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Denise Jackson
Edith Cowan University

Claire Lambert
Edith Cowan University

Ruth Sibson
Edith Cowan University

Ruth Bridgstock

Matalena Tofa

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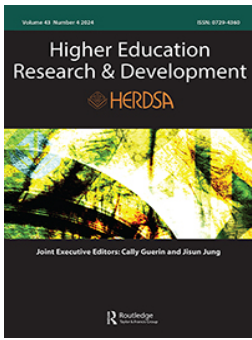


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Student employability-building activities: participation and contribution to graduate outcomes

Denise Jackson ^a, Claire Lambert ^a, Ruth Sibson ^a, Ruth Bridgstock ^b and Matalena Tofa ^b

^aSchool of Business and Law, Edith Cowan University, Joondalup, WA, Australia; ^bChancellery, Swinburne University, Melbourne, Australia

ABSTRACT

Employability development has become a central concern of higher education, with many students attending university to enhance their employability and career development. Universities offer a range of curricular, co-curricular and extracurricular employability-building activities, including work-integrated learning, mentoring and career counselling. However, participation in these activities, barriers to engagement and their impact on employability are unclear. This paper examines student engagement in diverse employability-building activities, barriers impeding participation and their perspectives on how activities develop aspects of employability. The methodological approach encompassed an online survey of recent bachelor graduates ($n = 324$) from two Australian universities and focus groups to further explore participants' experiences ($n = 11$). Findings showed relatively low participation rates in most activities, with the greatest engagement in external paid employment and work-related activities (e.g., internship). These activities were also perceived as the most useful for developing a sense of professional self, networks and securing work. Barriers to participation included work/study commitments, financial/health pressures and lack of confidence and awareness, somewhat varying by graduates' background characteristics. Benefits from activities varied by their type, along with students' personal characteristics. Findings highlight the importance of embedding employability-building activities in the curriculum and signal potential ways to increase engagement in diverse cohorts.

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Employability; agency; co-curricular; extracurricular; student engagement

Introduction

Employability relates to an individual's capacity to realise their career goals. It is an important indicator of institutional performance and a key construct in national economic policy (Bennett, 2019). Early approaches to graduate employability development relied largely on curriculum-based development of disciplinary and generic skills for

CONTACT Denise Jackson  d.jackson@ecu.edu.au  2.243, 270 Joondalup Drive, Joondalup, WA 6027, Australia

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work ('human capital' approach) (Holmes, 2013). Now, employability is recognised as more than work skills and is strongly linked with students' identity and sense of self, ability to self-manage their career across their lifespan, and development of relationships with others (Bridgstock, 2009; Jackson, 2016). International and non-traditional students may particularly benefit from employability-building activities that reach beyond human capital and start to address deeper facets of disadvantage (Jackson & Dean, 2022).

Recent conceptualisations of employability also recognise that development extends beyond curriculum-based learning to complementary co-curricular activities offered by the institution and individually organised extracurricular activities (e.g., employment, travel, avocational interests/hobbies) (Kinash et al., 2016). Given that many students attend university to foster employability and further their careers, engagement with employability-building opportunities might be lower than expected (Jackson & Tomlinson, 2021). Structural factors (work obligations, financial limitations, health concerns) can constrain engagement (Stuart et al., 2009) with, ironically, institutions often creating barriers through restrictive eligibility rules, scheduling and delivery modes (Kahu, 2013). Agency is also important, with clear benefits for students intentionally and proactively developing their employability (Parutis & Howson, 2020). Propensity to be agentic is, in turn, developed through employability-building activities, although it is also influenced by students' backgrounds, sociocultural factors and structural constraints (Bathmaker et al., 2016; Tholen, 2015).

This dual-institution study uses quantitative and qualitative data to investigate student engagement in employability-building activities and how activities develop aspects of employability and support job attainment. Data are gathered on graduate perspectives; their post-graduation career experiences enabling a deeper understanding of activities' value and factors influencing engagement during university. The research questions were: How engaged are higher education (HE) students in activities designed to develop their employability and does this vary by personal and study characteristics (RQ1)? What factors impact student engagement in employability-building activities, and do these vary by personal characteristics (RQ2)? To what extent are activities designed to enhance HE student perceived employability, developing networks, understanding of professional self, and supporting job attainment (RQ3)?

The study differs from others by exploring nuances in the influence of individual and contextual constraints and enablers on students' engagement in various employability-building activities. It builds on agency theory and the role of sociocultural and structural factors to inform our understanding of student proactivity and behaviour related to activities. Further, it examines how activities may benefit diverse cohorts in different ways, thinking beyond post-graduation employment to the development of social and identity capital resources for career success.

Literature review

Dimensions of employability

Overemphasis on human capital, the requisite skills and knowledge for effective workplace performance developed through education, fails to account for mediating factors in the relationship between acquired skills and employment outcomes (Marginson,

2019), such as labour market conditions (Guilbert et al., 2016). Rapidly evolving skill demands mean that human capital remains important, yet many suitably skilled graduates are challenged with confidently creating and communicating a sound employability narrative to secure work (Jorre de St Jorre & Oliver, 2018). Recognising the complex and multi-faceted nature of employability, this study focuses on two relatively underexplored dimensions (Jackson, 2016). First, social connectedness, which refers to building, strengthening, and using networks for career development (Bridgstock & Tippett, 2020), pivotal for advancing graduate careers through easier access to the hidden job market, sharing knowledge and building relationships to advance work-related opportunities (Batistic & Tymon, 2017). It is particularly important for equity students whose limited professional networks (bridging capital) and own family and peer networks (bonding capital) may not support the value and mechanics of social connectedness for future careers (Clarke, 2018). Similarly, their weaker cultural capital could limit familiarity with workplace signals, language, and cues, impacting network building, professional identity development and performance in recruitment (Tomlinson, 2017).

Second is sense of professional self, an aspect of professional identity which emphasises HE students' familiarity with their targeted profession to understand prioritised work-related capabilities, responsibilities and norms and standards of behaviour (Jackson, 2016). Understanding a profession's culture, and self-reflection on alignment with personal values and priorities, encourages awareness of one's professional being, enabling the curation of an appealing employability narrative and easier decoding of cultural capital for enhanced recruitment experiences (Tomlinson & Jackson, 2019). HE institutions' development of these two dimensions is critical to better supporting students in mobilising their human capital through connections and effective recruitment and selection performance, particularly amid global talent shortages.

Developing aspects of graduate employability

Developing social connectedness and sense of professional self may occur through curriculum-based, co-curricular and extracurricular activities, depending on how institutions structure and resource them. One strategy is work-integrated learning (WIL), a partnering of students, industry and educators on authentic, work-related activities that connect students' curriculum-based learning to career. WIL is organised on-campus, virtually, globally or in professional/community settings and can enhance employment prospects (ACEN, 2023), affording professional socialisation, networking opportunities and career planning through evaluation and feedback (Jackson, 2017; Jackson & Tomlinson, 2021). Extracurricular employment may offer similar benefits yet can be less impactful given the absence of reflective practice and career development learning (Jackson, 2023).

Global experiences (study exchange/study tour) can build students' confidence, extend international networks, and develop cultural awareness (Potts, 2022), potentially advancing global career opportunities. Industry mentoring programmes may develop mentees' networks, build self-awareness through dialogue and reflection, and clarify roles and career pathways (Jackson & Tomlinson, 2021), enhancing sense-of-professional self. Also important for career decision-making, professional identity and social connectedness is HE institutions' careers provision, including recruitment fairs, networking

sessions with employers/professional associations, career counselling and recruitment tool development (Jackson & Tomlinson, 2021; Kinash et al., 2016; Whiston et al., 2017). Other activities include holding positions of responsibility in community/sports groups, valuable for professional networking if related to degree studies (Brereton & Mistry, 2019; Jackson & Tomlinson, 2021), and co/extracurricular professional development (e.g., short courses/award programmes/micro-credentials) which may clarify personal strengths and development needs.

Earlier work shows how activities contribute differently to employability and graduate employment outcomes (e.g., Jackson & Rowe, 2023; Pinto & Ramalheira, 2017) yet there lacks empirical analysis on how benefits vary across diverse cohorts to inform future practice. Importantly, we acknowledge the known challenges with designing, resourcing, and evaluating employability-building activities, such as ensuring they are inclusive and impactful for all students (Jackson & Dean, 2022). This includes challenges with embedding activities in curriculum due to space, academic resistance, and haphazard integration rather than scaffolded, course-wide approaches (Bennett, 2021). As an example, WIL requires significant resourcing and attention to quality principles to achieve positive experiences and outcomes for all students (Hora et al., 2019).

Engagement in activities and agency

Motivation to undertake work-based WIL (Hora et al., 2019) and upward trends in paid employment (Jackson, 2023) indicate that students recognise the career-related value of relevant work experience. However, overall, students engage less than expected in employability-building activities (Bradley et al., 2021), albeit varying by activity type (Jackson & Dean, 2022). Agency is driven by intentionality (e.g., enjoyment of/learning from activities) and anticipation of outcomes (e.g., career clarification, skill development and networking) (Klemenčič, 2015), which are shaped by previous experiences, outcomes, and notions of what is possible and desirable (Biesta, 2008). Therefore, an agentic student who recognises the importance of employability will seek information and make informed decisions about which activities to engage in, although exploration and happenstance remain important (Klemenčič, 2015). A lack of proactivity may reflect an underappreciation of the value of employability and related activities from weakly developed cultural and social capital rather than apathy (Burke et al., 2020).

Many (Biesta, 2008; Kahu, 2013; Klemenčič, 2015) recognise the interplay of socio-cultural factors and agentic behaviour, with support from informal networks and career influencers, confidence, and sense of belonging shaping proactive engagement in activities (Stevenson & Clegg, 2011). Sociocultural influences can vary across student groups, and embedding activities into the curriculum may allow less privileged students to participate (Bathmaker et al., 2016). Structural factors may also influence agency, including work obligations, financial worries, family/caring commitments (Stuart et al., 2009) and health concerns, such as physical access and psychological support among students with disability (Clarke & Harvey, 2019). Less understood is the role of institution-related matters on engagement among diverse cohorts, such as activity design (e.g., entry criteria), delivery (e.g., mode/timing) and availability (Kahu, 2013); a gap addressed in this study.

Methodology

The study combined quantitative (online survey) and qualitative (follow-up focus group) data, allowing methodological triangulation to enrich findings and enhance validity.

Participants

Participants comprised bachelor graduates who completed their last degree in one of two Australian universities during 2020/2021/2022 (see Table 1). Both universities are primarily located in metropolitan areas on the West (One) and East (Two) coast and strategically focus on employability. The study focused on non-professionally accredited courses without extensive periods of mandatory practicum/placement. Therefore, graduates of Medicine/Dentistry, Education, Nursing/Midwifery and Allied Health (Occupational Therapy/Paramedical Science/Speech Pathology) were excluded. Of the 324 surveyed graduates, 11 participated in focus groups for deeper insights into activity engagement. They comprised six males and five females, aged 25 and above and were from Commerce, STEM and Arts disciplines across both institutions.

Procedures

Following ethics approval, each institution's alumni centre invited 2020/2021/2022 graduates from the targeted courses to participate in an online survey between September and November 2022. Respondents who had indicated their willingness were invited

Table 1. Survey participant characteristics.

Variable	Sub-groups	Institution 1 (<i>n</i> = 249)		Institution 2 (<i>n</i> = 75)		Total (<i>n</i> = 324)	
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Gender	Male	121	48.8	29	39.7	150	46.7
	Female	127	51.2	44	60.3	171	53.3
Age	<24 years	55	22.1	37	50.7	92	28.6
	25–29 years	146	58.6	27	37.0	173	53.7
	30+ years	48	19.3	9	12.3	57	17.7
Student enrolment	International	70	28.1	8	10.7	78	24.1
	Domestic	179	71.9	67	89.3	246	75.9
First-in-family	First-in-family	105	42.2	28	37.3	133	41.0
	Not first-in-family	144	57.8	47	62.7	191	59.0
Time since graduation	0–11 months	59	23.7	4	5.3	63	19.4
	12–23 months	110	44.2	32	42.7	142	43.8
	24–35 months	80	32.1	39	52.0	119	36.7
Discipline	Science	34	10.4	7	8.2	41	10.0
	Information Technology	45	13.8	10	11.8	55	13.3
	Engineering	36	11.0	9	10.6	45	10.9
	Architecture/Building	38	11.6	2	2.4	40	9.7
	Health	45	13.8	10	11.8	55	13.3
	Management/Commerce	73	22.3	18	21.2	91	22.1
	Society/Culture	31	9.5	8	9.4	39	9.5
	Creative Arts	25	7.6	21	24.6	46	11.2
With disability	Yes	21	8.4	6	8.0	27	8.3
	No	228	91.6	69	92.0	297	91.7
Non-English-speaking background (NESB)	Yes	14.5	11	14.7	14.5	47	14.5
	No	85.5	64	85.3	85.5	277	85.5

by email to a focus group session. Eleven graduates were separated (by institution) into three one-hour virtual focus groups conducted between December 2022 and February 2023. The sessions were facilitated by two researchers and recorded and transcribed via Microsoft Teams.

Measures

The survey instrument first posed questions on demographic/study characteristics with several response options for gender. First-in-family to attend university status was derived from the highest of parents' education level. RQ1 was gauged by rating engagement in 10 activities (five-point scale, 1 = not at all, 3 = to some extent, 5 = to a very great extent) identified from earlier studies (e.g., Jackson & Bridgstock, 2021; Jackson & Tomlinson, 2021; Kinash et al., 2016). For RQ2, participants rated (same five-point scale) the extent to which 12 factors, previously observed as constraints or enablers in the literature (e.g., Burke et al., 2020; Stuart et al., 2009), impacted engagement in activities not part of their bachelor course, including paid work. For RQ3, graduates rated their agreement (five-point scale, 1 = strongly disagree, 5 = strongly agree) on how useful each of the 10 activities were for: (i) securing preferred work post-graduation; (ii) building, strengthening, and using networks/connections for career development; and (iii) building a sense of professional self and developing strategies to accomplish career goals.

A semi-structured focus group schedule explored participants' bachelor studies, achievement of preferred work and activity engagement, including questions on how they learned about their professional field, built professional networks, developed their professional identity and employability narrative, and the role that activities played. Participants were asked to elaborate on their challenges and how universities might better support students in these areas. The survey instrument and focus group schedule were piloted among a small sample of recent graduates prior to data collection.

Analysis

Survey data were analysed using SPSS 29.0 with techniques selected based on effectively addressing the research questions and the meeting of requisite assumptions (e.g., data normality, case-variable ratio, sample size). Harman's single factor test showed survey data were normal without common method bias (Podsakoff et al., 2003). For RQ1, means and standard deviations were computed for activity engagement, and variations were examined by Multivariate Analysis of Variance (MANOVA) given mild, positive bivariate correlations between activities. Pillai's Trace statistic was used because of its robustness to heterogenous variances among dependent variables. External paid employment did not correlate with other activities and was analysed separately using One-Way Analysis of Variance (ANOVA). For RQ2, means and standard deviations were calculated for the 12 items influencing activity engagement. Principal Components Analysis (PCA) with Varimax rotation was conducted to group the 12 variables, and multiple regressions were run on the factor scores of emergent factors. For RQ3, means and standard deviations indicated activities' usefulness for securing work post-graduation and developing an understanding of professional self and networks. Variations in personal/study characteristics were examined using MANOVA.

The focus group data thematic analysis was initially guided by the activities and factors utilised in the survey instrument. To further understand the factors influencing activity engagement and the role of activities in developing professional networks, sense of professional self and supporting a transition to preferred work, one research team member used manual coding techniques to produce initial codes and generate a framework of themes in Microsoft Excel. Upon review by another researcher, differences were discussed, and final themes were agreed upon and documented (see Braun & Clarke, 2006). Quotations from participants are included to represent identified themes.

Results

Participation in employability-building activities

The mean participation scores for all 10 activities approximated towards three, ‘to some extent’ (see Table 2). The most common activities were external paid employment and

Table 2. Participation in employability-building activities.

	Mean (SD)	Sub-group	df	MS	F	p-value	η^2
Paid employment (not part of course)	3.22 (1.308)						
Work-related activities (volunteering/internships/projects)	3.06 (1.201)						
Entrepreneurship-related activities with industry/community partners (consultancies/competitions/hackathons)	2.50 (1.369)	Age	2	30.580	18.130	<.001	.108
		Institution	1	83.749	52.230	<.001	.147
		Citizenship	1	14.891	8.130	.005	.026
		First-in-family	1	26.410	14.727	<.001	.046
Job search/recruitment-related activities (resume writing/ careers fairs)	2.86 (1.189)	Age	2	8.865	6.552	.002	.042
		Institution	1	15.045	10.997	.001	.035
		First-in-family	1	15.458	11.310	<.001	.036
Career counselling	2.69 (1.324)	Age	2	17.866	10.819	<.001	.067
		Institution	1	80.202	53.692	<.001	.151
		Citizenship	1	31.517	19.044	<.001	.059
		First-in-family	1	31.222	18.855	<.001	.059
Networking activities/events (university-organised/professional association events)	2.82 (1.277)	Age	2	15.889	10.270	<.001	.064
Mentoring (student/industry/ community, as mentee or mentor)	2.70 (1.344)	Institution	1	41.445	27.632	<.001	.084
		Age	2	12.547	7.197	<.001	.046
		Institution	1	63.899	39.915	<.001	.117
Position of responsibility (community/sport/university groups)	2.61 (1.326)	Citizenship	1	32.734	19.210	<.001	.060
		Age	2	17.010	10.266	<.001	.064
		Institution	1	32.794	19.823	<.001	.062
		Citizenship	1	16.854	9.872	.002	.032
Professional development outside curriculum (short courses/ award programmes/micro-credentials, e.g., public speaking/ programming/software)	2.67 (1.343)	First-in-family	1	11.481	6.656	.010	.022
		Institution	1	66.246	41.635	<.001	.121
		Citizenship	1	12.922	7.310	.007	.024
		First-in-family	1	14.168	8.034	.005	.026
Global experiences (study exchange/study tour)	2.55 (1.399)	Institution	1	18.908	9.942	.002	.032
		Age	2	20.207	10.983	<.001	.068
		Citizenship	1	25.892	13.782	<.001	.044
		First-in-family	1	33.517	18.083	<.001	.056

Notes: SD = standard deviation; df = degrees-of-freedom; η^2 = effect size.

work-related activities (e.g., volunteering/internships/projects). The least common were entrepreneurship-related activities (e.g., consultancies/competitions/hackathons) and global experiences (e.g., study exchanges/tours). Although not presented here, differences in means across disciplines were not sizeable. Health graduates reported less engagement in seven activities, while Creative Arts graduates were least likely to participate in the other three.

One-way MANOVA ($\alpha = .05$) explored differences by gender, age, citizenship, first-in-family status and institution for the nine activities (paid work excepted). A significant Pillai Trace was reported for age, $F(18,584) = 2.925$, $p < .001$, $P = .165$; citizenship, $F(9,294) = 3.745$, $p < .001$, $P = .103$; first-in-family, $F(9,294) = 3.582$, $p < .001$, $P = .099$; and institution, $F(9,294) = 11.509$, $p < .001$, $P = .261$. Their associated univariate analysis, with Bonferroni correction ($\alpha = .01$), reported significant differences for all activities apart from work-related activities (see Table 2). Seven activities reported significant differences by age; Tukey post-hoc analysis ($\alpha = .05$) showed that those aged 25–29 participated the most, followed by the youngest group, then the oldest. Six activities varied by citizenship, with those enrolled as international students reporting higher means for all. Six activities also differed by first-in-family status, with those with university-educated parents scoring higher for all. There were institutional differences across all eight activities, with lower mean scores for institution two across the board. The separate One-Way ANOVA ($\alpha = .05$) for paid work reported a significant difference for citizenship, $F(1, 302) = 5.214$, $p = .023$, partial $\eta^2 = .017$, with a higher mean score for domestic graduates.

Evident from the focus groups was that participation in employability-building activities was more likely to occur if activities were embedded into the curriculum. This was particularly apparent in work-related activities (e.g., internships/projects) and job search/recruitment-related activities (developing CVs/LinkedIn profiles).

Barriers to activity engagement

Mean scores for the 12 potential inhibitors on activity engagement (except paid employment or curriculum-based) fell between ‘disagree’ and ‘neither agree nor disagree’ (see Table 3). The most impactful were work and academic study commitments, and the least discouragement from professional connections and family/friends. PCA produced three factors that explained 23.7% of the variance. Factor one represents *personal pressures* that discourage participation, spanning financial and health concerns, and discouragement from close contacts. Factor two represents *a lack of confidence, awareness, and appreciation*, highlighting a lack of understanding of and interest in activities, including failing to appreciate their value and not being sufficiently confident to take part. Factor three relates to *commitments* that inhibit activity engagement, including social/work/family/academic study.

Factor scores for the three emergent factors were the dependent variable for each linear regression (see Table 4). β indicates the expected change in each factor for each independent variable, holding other predictors constant. The *personal pressure* model was significant and showed that first-in-family, older and graduates from institution two experienced lower levels of personal pressure than their counterparts when engaging in activities. Those with a disability, however, were associated with higher levels of personal pressure. Results for *lack of confidence/awareness/appreciation* showed a negative

Table 3. Factors influencing activity participation.

Items	Mean	SD	Factor 1: Personal pressures	Factor 2: Lack of confidence/awareness/ appreciation	Factor 3: Commitments
Lack of motivation to take part in activity(s)	2.63	1.268	.277	.735	-.083
Lack of confidence to take part in activity(s)	2.67	1.292	.250	.740	-.053
Lack of awareness that activity(s) were available	3.01	1.237	-.140	.661	.319
Lack of appreciation of the value of activity(s)	2.53	1.291	.279	.555	.227
Busy social life	2.65	1.268	.205	.302	.521
Commitment/time for academic study	3.14	1.168	.141	.023	.608
Work commitments	3.08	1.161	-.030	.107	.740
Family/caring commitments	2.80	1.365	.337	-.077	.617
Discouragement from family/friends	2.25	1.304	.805	.180	.092
Discouragement from professional connections (e.g., co-workers/manager)	2.36	1.372	.773	.191	.143
Financial reasons (e.g., cost of clothes/travel)	2.72	1.331	.683	.030	.298
Physical/mental health concerns	2.74	1.285	.605	.287	.073

age effect, meaning younger graduates were less aware, motivated, or confident in engaging in the activities. Finally, for *commitments*, older graduates and those enrolled as international students reported higher levels and those with disability lower than their respective groups.

Corresponding with the survey results, commitments were a barrier, with all but one focus group graduate stating that time for work and academic study took priority over participation in other employability-building activities; ‘It was a struggle in some ways with time ... I had to work, and I had to go to class, and do assignments’ [B3]. A lack of appreciation of the value of activities and the importance of employability, including articulating effectively values and acquired skills, was also evident. ‘There were heaps of like “what are your values?”, “what are your skills?” I don’t think I really understood their weight and what they actually meant until about three or four years later’ [B2]. A lack of confidence or feeling intimidated was mentioned specifically for networking activities as a barrier to participation. ‘You have nothing to offer to build a relationship, and that is a bit intimidating because you really just had a poor negotiating position the entire time’ [A3]. Only one graduate cited personal mental health concerns as challenging activity engagement.

Graduates highlighted how institutional management and the design of activities impeded participation. One example was their school not approving a non-credit-bearing internship for insurance reasons, preventing them from participating. One-half of the focus group participants felt that some activities were not relevant, being ‘too broad’ and not meeting their career development needs. The industry professionals attending university-organised networking events, or their ratio to students, were cited as examples; ‘I think to myself that if I go to this networking event, trying to find someone who is in a similar field to me would be like finding a needle’ [B1]. Another stated, ‘Networking events could be better served with people that are actually interested in recruitment or the next generation of employee ... that felt like a barrier’ [A1]. Further, a

Table 4. Linear regression analysis on factors influencing activity engagement.

Variable	Personal pressures			Lack of confidence/awareness/value			Commitments			
	B	SE	β	B	SE	β	B	SE	β	p-value
Constant	2.448	.330		1.044	0.388		-.511	.385		.186
Institution 2	-1.16	.127	-0.470	-.131	0.149	-.053	-.160	.148	-.066	.279
Female	-.032	.100	-.016	-.179	0.118	-.090	.105	.117	.053	.368
With disability	.333	.183	.092	.299	0.216	.083	-.425	.214	-.118	.048**
NESB	.013	.156	.004	-.067	0.183	-.023	-.006	.182	-.002	.975
International	.138	.135	.059	-.081	0.159	-.035	.267	.157	.116	.091*
First-in-family	-.302	.105	-.148	.078	0.123	.039	-.041	.122	-.020	.739
Age	-.034	.008	-.216	-.023	0.009	-.152	.020	.009	.128	.036**
F-value	18.259***			1.486			1.792*			
R ²	.313			.036			.043			
Adjusted R ²	.296			.012			.019			

Notes: * $p < .10$, ** $p < .05$, *** $p < .01$; SE = standard error; β = standardised regression coefficient.

graduate who had arrived in Australia as a refugee cited culture as a barrier to engaging in such activities; ‘it does honestly feel like it’s really hard to cut in if someone isn’t ready to open the door for you’ [A3]. COVID-19 was also a barrier that prevented some from participating in curriculum-based internships.

Employability-building activities and personal resources

Means for activity usefulness for developing an understanding of professional self, networks and securing work fell between ‘some’ and ‘to a great extent’ (see Table 5). There was relatively little difference between activities for understanding professional self, with work-related activities perceived as most useful and career counselling the least. For networks, the highest mean was recorded for paid employment and the lowest for entrepreneurship and career counselling. Work-related activities were considered most useful for securing work and entrepreneurship and global experiences the least.

Significant MANOVAs ($\alpha = .05$) for securing work were reported for institution, $F(10,286) = 2.378$, $p = .010$; $P = .077$; first-in-family, $F(10,286) = 2.304$, $p = .013$; $P = .075$; and citizenship, $F(10,286) = 2.069$, $p = .027$; $P = .050$, $P = .067$. Univariate analysis (Table 6) revealed no institutional differences with the applied Bonferroni correction ($\alpha = .01$). For first-in-family status, graduates with university-educated parents reported significantly higher means for mentoring, positions of responsibility and global experiences. Finally, international students rated mentoring and global experiences more highly than their domestic counterparts.

A significant MANOVA was reported for usefulness for developing an understanding of professional self by institution, $F(10,286) = 2.709$, $p = .003$; $P = .087$; age, $F(10,286) = 1.729$, $p = .025$; $P = .115$; and first-in-family, $F(10,286) = 1.929$, $p = .041$; $P = .063$. Univariate analysis showed a higher mean score for paid employment for institution one. There were no significant effects within the prescribed significance level for age. For first-in-family status, those with university-educated parents found career counselling and global experiences more useful. Finally, a significant MANOVA was reported for developing networks by institution, $F(10,286) = 2.231$, $p = .016$; $P = .072$. Univariate analysis showed a significantly higher average rating for work-related activities.

Only five focus group participants indicated they had secured their preferred work. There was individual variance in the activities perceived as most useful, spanning paid

Table 5. Employability-building activities and development of personal resources.

Activity	Professional self		Networks		Securing work	
	Mean	SD	Mean	SD	Mean	SD
Paid employment	3.55	1.194	3.59	1.089	3.42	1.175
Work-related activities	3.64	1.141	3.55	1.194	3.50	1.192
Entrepreneurship-related activities	3.48	1.137	3.32	1.115	3.17	1.107
Job search/recruitment-related activities	3.55	1.073	3.42	1.105	3.45	1.069
Career counselling	3.44	1.127	3.33	1.125	3.41	1.113
Networking activities/events	3.50	1.108	3.53	1.08	3.30	1.129
Mentoring	3.57	1.112	3.49	1.026	3.31	1.091
Position of responsibility	3.61	1.116	3.47	1.118	3.34	1.161
Professional development outside the curriculum	3.57	1.149	3.51	1.109	3.41	1.084
Global experiences	3.53	1.142	3.48	1.106	3.25	1.176

Table 6. Variations in employability-building activities for securing work, understanding professional self and developing networks.

Activity	Sub-group	df	MS	F	p-value	η^2
<i>Securing work</i>						
Mentoring	First-in-family	1	12.213	10.589	.001	.035
	Citizenship	1	12.706	11.032	.001	.036
Position of responsibility	First-in-family	1	13.282	10.159	.002	.0330
Global experiences	First-in-family	1	14.233	10.634	.001	.035
	Citizenship	1	9.656	7.132	.008	.024
<i>Professional self</i>						
Paid employment	Institution	1	14.800	10.722	.001	.035
Career counselling	First-in-family	1	11.851	9.599	.002	.031
Global experiences	First-in-family	1	8.627	6.745	.010	.022
<i>Developing networks</i>						
Work-related activities	Institution	1	17.308	12.613	<.001	.041

employment, work-related activities, job search and recruitment-related activities, and professional association networking events. Corresponding with survey findings, employment and work-related activities were important for understanding the professional self. Concerning universities supporting students better, all responses centred on embedding more practical and ‘real-life’ experiences and assessments into the curriculum. Interaction with industry professionals, such as field trips, guest lecturers and mentoring, was emphasised.

For developing professional networks, peers from university courses and clubs, connections established through volunteering, external clubs or professional associations, mentoring and LinkedIn were considered important. In terms of improving university support, graduates focused on strengthening industry connections through longer periods of work experience, employing lecturers who work in the industry, partnering with professional association events and using recent graduates as mentors. ‘Overall, probably deeper ties with people in industry’ [A1] and ‘the most beneficial thing [the university] could do is to hook into all the industries and events that are already out there’ [B2].

Importantly, some graduates that participated in curriculum-based internships and projects found their institution’s design and/or management of these activities limited their value, including a lack of support in sourcing opportunities or poor alignment with their discipline/career aspirations. For example, ‘what I had envisioned myself doing, I didn’t see a lot of opportunity to get experience or understanding about’ [A4]. Another graduate described their client-based group project as ‘completely pointless because the only feedback we got from the client was “great work” ... I then got harshly graded for a poor reflection because I didn’t really know how to reflect on “great work”’ [A3]. In speaking further about their experiences, which also focused on job search and recruitment-related activities, they stated, ‘really, it felt like your opportunity was gated by the university in some ways’.

Discussion

Overall, findings support earlier evidence of a lack of student participation in employability-building activities (Jackson & Tomlinson, 2021). Those who do engage prefer paid employment outside of their university course, which can offer valuable opportunities for developing professionalism and teamwork skills (Smith, 2009), yet hinder

participation in other employability-building activities (Kinash et al., 2016). Domestic graduates' greater engagement in paid work and international students' higher participation in other activities may support this notion. Also favoured were work-related activities, echoing earlier work (e.g., Hora et al., 2019), and possibly reflecting the sector-wide drive to embed internships/projects with the lack of variation in participation levels by personal/study characteristics seen in earlier studies (e.g., Bathmaker et al., 2016). In contrast, participation in other activities beyond curriculum varied across institutions, age groups, first-in-family status and citizenship, supporting the influence of sociocultural and institution-related factors on engagement (Tholen, 2015). The lower participation rates among domestic students that have been reported elsewhere (e.g., Jackson & Dean, 2022) as with older and first-in-family students (Jackson & Bridgstock, 2021), highlight the need for HE institutions to review activity design and delivery to remove any barriers and heighten activity appeal.

The constraining factors on student engagement signal potential ways to increase participation. The personal pressures experienced by students are observed in earlier studies (Brereton & Mistry, 2019; Clarke & Harvey, 2019) and should encourage consideration of mechanisms to engage those in financial need (e.g., internship bursaries/stipends, clothing for events/activities) and provide support for mental/physical health concerns (e.g., accessibility for students with disability). Relatedly, aligning with earlier work (e.g., Stevenson & Clegg, 2011; Stuart et al., 2009), the demands of work, study, and family/social life constrained participation in employability-building activities, particularly among older and international students. Innovatively integrating activities within the curriculum can help students to balance employability development with commitments, such as allowing part-time employment as a for-credit internship if it offers significant learning opportunities.

Supporting Burke et al. (2020), more effective communication messaging and channels are needed to enhance student confidence, awareness, and appreciation of employability-building activities beyond curriculum, particularly to boost engagement among younger students. Findings promote an educative approach that encourages students to strategically consider available activities, their circumstances, and how to balance activities to develop different aspects of employability. Greater recognition and promotion of activities can be achieved through embedding activities into curriculum, better supporting student equity groups who are often constrained in engaging in external activities (Bathmaker et al., 2016). Further, participation can be incentivised and rewarded through co-curricular award programmes which capitalise on a portfolio approach to learning, effective in curating and articulating an employability narrative (Jorre de St Jorre & Oliver, 2018).

The focus groups revealed that the management of employability-building activities could present significant obstacles to participation, including a lack of available opportunities, academic staff not acknowledging their value, and prohibitive eligibility criteria for engagement, underscoring the need for a mindset shift to eliminate barriers to participation. Findings emphasised how graduates value work-based WIL (e.g., internships), supporting calls for inclusive WIL programmes (Jackson & Dean, 2022), although some demonstrated agency by seeking external internships when in-curriculum opportunities were lacking.

With respect to the value of activities, findings highlighted how more work is needed to develop graduates' professional sense of self. According to participants, incorporating more 'real-life' experiences through assessments and activities with industry experts would assist. Even smaller degrees of industry exposure can be valuable in preparing students for industry engagement (Jackson & Rowe, 2023), scaffolded through courses to professionally socialise and build confidence, particularly for equity students (Jackson & Dean, 2022). Work-based WIL can effectively develop students' professional identity (Jackson, 2017), emphasising the need to offer opportunities to all students across disciplines and course levels.

For developing professional networks, paid employment and work-related activities were relatively important, supporting earlier studies (e.g., Jackson & Bridgstock, 2021). Again, more is needed, and participants suggested a structured and discipline-based approach where industry partners could facilitate social connectedness by involving new hires in networking events to bridge the gap between students and industry professionals. This may also help address the additional challenges international students face in attending these events due to cultural and social inequalities (Clarke, 2018). Consistent with the literature, work-related activities and paid employment are highly valued for securing work (ACEN, 2023; Jackson, 2023), along with search/recruitment-related activities and career counselling initiatives (Whiston et al., 2017). Interestingly, the perceived value of entrepreneurship-related activities for professional socialisation and network building was underwhelming, warranting further investigation of the asserted value of university-industry incubators in preparing graduates for future career (e.g., Smith et al., 2019). Global experiences were also relatively underplayed compared to other studies (e.g., Potts, 2022), particularly for first-in-family and domestic graduates, yet this may be attributed to a relative lack of exposure from COVID-19 travel restrictions.

Conclusion

This study contributes by offering insights into the employability-building activities students are most and least likely to participate in and explores factors that influence participation and activities' impact on non-skill-related determinants of graduate success. Overall, the study indicates underwhelming levels of student participation in employability-building activities, a longstanding and commonly recognised challenge in HE (Bradley et al., 2021). It identifies common barriers to engagement, such as personal pressures, difficulties balancing work and study, a lack of awareness of employability-building activities and their advantages, and how these vary across student groups. Despite investment in various employability development strategies and approaches, our research indicates that certain activities may not effectively develop key aspects of employability (e.g., professional identity, networks, and the ability to secure work), suggesting room for improvement in optimising graduate outcomes.

Findings suggest more staged, discipline-based, and developmental approaches which incorporate different employability-building activities across the curriculum to increase student awareness, confidence and appreciation of the value of these initiatives. The curriculum should be explicit about how activities align with targeted learning outcomes to improve perceived effectiveness (Bennett, 2021) and how they link to employability, so

graduates can apply what they have learned to their career journeys (Bridgstock, 2009). Activities designed and delivered outside the curriculum also require greater clarity and communication on their value and must be thoughtfully designed, accounting for socio-cultural and structural factors so they can be accessed and offer positive learning experiences for all students. More closely connecting students with industry partners is critical, highlighting the prioritisation of co-designed and co-delivered activities which could better support professional socialisation and targeted network building.

To increase the efficacy of HE institutions' efforts, integrated measurement of communication awareness, student engagement and impact for different employability dimensions would be beneficial. Universities may consider using work-based WIL as a starting point to learn from its success in engaging students before expanding offerings, given the limited student engagement.

The study employs survey and focus group data to quantify impact and describe student experiences, although limitations should be acknowledged. These include self-reported data, unequal sample sizes for the two institutions and potential COVID-19 effects on graduates' experiences and responses (particularly those from institution two, which experienced multiple lockdowns). Several potential avenues for future research arise, recognising HE graduates are heterogeneous in terms of their engagement with employability, development needs and career aspirations. Examples include diving more deeply into the experiences of non-traditional students to understand specific developmental and support needs, along with examining how graduates with matured professional identities, networks and job search skills developed these. Further, evaluating various designs and employability-building offerings regarding different employability dimensions could establish an evidence base around effective strategies for diverse student cohorts.

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ORCID

Denise Jackson  <http://orcid.org/0000-0002-7821-3394>

Claire Lambert  <http://orcid.org/0000-0002-0020-2599>

Ruth Sibson  <http://orcid.org/0000-0002-4722-5034>

Ruth Bridgstock  <http://orcid.org/0000-0003-0072-2815>

Matalena Tofa  <http://orcid.org/0000-0003-4976-9673>

References

- ACEN. (2023). *The impact of WIL on graduate outcomes – A three-year review*. Australian Collaborative Education Network.
- Bathmaker, A., Ingram, N., Abrahams, J., Hoare, A., Waller, R., & Bradley, H. (2016). *Higher education, social class and social mobility*. Palgrave Macmillan.
- Batistic, S., & Tymon, A. (2017). Networking behaviour, graduate employability: A social capital perspective. *Education + Training*, 59(4), 374–388. <https://doi.org/10.1108/ET-06-2016-0100>
- Bennett, D. (2019). Graduate employability and higher education: Past, present and future. *HERDSA Review of Higher Education*, 5, 31–61.
- Bennett, D. (2021). Fostering equitable access to employability development through an institution-wide, in-curricular strategy. In M. Shah, S. Kift, & L. Thomas (Eds.), *Student retention and success in higher education* (pp. 191–215). Palgrave Macmillan.
- Biesta, G. (2008). *Learning lives: Learning, identity and agency in the life course*. ESRC. https://cris.dev.brighton.ac.uk/ws/portalfiles/portal/33369808/learning_lives.pdf
- Bradley, A., Quigley, M., & Bailey, K. (2021). How well are students engaging with the careers services at university? *Studies in Higher Education*, 46(4), 663–676. <https://doi.org/10.1080/03075079.2019.1647416>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brereton, F., & Mistry, V. (2019). Barriers to student engagement in clubs and societies: A social capital perspective. *Innovations in Practice*, 13(2), 24–45. <https://doi.org/10.24377/LJMU.iip.vol13iss2article319>
- Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31–44. <https://doi.org/10.1080/07294360802444347>
- Bridgstock, R., & Tippett, N. (2020). *Higher education and the future of graduate employability. A connectedness learning approach*. Edward Elgar Publishing.
- Burke, C., Scurry, T., & Blenkinsopp, J. (2020). Navigating the graduate labour market. *Studies in Higher Education*, 45(8), 1711–1722. <https://doi.org/10.1080/03075079.2019.1702014>
- Clarke, J., & Harvey, A. (2019). *De-valuing 'alternative extra-curricular activities'*. Society for Research in Higher Education. <https://srhe.ac.uk/arc/conference2019/abstracts/0422.pdf>
- Clarke, M. (2018). Rethinking graduate employability: The role of capital, individual attributes and context. *Studies in Higher Education*, 43(11), 1923–1937. <https://doi.org/10.1080/03075079.2017.1294152>
- Guilbert, L., Bernaud, J. L., Gouvernet, B., & Rossier, J. (2016). Employability: Review and research prospects. *International Journal for Educational and Vocational Guidance*, 16(1), 69–89. <https://doi.org/10.1007/s10775-015-9288-4>
- Holmes, L. (2013). Competing perspectives on graduate employability: Possession, position or process? *Studies in Higher Education*, 38(4), 538–554. <https://doi.org/10.1080/03075079.2011.587140>
- Hora, M., Chen, Z., Parrott, E., & Her, P. (2019). *Problematizing college internships: Exploring issues with access, program design, and developmental outcomes*. University of Wisconsin-Madison.
- Jackson, D. (2016). Re-conceptualising graduate employability: The construction of pre-professional identity in the higher education landscape of practice. *Higher Education Research and Development*, 35(5), 925–939. <https://doi.org/10.1080/07294360.2016.1139551>
- Jackson, D. (2017). Developing pre-professional identity in undergraduates through work-integrated learning. *Higher Education*, 74(5), 833–853. <https://doi.org/10.1007/s10734-016-0080-2>
- Jackson, D. (2023). The relationship between student employment, employability-building activities and graduate outcomes. *Journal of Further and Higher Education*. <https://doi.org/10.1080/0309877X.2023.2253426>
- Jackson, D., & Bridgstock, R. (2021). What actually works to enhance graduate employability? *Higher Education*, 81(4), 723–739. <https://doi.org/10.1007/s10734-020-00570-x>

- Jackson, D., & Dean, B. (2022). Employability-related activities beyond the curriculum: How participation and impact vary across diverse student cohorts. *Higher Education*. <https://doi.org/10.1007/s10734-022-00966-x>
- Jackson, D., & Rowe, A. (2023). Impact of work-integrated learning and co-curricular activities on graduate labour force outcomes. *Studies in Higher Education*, 48(3), 490–506. <https://doi.org/10.1080/03075079.2022.2145465>
- Jackson, D., & Tomlinson, M. (2021). The relative importance of work experience, extra-curricular and university-based activities on student employability. *Higher Education Research and Development*, 41(4), 1119–1135. <https://doi.org/10.1080/07294360.2021.1901663>
- 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. <https://doi.org/10.1080/07294360.2017.1339183>
- Kahu, E. (2013). Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 758–773. <https://doi.org/10.1080/03075079.2011.598505>
- Kinash, S., Crane, L., Judd, M., & Knight, C. (2016). Discrepant stakeholder perspectives on graduate employability strategies. *Higher Education Research & Development*, 35(5), 951–967. <https://doi.org/10.1080/07294360.2016.1139555>
- Klemenčič, M. (2015). What is student agency? An ontological exploration in the context of research on student engagement. *Student Engagement in Europe: Society, Higher Education and Student Governance*, 11–29.
- Marginson, S. (2019). Limitations of human capital theory. *Studies in Higher Education*, 44(2), 287–301. <https://doi.org/10.1080/03075079.2017.1359823>
- Parutis, V., & Howson, C. (2020). Failing to level the playing field: Student discourses on graduate employability. *Research in Post-Compulsory Education*, 25(4), 373–393. <https://doi.org/10.1080/13596748.2020.1846312>
- Pinto, L., & Ramalheira, D. (2017). Perceived employability of business graduates: The effect of academic performance and extracurricular activities. *Journal of Vocational Behavior*, 99, 165–178. <https://doi.org/10.1016/j.jvb.2017.01.005>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Potts, D. (2022). Employability development and career outcomes from short-term learning abroad programmes. *Higher Education Research & Development*, 41(4), 1215–1230. <https://doi.org/10.1080/07294360.2021.1901665>
- Smith, E. (2009). New models of working and learning: How young people are shaping their futures differently. *Research in Post-Compulsory Education*, 14(4), 429–440. <https://doi.org/10.1080/13596740903360984>
- Smith, J., Ferns, S., Kay, J., Russell, L., Marcus, M., & Wache, D. (2019). *Enabling and evidencing enterprise and entrepreneurship through WIL*. Australian Technology Network.
- Stevenson, J., & Clegg, S. (2011). Possible selves: Students orientating themselves towards the future through extracurricular activity. *British Educational Research Journal*, 37(2), 231–246. <https://doi.org/10.1080/01411920903540672>
- Stuart, M., Lido, C., Morgan, J., & May, S. (2009). *Student diversity, extra-curricular activities and perceptions of graduate outcomes*. Higher Education Academy.
- Tholen, G. (2015). What can research into graduate employability tell us about agency and structure? *British Journal of Sociology of Education*, 36(5), 766–784. <https://doi.org/10.1080/01425692.2013.847782>
- Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education+ Training*, 59(4), 338–352. <https://doi.org/10.1108/ET-05-2016-0090>
- Tomlinson, M., & Jackson, D. (2019). Professional identity formation in contemporary higher education students. *Studies in Higher Education*, 46(4), 885–900. <https://doi.org/10.1080/03075079.2019.1659763>
- Whiston, S. C., Li, Y., Mitts, N. G., & Wright, L. (2017). Effectiveness of career choice interventions: A meta-analytic replication and extension. *Journal of Vocational Behavior*, 100, 175–184. <https://doi.org/10.1016/j.jvb.2017.03.010>