graduate employers on the ability to comprehend and articulate worth in respect to advertised roles and opportunities.

Unfortunately, there has been a suggestion that new graduates have an inflated sense of workplace preparedness (Hart Research Associates, 2015), and there is widely publicised evidence of employers' dissatisfaction with new graduates (Davies et al., 2016; Deloitte, 2017). Findings did not identify that student self-perception was an issue, however, this may be more apparent closer to graduation. It is important to find ways to encourage and engage students to take the time to develop their self-awareness and benchmark their capabilities against industry standards, as well as providing platforms and guidance on communicating these to third parties. *Consider the cohort*

Students in non-vocational areas may need more encouragement to engage with CDL. Although Business may not be considered "non-vocational" in comparison with, for example, liberal arts, it is often generalist in nature and presents students with multitude potential career pathways. It experienced relatively weaker take-up of the CDL intervention compared to Physiotherapy, where enrolled students are focused on their personal and professional development toward a specific occupation. In addition, the proportion of international students may be important, as the emphasis placed on selection criteria differs geographically. In Asia, for example, the recruitment process may be less focused on capabilities and more on centralised exams (Poocharoen & Brillantes, 2013), loyalty, networks, and status. The higher proportion of international students of Asian descent in the first cohort may explain lesser importance assigned to the activity, resulting in poorer take-up. It is important to emphasise to such cohorts the importance of selection criteria, particularly given their preference for employment in their country of study (International Education Association of Australia, 2012).

Conclusion

This paper explored student confidence and capabilities in applying for graduate roles, and evaluated the experiences of two institutions instigating a CDL intervention, supported by industry professionals, to better enable students to draw on their work experience when addressing selection criteria. Despite the varied disciplines, there were similarities across both institutions in student engagement and quality of outcomes. Findings contribute to the debate that CDL is undervalued by students across the higher education sector, regardless of discipline. Further resourcing is needed to educate students on the importance of CDL, more specifically their ability to draw on work experience to better understand and articulate their capabilities to prospective employers. The study supports embedding CDL into the curriculum and assessment processes to support employable graduates in communicating their achievements and achieving their targeted employment outcomes.

The authors acknowledge the limitations of the study, including the sample size at both institutions. Differences in the cohorts presented challenges with maintaining consistency in deployed methodology, in particular measures used in the pre- and post-intervention surveys to track student ability to apply for graduate roles. It is felt, however, that the study provides a rich, cross-disciplinary snapshot of the value of and student engagement with CDL, informing future experimentation with post-WIL interventions for CDL purposes. In particular, extending the study to include a wider range of disciplines and to explore variations in student responses to interventions – such as by discipline, socio-economic status, gender, and age - would be useful for targeted strategies to improve student engagement with CDL. In particular, given the high proportion of international students in Australia (Department of Education and Training, 2018), exploring the value of CDL interventions among international students is considered important.

References

- Ahmadi, M. (2015). Emerging practices of university career centers. What patterns are most conducive to reducing underemployment in college graduates? Retrieved from http://hdl.handle.net/1773/34820
- Andrewartha, L., & Harvey, A. (2017). Employability and student equity in higher education:
 The role of university careers services. *Australian Journal of Career Development*, 26(2), 71-80. DOI: 10.1177/1038416217718365
- Australian Bureau of Statistics. (2017). *Education and work, Australia, May 2017, 6227.0*. Canberra, ACT: ABS.
- Bennett, J., Pitt, M., & Price, S. (2012). Understanding the impact of generational issues in the workplace. *Facilities*, *30*(7), 278 288.
- Billett, S. (2011). *Curriculum and pedagogical bases for effectively integrating practice-based experiences*. Strawberry Hills, NSW: Australian Learning and Teaching Council.
- Billett, S. (2015). *Integrating practice-based experiences into higher education*. Dordrecht: Springer.
- Billett, S., Cain, M., & Le, A. (2016). Augmenting higher education students' work experiences: preferred purposes and processes. *Studies in Higher Education*, 1-16.
- Blau, G., & Snell, C. (2013). Understanding undergraduate professional development engagement and its impact. *College Student Journal*, 47(4), 689-702.
- Boud, D., & Falchikov, N. (2007). *Rethinking assessment in higher education: Learning for the longer term.* New York, NY: Routledge.
- Breen, R. (2006). A practical guide to focus-group research. *Journal of Geography in Higher Education*, *30*(3), 463-475. DOI: 10.1080/03098260600927575
- Briscoe, J., & Hall, D. (2006). The interplay of boundaryless and protean careers: Combinations and implications. *Journal of Vocational Behavior*, 69(1), 4–18.

- Brooks, R., & Youngson, P. (2016). Undergraduate work placements: an analysis of the effects on career progression. *Studies in Higher Education*, 41(9), 1563-1578.
 DOI:10.1080/03075079.2014.988702
- Clarke, M. (2017a). Building employability through graduate development programmes: A case study in an Australian public sector organisation. *Personnel Review*, 46(4), 792-808. DOI: 10.1108/PR-12-2015-0321
- Clarke, M. (2017b). Rethinking graduate employability: The role of capital, individual attributes and context, *Studies in Higher Education*. DOI: 10.1080/03075079.2017.1294152
- Dacre Pool, L., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education+ Training*, 49(4), 277-289. DOI: 10.1108/00400910710754435
- Davies, J., Edgar, S., Debenham, J. (2016). A qualitative exploration of the factors influencing the job satisfaction and career development of physiotherapists in private practice. *Manual Therapy*, 25, 56-61. DOI: 10.1016/j.math.2016.06.001

Deloitte (2017). Soft skills for business success. Sydney, NSW: Deloitte.

- Department of Education and Training (2018). *International student data monthly summary, March 2018.* Canberra, ACT: DET.
- Department of Employment (2016). Unpaid work experience in Australia: Prevalence, nature and impact. Canberra, ACT: Department of Employment
- Donald, W., Baruch, Y., & Ashleigh, M. (2017). The undergraduate self-perception of employability: human capital, careers advice, and career ownership. *Studies in Higher Education*. DOI: 10.1080/03075079.2017.1387107

- Edgar, S., Francis-Coad, J., & Connaughton, J. (2013). Undergraduate reflective journaling in work integrated learning: Is it relevant to professional practice? *Asia-Pacific Journal* of Cooperative Education, 14(3), 147-156.
- Elias, K. (2014). *Employer perceptions of co-curricular engagement and the co-curricular record in the hiring process*. Doctoral dissertation, University of Toronto (Canada).
- Foundation for Young Australians. (2016). *The new work mindset: 7 new job clusters to help* young people to navigate the new work order. Melbourne, VIC: FYA.
- Gilfillan, G. (2018). Characteristics and use of casual employees in Australia. *Research Paper Series 2017-18, Parliament of Australia*. Canberra, ACT: Australian Government.
- Granovskaya, Y., & Givens, L. (2016). Curricular infusion of career development. In M.
 Levy and B. Polnariev (Eds.), *Academic and Student Affairs in Collaboration: Creating a Culture of Student Success* (pp. 35-64). New York, NY: Routledge.
- Hart Research Associates (2015). *Falling short? College learning and career success*. Retrieved from http://www.voced.edu.au/content/ngv:78305
- Harvey, A., Andrewartha, L., Edwards, D., Clarke, J., & Reyes, K. (2017). Student equity and employability in higher education. Melbourne, ACT: Centre for Higher Education Equity and Diversity Research, La Trobe University.
- Health Workforce Australia (2014). Australia's Health Workforce Series Physiotherapists in Focus. Adelaide, SA: Health Workforce Australia.
- Holmes, L. (2013). Competing perspectives on graduate employability: possession, position or process? *Studies in Higher Education*, *38*(4), 538–554. DOI: 10.1080/03075079.2011.587140
- Hooley, T., & Dodd, V. (2015). *The economic benefits of career guidance*. London, UK: Careers England.
- International Education Association of Australia. (2012). Internships and Work

Placement Opportunities for International Students in Victoria. Melbourne, VIC: IEAA.

- Jabeen, F., Behery, M., & Abu Elanain, H. (2015). Examining the relationship between the psychological contract and organisational commitment: the mediating effect of transactional leadership in the UAE context. *International Journal of Organizational Analysis*, 23(1), 102-122.
- Jackson, D. (2016). Re-conceptualising graduate employability: The construction of preprofessional identity in the higher education landscape of practice. *Higher Education Research and Development*, 35(5), 925-939. DOI: 10.1080/07294360.2016.1139551
- Jackson, D. (2017). Developing pre-professional identity in undergraduates through workintegrated learning. *Higher Education*, 74(5), 833-853. DOI: 10.1007/s10734-016-0080-2
- Jackson, D., & Wilton, N. (2016). The development of career management competencies among undergraduates and the role of Work-Integrated Learning. *Teaching in Higher Education*, 21(3), 266-287. DOI: 10.1080/13562517.2015.1136281
- Jorre de St Jorre, T. & Oliver, B. (2018) Want students to engage? Contextualise graduate learning outcomes and assess for employability. *Higher Education Research & Development*, *37*(1), 44-57, DOI: 10.1080/07294360.2017.1339183
- Karmel, T., & Carroll, D. (2016). Had the graduate job market been swamped? NILS working paper series No.228/2016. Adelaide, SA: Flinders University, National Institute for Labour Studies.
- Kinash, S., Crane, L., Judd, M-M., Mitchell, K., McLean., M., Knight, C., Dowling, D., & Schultz, M. (2015). Supporting graduate employability from generalist disciplines through employer and private institution collaboration. Canberra, ACT: Office of Learning and Teaching.

- Lowden, K., Hall, S., Elliot, D., & Lewin, J. (2011) Employers' perceptions of the employability skills of new graduates. Glasgow, UK: University of Glasgow.
- McKenzie, S., Coldwell-Neilson, J., & Palmer, S. (2017). Informing the career development of IT students by understanding their career aspirations and skill development action plans. *Australian Journal of Career Development*, 26(1), 14-23. DOI: 10.1177/1038416217697972
- McNamara, J., & Ruinard, E. (2016). Evaluation of collaborative assessment of work integrated learning. *International Journal of Clinical Legal Education*, 23(5), 1-27.
 DOI: http://dx.doi.org/10.19164/ijcle.v23i1.488
- Millar, G. (1995). *Helping schools with career infusion*. ERIC Digest, EDO-CG-95-57. Retrieved from <u>https://www.counseling.org/resources/library/ERIC%20Digests/95-057.pdf</u>
- Oliver, B. (2015). *Assuring graduate capabilities: Evidencing levels of achievement for graduate employability*. Canberra, ACT: Office for Learning and Teaching.
- Payton A. 2017. *Skilling for tomorrow*. Adelaide, SA: National Centre for Vocational Education Research.
- Pegg, A., Waldock, J., Hendy-Isaac, S., & Lawton, R. (2012). *Pedagogy for employability*. York, UK: Higher Education Academy.
- Poocharoen, O., & Brillantes, A. (2013). Meritocracy in Asia Pacific: Status, issues, and challenges. *Review of Public Personnel Administration*, 33(2), 140-163. DOI: 10.1177/0734371X13484829
- Simpson, A., & Ferguson, K. (2013). Location, timing, and flexibility: Position inclusivity in higher education career services. *Australian Journal of Career Development*, 22(1), 45-48. DOI: 10.1177/1038416213478806

- Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P. & Tyler, J. (2009). Career development learning: Maximising the contribution of work-integrated learning to the student experience. Wollongong, Australia: University of Wollongong.
- Smith, C., Ferns, S., & Russell, L. (2014). *The impact of work integrated learning on student work-readiness - Final Report*. Canberra, ACT: Office of Learning and Teaching.
- Social Research Centre (2017). Student experience survey report. Melbourne, VIC: SRC.
- Taylor, A., and Hooley, T. (2014). Evaluating the impact of career management skills module and internship programme within a university business school. *British Journal of Guidance and Counselling*, 42(5), 487–99. DOI: 10.1080/03069885.2014.918934
- Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy*, *25*(4), 407–31. DOI: 10.1057/hep.2011.26
- Universities Australia, BCA, ACCI, AIG, and ACEN. (2015). *National strategy on Work Integrated Learning in university education*. Canberra, ACT: UA.
- Urbis. (2011). National career development strategy (NCDS) research project element 2: Synthesis report. Canberra, ACT: Urbis.
- Watts, A. (1977). Careers education in higher education: Principles and practice. British Journal of Guidance & Counselling, 5(2), 167-184. DOI: 10.1080/03069887708258112
- Wilton, N. (2012). The impact of work placements on skill development and career outcomes for business and management graduates. *Studies in Higher Education*, *37*(5), 603–620.
 DOI:10.1080/03075079.2010.532548
- Yorke, M., & Knight, P. (2006). *Embedding employability into the curriculum*. York, UK: Higher Education Academy.

		Frequency	%	Mean	SD
Communicate	Not confident at all	0	0.0	3.74	0.70
strengths against	Not very confident	2	5.7		
selection criteria	Neutral	8	22.9		
	Confident	22	62.9		
	Very confident	3	8.6		
Use clear examples	Not confident at all	0	0.0	3.46	0.74
to show how you	Not very confident	3	8.6		
criteria	Neutral	15	42.9		
Unterna	Confident	15	42.9		
	Very confident	2	5.7		
Draw on your work	Not confident at all	0	0.0	3.63	0.81
experience to meet	Not very confident	4	11.4		
selection criteria	Neutral	8	22.9		
	Confident	20	57.1		
	Very confident	3	8.6		

Table 1 Institution 1: Confidence levels in using selection criteria

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Table 2 Institution 2: Pre- and post-intervention percentage of ratings on ability to apply for graduate roles

	Pre-workshop $(N = 56)$					Post-workshop $(N = 56)$				Post-selection task $(N = 20)$					
	Very poor (%)	Below average (%)	Average (%)	Above average (%)	Very good (%)	Very poor (%)	Below average (%)	Average (%)	Above average (%)	Very good (%)	Very poor (%)	Below average (%)	Average (%)	Above average (%)	Very good (%)
Apply for work relevant to your studies	0	5.36	33.93	58.92	1.79	0	0	7.14	87.5	5.36	0	5	5	60	30
Present yourself effectively in selection interviews and processes	0	12.5	21.43	64.28	1.79	0	0	3.57	80.36	16.07	0	0	15	75	10
Judge the applicability of the knowledge gained in your studies to the workplace	0	7.14	25.00	67.86	0	0	0	10.71	80.36	8.93	0	0	10	75	15

Table 3 Institution 1: Usefulness of workshop (N = 25)

		%	Mean	SD
The workshop helped	Strongly disagree	4.2	3.96	.91
me understand how	Somewhat disagree	4.2		
to communicate my	Neither agree nor disagree	4.2		
selection criteria	Somewhat agree	66.7		
selection criteria	Strongly agree	20.8		
The workshop helped me understand how to draw on work experience more effectively when writing job	Strongly disagree	0	3.96	.91
	Somewhat disagree	8.3		
	Neither agree nor disagree	16.7		
	Somewhat agree	45.8		
	Strongly agree	29.2		
applications				
The workshop helped	Strongly disagree	0	4.21	.93
me understand how to use clear examples	Somewhat disagree	8.3		
	Neither agree nor disagree	8.3		
to show how I meet	Somewhat agree	37.5		
selection criteria	Strongly agree	45.8		

Drawing on work experience to articulate capabilities



Figure 1 Level of understanding of how to address selection criteria in graduate job applications