



10

Fostering Equitable Access to Employability Development Through an Institution-Wide, In-Curricular Strategy

Dawn Bennett

Chapter Summary

This chapter describes the development and incorporation of a strength-based, in-curricular and whole-of-institution approach to employability development. The chapter explores some of the prevailing challenges for scholars who seek equitable approaches to student and graduate success. It then describes the experience of implementing a whole-of-institution approach within the existing first-year curriculum with a view to a phased roll-out over the subsequent three years. The chapter ends by reviewing the lessons learned and highlighting the factors which might enable similar initiatives elsewhere.

D. Bennett (✉)
Bond University, Robina, QLD, Australia
e-mail: dabennet@bond.edu.au

Framing Graduate Success

The question of how to prepare higher education (HE) students for employment is at the forefront of higher education policy and practice. In contrast, the labour market is increasingly dominated by multiple, impermanent roles rather than employment with a single employer. Labour market characteristics indicate that if graduates are to *earn* a living, they need to have learned how to *think* a living. They also need to know how to think beyond a single economic sector or career and to negotiate a labour market in which disadvantage, and multiple disadvantage in particular, is not necessarily ameliorated either by successful entry to higher education or the successful completion of a programme.

The COVID-19 pandemic of exacerbated labour market uncertainty and increased the competition for work. The lessons of previous recessions highlighted that the burden of these changes would be felt most keenly by students and workers with disadvantage (see Cockx, 2016). Similarly, the macro-economic shock of disruptors such as disease adversely affect less developed nations and the most vulnerable populations. As such, Harvey (2020, para. 6) was quick to point out that ‘the student equity gains of the past decade’ would be endangered without specific programme funding.

Even prior to the pandemic, increased diversity and growth of the HE student population posed considerable challenges in terms of student success and the equity of graduate outcomes (Pitman et al., 2019). Students from disadvantaged groups experience higher rates of attrition and deferral (Pitman et al., 2019) and they are less likely to have sufficient knowledge and awareness of contemporary employability and career construction (O’Shea, 2019) or the social capitals on which much work is secured (Britton et al., 2016; Tomlinson, 2012). Morley’s study of graduate employers finds that employers’ increasing emphasis on capabilities and experience beyond the degree – the ‘homogenised signifiers of worth’ – create ‘ideal preconditions for the reproduction of elitism and inequalities’ (2007, p. 194). These issues combine to illustrate a gap still to be addressed in either policy or practice (Li et al., 2017; Li & Dockery, 2015).

This chapter is concerned with inequitable access to employability development within higher education studies (see Nerlich, 2013), which among students with disadvantage decreases the likelihood of student success (Clayton et al., 2018) and equitable graduate outcomes. The chapter reports the operationalisation of a data-driven and responsive strategy through which institutions might help to prepare a diverse student population for success in both their studies and their graduate life and work.

The need for such initiatives is also apparent within HE policy and funding mechanisms, which tend towards neoliberal, reductionist indicators of performance and conflate *employment* and *employability*. In Australia, the Federal Government's *Driving Innovation, Fairness and Excellence in HE* (Department of Education and Training, 2016) asked the HE sector to attend to fairness and equity by developing innovative, evidence-based and research-led approaches to employability development. This aligned with a call for graduates who are entrepreneurial, creative, responsive to change and engaged in learning (Innovation and Science Australia, 2017) – a broad and inclusive remit at odds with the measurement of graduate success as employment.

Higher education institutions globally have responded to both similar policy emphases and the needs of diverse student populations by creating multiple employability development opportunities (EDOs), often aligned with retention and student success. These initiatives typically include work-integrated learning and experiential learning programmes (Freudenberg et al., 2011), co-curricular employability awards, leadership and study abroad programmes, and in-curricular, credit-bearing employability strands (Pegg et al., 2012).

The implementation of employability initiatives presents multiple challenges, not least of which is persistent ambiguity about how employability should be defined and how and when it should be measured. Although internal and external stakeholders often voice differing perspectives on employability, they tend to agree that there is limited value and practicality in delivering a standard suite of 'soft skills' (better termed core capabilities) across multiple, specialised programmes (Barrie, 2006; Gracia, 2009; Jackson, 2014; Kalfa & Taksa, 2015). How, then, might EDOs be structured to enable equitable student and graduate success?

The best-resourced and most meticulously designed EDOs have little value unless students and faculty engage with them regularly. And yet many students fail to see the relevance of EDOs and many more are so ‘time jealous’ (Billett, 2015) that they need to make strategic decisions about how to spend their limited time; co-curricular (extra-curricular) activities for which no course credit is awarded tend not to be privileged in these decisions (see Andrewartha & Harvey, 2017). Added to this, Morrison (2014) finds that students from low socio-economic backgrounds tend to view their degrees as providing specialist knowledge rather than knowledge and skills which might be transferred to multiple settings. Similarly, time-poor and increasingly hourly-paid academic staff have insufficient time, resources or expertise to include what they see as ‘yet another’ thing in an already over-crowded curriculum. The term for fear of overcrowding the curriculum is *anupholsteraphobia*. That such a word exists illustrates the legitimacy of their fears.

The response of one university to the challenges outlined above was to develop and embed, in the existing curriculum, a data-driven employability development strategy which would engage every student from the first year of study. Co-delivered by academic staff and career practitioners, the team defined employability as the ability ‘to find, create and sustain meaningful work across the career lifespan and in multiple settings’ (Bennett, 2019, 2020). The strategy utilised Bennett’s (2019, 2020) ‘employABILITY thinking’ approach, which is a strength-based, metacognitive approach to employability development. Grounded in socio-cognitive theory, the approach prompts students to understand why they think the way they think; how to critique and learn the unfamiliar; and how their values, beliefs and assumptions can inform and be informed by their learning, lives and careers. The strategy’s goals were threefold:

1. To create a whole-of-institution intervention which would ensure equitable access to career development learning (CDL) for all students by embedding it within the existing curriculum and negating the need for additional time, resources or educator expertise.
2. To build strong relationships between the institution’s careers service practitioners and academic staff and curricular leaders.

3. To inform the timing, content and delivery of student support initiatives, including those focused on employability, retention, student success and equity.

Employability as Design

The challenges inherent in operationalising employability are well documented. To overcome them I devised a design-centric approach to employability development informed by Goodyear's (2015) 'design for learning' model. Shown at Fig. 10.1, the model illustrates the four forces which impact contemporary higher education adapted to the context of employability development. The challenges outlined in the following section were identified, and solutions proposed, using this design-centric approach.

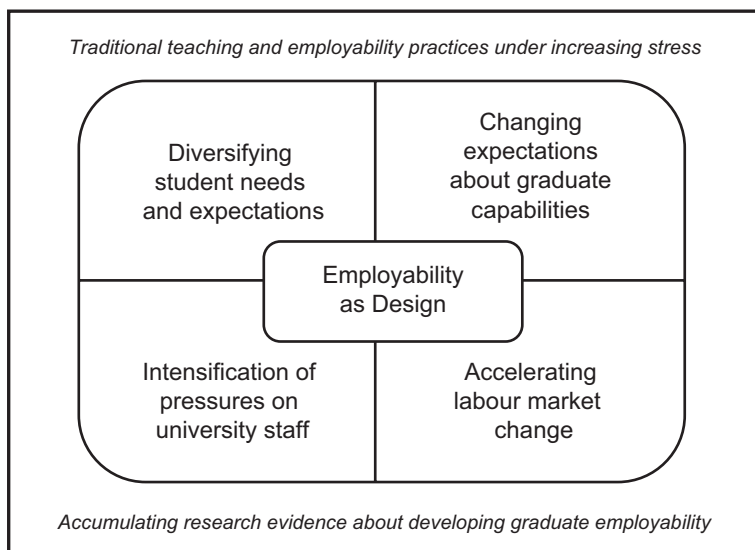


Fig. 10.1 Employability as design (Bennett, 2019b, p. 51). (Adapted from Goodyear (2015))

The Challenge of Reaching Every Student

The delivery of employABILITY thinking was informed by Holmes' (2013) employability models, through which the orientation of contemporary initiatives can be understood at the institutional level as *possessional* (possession of employability attributes), *positional* (the use of existing capital) and *processual* (a focus on the developmental process). Analysis of key stakeholder perceptions (Smith et al., 2018) and EDO descriptions on institutional websites (Bennett et al., 2017) suggests that the most common graduate employability orientation is possessional. This is unsurprising given its alignment with current policy and the focus on graduates possessing the skills, abilities, or characteristics needed for employment. The responsibility in this approach, however, can lie primarily with students.

The operationalisation of contemporary employability initiatives can be similarly categorised using Farenga and Quinlan's (2016) employability approaches of *portfolio*, *award* and *hands-off*, and Bennett et al.'s (2017) *non-embedded* approach. These are summarised below.

- In a *portfolio* initiative, students are offered a portfolio of curricular and co-curricular employability development opportunities delivered by both academic staff and central services; these tend not to be connected as a single initiative.
- *Award* initiatives feature a formal credential which often combines academic and careers programmes and leads to a certificate or second academic transcript.
- A *hands-off* initiative assumes that capabilities such as problem solving, communication skills and leadership develop naturally through academic programmes. Students in a hands-off context need to identify the gaps in their capabilities and then seek help, often through a careers service that has little involvement with their programmes. The hands-off approach aligns with Holmes' *positional* orientation in which individuals are expected to leverage their existing social and cultural position and its influence on their ability to access the labour market.

- *Non-embedded* approaches are a hybrid of portfolio and hands-off initiatives. They are less accessible to students from disadvantaged backgrounds because of their reliance on students to recognise their developmental needs and set aside time to access help.

Hands-off initiatives, most prevalent among older, research-intensive universities (Divan et al., 2019) are arguably the least successful in engaging students from disadvantaged backgrounds because their positional orientation privileges students 'whose backgrounds are already privileged enough to have tacit labor-market awareness, networks, and cultural capital' (Farenga & Quinlan, 2016, p. 10).

The responsibility of employability development varies greatly in the above approaches, with the co-curricular and hands-off approaches placing much or all of the responsibility on students. In the labour market, too, the balance of responsibility for career progression and learning is shifting from employers to individual workers (Potgieter, 2012, p. 2), who can find themselves isolated from supervisors and peers, expected to perform management tasks and needing to balance multiple roles from the point of graduation. The shift in responsibility explains in part why industry can be critical of universities for not providing graduates who are 'oven ready' (Brumfitt, 2004) for their specific context. However, Crebert et al. (2004) find that when industries relegate developmental responsibility entirely to institutions and fail to acknowledge that graduates face a learning curve as employees, graduates' confidence is negatively impacted. This relegation benefits no one because confidence and self-esteem are positively associated with graduates' ability to be proactive and successful in their career management (Potgieter, 2012).

It follows that from educational, labour market and equity perspectives, higher education students need to learn how and what to learn, and how to manage their graduate work and learning. As Goodyear (2015, p. 45) emphasises, a lifelong learner knows 'how to design for one's own learning [and] how to create better environments in which to think for a living'. In approaching employability as design, the *processual* orientation emerges as distinct from other approaches because it moves beyond skills and positionality to highlight the relationship between the integrative and continually interactive process of employability development.

I concluded that the processual orientation has the greatest potential to be equitable, but only if it is delivered within the curriculum so that it engages all students and develops both metacognition and individual agency.

The Challenge of Embedding Careers Expertise in the Curriculum

A prevailing challenge to equitable employability development is that career practitioners, the experts in career development learning (CDL), are most often professional staff whose work occurs largely or even solely within the co-curricular space. At the same time, non-expert faculty who realise the importance of introducing students to 'the real world' deliver aspects of CDL without the support of these expert peers.

A second feature of non-expert (faculty-led) CDL delivery is its vulnerability. Non-expert CDL tends to form part of an informal curriculum. Examples include a guest speaker or alumni panel, reframing an assessment task to give it a professional orientation, and impromptu discussions relating to career and industry. Students experience informal CDL alongside the informal curriculum of social and community interactions (Kift & Nelson, 2005), in which contexts they begin to make sense of themselves and their studies. By definition the informal curriculum does not appear on a unit outline and is not explicitly assessed. As such, it relies on the educator who devised it, it impacts limited student cohorts and it disappears when the educator no longer teaches the class.

Inexpert CDL also risks negatively impacting student well-being and motivation: telling piano performance majors that they have a 1:100,000 chance of securing a full-time performance career is unlikely to elicit more than demotivation or a retreat to the practice studio. There is a need, then, to engage career practitioners such that the efforts of academic staff are supported and students can begin to position themselves for the future.

An equitable approach to employability and CDL would engage all students, enlist the expertise of career practitioners, link with centralised careers supports and bring into view activities within the informal

curriculum. Interviews with the leaders of institutional careers services globally (Smith et al., 2018) reveals that career practitioners struggle to work within the core curriculum because of limited curricular time. As a result, students and faculty tend to be unaware of the careers support available, and career practitioners spend an inordinate amount of time with final-year students who are in a pre-graduation panic. Our hypothesis was that if all students were engaged in CDL from the first year of study, career practitioners would eventually spend less time with panicked final-year students and more time in the core curriculum. Further, I needed to align EDOs with the curriculum such that they would entail doing things differently rather than doing more.

The Challenge of Understanding Student Needs and Perceptions

Data on, and from, university students is a primary source of university intelligence and an arbiter of national quality assessment (Williams, 2014). It follows that students suffer from survey fatigue (Klemenčič & Chirikov, 2015; Porter, 2004). Klemenčič and Chirikov (2015) find that student survey fatigue results in low response rates and in careless or inaccurate responses – Porter (2011, p. 45) goes as far as to suggest that ‘the typical college student survey has minimal validity’. Klemenčič and Chirikov (2015) add that student surveys are also inherently biased due to the ‘underrepresentation of disengaged, non-traditional and minority students’ (2015, p. 372). An obvious reaction to these concerns is to heighten response rates; however, Fosnacht, Sarraf, Howe and Peck (2017, p. 22) conclude that the reliability of student survey data differs little with response rate and suggest that the focus should move away from response rates and towards the more effective use of student data.

One of the contributors to survey fatigue is that students rarely see the results of student surveys and they rarely benefit directly from surveys such as those delivered at the end of a unit of study. A data-driven solution to employability, then, requires a way of amassing student data at scale and in such a way that it has a direct benefit to students both as a developmental or learning gain and as the recipients of more targeted

interventions, supports and/or pedagogical renewals. The strategy's data-related goals were therefore defined as follows:

1. To amass data in a way that has a direct and tangible benefit to all students and enables targeted interventions within the same study period.
2. To create longitudinal data with which students can review the changes in their thinking about learning and career and compare their thinking with that of their peers.
3. To create longitudinal data with which curricular and other leaders can inform curricular review, student needs and factors relating to retention.

Rejecting the idea of a traditional survey, the focus moved to what students might gain from the task of providing their responses. The solution came in the form of the employABILITY online self-assessment tool with which students can create a formative, personalised profile report with embedded developmental resources. The tool ensured that students would gain immediate benefits from their engagement whilst generating data which could enhance their student experience, help to support retention and success, and inform longer-term curricular transformation. This was supported, in turn, with multiple educator resources which enabled educators, researchers, career practitioners and curricular designers to scaffold student learning within a single study period.

The Process

The employABILITY thinking strategy was made available as an open-access resource in 2018 and attracted attention from multiple institutions internationally. The strategy features an online self-assessment tool and dedicated websites for students and faculty containing developmental resources. Using the tool, students assess their confidence in relation to their self-management, career decision-making, self-esteem, academic self-efficacy, identity construction, the citizen-self, emotional intelligence, and perceived learner and graduate attributes. Students also

respond to optional open questions relating to their work and study backgrounds, career intentions, choice of major and their current courses (programmes). The intention is that students revisit the tool in each year of study. The approach is used primarily as an educational resource. It also forms the basis of an established programme of research; however, students decide whether to include their responses to the tool in the research database.

In 2019, the university at which the strategy had been developed rolled it out to all first-year students (approximately 11,000 in number) with the intention that it would extend engagement to second-year students in 2020 and to third- and then fourth-year and graduate students in subsequent years. The basis of the roll-out was that it could be incorporated within existing curricula and that lecturers would not need to find any extra time, resources or expertise. These claims had yet to be proven!

The process of engaging every first-year student, their educators, career practitioners and other support staff, is summarised below and then described in more detail.

- Identify the most appropriate first-year unit (semester-long course/module)
- Schedule the [online student self-assessment tool](#) as a required reading or in-class activity, engaging the relevant careers practitioner
- Register the unit to enable an educator report for each unit cohort
- Identify and embed an employability touchpoint
- Review the student data via the educator report and upload student/educator resources (e.g. from employABILITY sites and the careers service)
- Revisit the data and reports with students (e.g. as a discussion)
- Note the key findings for future iterations and curricular renewal
- Review, adapt and embed the approach for successive study periods.

Identifying the Most Appropriate Unit

First-year curricular have the greatest prevalence of foundation or common core units: semester-long courses or modules which engage entire

discipline cohorts. I began by identifying the foundation units within each Faculty and added units for students who were not otherwise captured. Foundation units included foundations for professional health practice, a common core introductory business unit, and generic humanities and science units focused on academic and professional communication. Students not engaged in the common core units included those in geology and design. The careers practitioners were engaged in each step of the process, enabling careers expertise to be embedded within the curriculum.

Scheduling the Self-Assessment Tool

The most difficult challenge was convincing academic leaders and educators that the strategy could be embedded without finding more curricular time. Once stakeholders understood how the touchpoints worked and how the self-reflection tool could be embedded (most often as a required reading), there was broad acceptance and increasing enthusiasm. I first reviewed unit outlines and decided when students would create their personalised employability profiles using the online self-assessment tool. The tool, which is embedded in an online learning space developed for the purpose, was assigned as either a required reading or as a replacement for an existing in-class activity. A link to the tool was uploaded to the learning management system (LMS) together with a link to the careers service, ensuring that the latter was visible to students from the first year of study.

Registering the Cohort to Enable an Educator Report

Realising the need to communicate top-line findings clearly and simply to educators, in the development phase I asked academic staff and curricular leaders what they would most like to know about their students' thinking; I added to these two priorities relating to the measurement of graduate employability. To enable the educator report, I generated a simple registration process. This generated a cohort code which students select when completing the tool.

The educator reports illustrate student confidence in relation to the following points. The reports summarise students' responses as a cohort, in comparison with all other respondents to the tool, and in comparison with all other students in the same year of study.

- Ability to articulate their strengths and how these can be deployed in their career
- Belief that their degree programme is preparing them to meet the realities of graduate life
- Confidence in their abilities to solve problems and make decisions
- Proactivity and initiative in achieving goals, tasks or deadlines
- Self-esteem and academic self-efficacy
- Confidence that they can manage stressful, difficult and upsetting situations
- Confidence that they can make informed, career-related decisions
- Belief they will cope if their first career choice does not work out; whether they have or can create a back-up plan.

Identifying and Embedding an Employability Touchpoint

Pitman (2016) asserts that self-assessment is the best measure of employability, criticising assessments based on graduate employment rates given that employability does not necessarily equate to employment. I note, however, that when Jackson (2014) traced the impact of assessable self-reflection tasks for students at different stages of their degrees, she found that the tasks increased students' confidence in their employability but not the alignment of their perceptions with those of industry. To be effective, core capabilities must be taught explicitly, as methods that can be translated into tasks in the workplace (Helyer, 2011; Winstead et al., 2009). To ensure that students benefit from the requisite self-aware learning, self-reflection, and the ability to recognise and benchmark their progress in developing employable skills (Daniels & Brooker, 2014; Pitman, 2016; Spence & Hyams-Ssekasi, 2015; Winstead et al., 2009),

core capabilities must also be integrated throughout the student lifecycle alongside a process of critical self-reflection through which students explore their vocational, self- and social identities. This thinking is not without precedence: Clayton, Wessel, McAtee and Knight's (2018, p. 431) US analysis of the influence of a career intervention programme on graduation rates found that 'career intervention participation was a statistically significant indicator of 1-year retention and 4-year graduation rates for students regardless of race or gender'. Similarly, Reardon et al. (2015) found a statistically significant relationship between participation in career development learning and graduation within four years of commencement.

I made employability development explicit by identifying in each unit a 'touchpoint' at which an existing task was reoriented as an explicit employability task. The most common touchpoints were group assignments, which were re-oriented as teamwork and scaffolded with teamwork resources; assessment feedback, which was re-oriented and scaffolded as the ability to give and receive effective feedback; reflection tasks, which were re-oriented as critical reflection and scaffolded with critical reflection templates; and site visits or guest speakers, which were scaffolded with informational interview techniques and/or the requirement to 'create a ticket' containing the three questions to which students most wanted an answer. Touchpoints emphasised that employability can be embedded by doing things differently rather than by doing more.

The benefits of EDOs can be realised unequally by students, and the integration of employability enabled us to negate this risk. An example of unequal benefits is given by Riebe et al. (2013), who examined the extent to which students perceived their employability skills had benefitted from the opportunity to listen to, question and network with a guest speaker. The researchers found that Australian students, whose culture emphasises the value of self-confidence and collaboration, reported greater benefit than did international students whose cultural background emphasises respect for authority and are thus less likely to ask questions. A scaffold such as the employABILITY 'ticket task', through which students create an event ticket by preparing three questions based on what they would like to learn, prompted students to align existing activities with their CDL and encouraged them to voice their thoughts. Winstead et al.

(2009) add that incorporating workplace behaviour and dress into sessions run by industry guest speakers helps students to develop a professional persona and engage in networking; hence, the addition of a persona and networking resource can help students to develop their core capabilities and professional identities (see Werth (2012) for a discussion of networks and the development of social capital for students with a disability). These identities form and reform as students '(re)conceptualise their strengths, interests and goals and experience a corresponding increase in curiosity, motivation, creativity and problem-solving' (Bennett, 2012, p. 27) through repeated engagement with future-oriented thinking and action.

Similarly, Riebe et al. (2010) propose a method for structuring group-work as the explicit development and practise of workplace skills. Riebe and colleagues utilised Tuckman's method of forming, storming, norming, performing and adjourning, accompanied at every stage by assessable tasks which required students to reflect on parallel skills development such as communication and cooperation. In the same vein, I made available resources for teamwork formation and management including making SMART goals and dealing with conflict.

In each case the online tool and touchpoint was embedded within the unit plan and the timing was agreed with the relevant careers practitioner. Resources from the educator and student websites were uploaded to the LMS. An unexpected finding was that by adding links to centralised careers initiatives, faculty and students became more aware of centralised careers support.

Reviewing the Student Data and Revisiting the Findings with Students

Within three weeks of tool completion, the unit coordinator/lecturer and careers practitioner received an educator report containing top-line results. The educator reports enabled us to see where students were most and least confident and they informed learning and teaching enhancements within the same study period. We explored individual and cohort-wide findings and identified extra resources for students, which were

uploaded to the LMS. In some cases we used anonymised student data to transform previously generic ‘careers’ workshops or scheduled discussions into targeted learning environments in which students explored individual and cohort findings and participated in developmental activities supported by the careers practitioner. In all cases students were directed to their individual reports and embedded resources located within these. As longitudinal datasets become available (from 2020) I will review the responses from multiple student cohorts to ascertain whether some concerns merit curricular time and consideration at the next curricular review.

Key Points in the Design of Equitable Employability Development

In this final section, and based on the lessons learned during our first year, I highlight the features which might enable similar initiatives at other institutions.

Redefine employability as it is understood at the institutional level by shifting the emphasis from graduate-level employment and towards students’ ability to find, create and sustain meaningful work across the career lifespan and in multiple settings. This requires the institution to trust that a focus on development will result in better and more equitable graduate outcomes. Having a team which included educators, researchers, career practitioners and relevant institutional leaders was a particular benefit when making the argument for change. Particular points of leverage include the alignment of employability – as an outcome – with student success and retention; the introduction of performance measures to assess the quality of education outcomes; and shared acknowledgement of the importance of rethinking the ways in which student data are collected and utilised.

Students typically perceive their choice of degree as a career choice with dominant influences including their interest in the field, job availability and security, and the anticipated salary, workload, and social prestige associated with the field (Downey et al., 2011). Here, too, disadvantaged students encounter further challenges, tending to select

'safe' vocational pathways with which they will be able to meet their financial needs (Morrison, 2014). It is therefore pertinent to encourage students to participate in, and recognise the value of, the opportunities available within and alongside their degree. A metacognitive view of employability brings to the fore the intrinsic and extrinsic factors which motivate students to choose their major and leverages these factors to energise student engagement.

Engage careers and equity practitioners in the curriculum through a partnership approach. One of the most difficult challenges in our first year was to enable the engagement of career practitioners in the explicit delivery of EDOs. Communication at the unit level, for example, often defaulted to academic staff such that career practitioners were omitted. This was resolved only by consistently forwarding on all communication; however, the challenge was overcome once career practitioners became known to staff and the benefits of their expertise were realised. Academic staff were often surprised to find that their career-related activities could be supported and perhaps enhanced.

I expected that the workload of career practitioners might increase and this was the case. By focusing on foundation first-year units I had no more than two active units per faculty. Careers colleagues welcomed the opportunity to offer embedded activities derived from students' self-reports rather than spending valuable time trying to negotiate access to students. Although there will be some extra work for career practitioners for the first three years of operation, this is likely to be negated once the demands of previously unengaged final-year students decline.

Position student data collection as a process through which students generate developmental agency and gain an immediate return on their investment of time. Student-derived data and analytics should contribute to both external reporting and internal business intelligence. However, the value of student data is dependent on the reliability of their responses, the integration of institutional datasets, and the institution's capacity to use these data to create change both in the longer term and within a single study period.

From an educational perspective, realistic expectations are created for students through appropriate, sufficient and consistent information. The engagement of learners as contributors to, and consumers of, data is

therefore likely to lead to ‘more complex and sophisticated expectations of university and of their own roles and responsibilities’ (James, 2002, p. 81; see also Hooley et al., 2018), heightening their success and enabling them to make more informed decisions. The employABILITY approach helped students to frame employability development as a strategy for creating and refining the future they might prefer. Students engaged because we told them to! Their feedback, however, is that they went on to use the website and the resources embedded in their reports to meet their ‘just-in-time’ learning needs.

Early data analysis indicated that students engaged genuinely with the self-reflection tool: there were very few invalid responses; similarly, over 99% of students opted to include their anonymised responses in the dataset used for research and curricular renewal. Early analysis also revealed significant differences in students’ confidence across fields of study. This might be expected given the professional focus of disciplines such as engineering and medicine compared with disciplines with less defined outcomes, such as in the creative arts. However, it also relates to the growing precarity of the labour market in multiple fields of study, including business, IT and allied health.

Taken together with other findings there is scope to inform targeted interventions both within the curriculum and more broadly. Alignment of data with institutional datasets will enable the specific needs of disadvantaged student cohorts to be understood and appropriate and timely supports to be offered, albeit at a cohort level. Analysis across multiple institutions will enable the research team to understand student needs, target existing resources, maximise the efficacy of study and career services and inform predictive measures of retention and success.

Consider multi-institution approaches. The employABILITY self-assessment tool and resources are entirely open access, enabling a collaborative approach to the enduring challenge of equitable student and graduate success. By January 2020 the approach had engaged with over 40 institutions and more than 18,000 students had included their responses within the research dataset. The data have the potential to elicit significant insights into students’ confidence, career aspirations and decision making, with these inquiries led by a community of researchers. The research is important not only to employability: students’ attitudes,

subjective norms and behavioural intentions are crucial to their choice of major (Soria & Stebleton, 2013), their engagement and retention (Cantt & Wated, 2011), their assessment of career prospects and potential salary (Malgwi et al., 2005) and their engagement with graduate attributes statements (see Pitman & Broomhall, 2009).

Concluding Comments

Higher education's focus on student success and graduate employability is ubiquitous. Less discussed is the process of employability development and the extent to which existing initiatives respond to the needs of a diverse student population. Kalfa and Taksa (2015) frame students' development of technical and core capabilities as the acquisition of cultural capital (qualifications and social competence) which increase their chances of inclusion in their desired field: thus, the development of employability can be viewed as a tool for promoting social equity. However, researchers remind us that even when students experience a degree that actively cultivates student success and employability capabilities, graduates' employability is still influenced by a range of capitals (e.g. Tomlinson's human social, cultural, identity and psychological capitals) and by socio-economic factors outside of the institution (Bennett et al., 2017; Gracia, 2009; Tomlinson, 2017). Students' cultural capital, work experience, cultural values and language skills thus influence students' ability to access career-related learning (Mackaway & Winchester-Seeto, 2018), limit the benefits of this learning (Hewitt et al., 2018), and limit students' ability to understand which employability capabilities are important and how they might be so. A level playing field can only be achieved if employability development is embedded within the core curriculum, not as generic skills delivered separately from their studies but as a core component of them. Never has this been more true than in the midst of a global pandemic, given that students who graduate into a depressed labour market might feel the impacts for the entirety of their career (Burgess & Sievertsen, 2020). As Canning wrote in May 2020, 'Widening participation matters too much for COVID-19 to shut it down'.

The initiative described in this chapter received no special funding and relied on its ability to be incorporated within existing first-year curricula. The design-centric approach enabled us to amass student data in a way that was beneficial for students and which helped me to respond to their learning and developmental needs through targeted activities in the same study period. By working in partnership, situating employability as processual and embedding it within the existing curriculum, I was able to ensure that every student had equal access. I did not initially embed the approach across multiple years of study or integrate it fully with the university's retention strategy. However, I began the longer journey of understanding and supporting the needs of all students.

References

- 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.
- Barrie, S. C. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education, 51*(2), 215–241.
- Bennett, D. (2012). A creative approach to exploring student identity. *International Journal of Creativity & Problem Solving, 22*(1), 27–41.
- Bennett, D. (2019). Graduate employability and higher education: Past, present and future. *HERDSA Review of Higher Education, 5*, 31–61. Retrieved from <http://www.herdsa.org.au/herdsa-review-higher-education-vol-5/31-61>
- Bennett, D. (2020). *Embedding employABILITY thinking across higher education*. Australian Government Department of Education and Training. Retrieved from <https://altf.org/wp-content/uploads/2017/06/Developing-EmployABILITY-draft-fellowship-report-1.pdf>
- Bennett, D., Knight, E., Divan, A., Kuchel, L., Horn, J., van Reyk, D., & da Silva, K. B. (2017). How do research-intensive universities portray employability strategies? A review of their websites. *Australian Journal of Career Development, 26*(2), 52–61.
- Billett, S. (2015). *Integrating practice-based experiences into higher education*. Springer.
- Britton, J., Dearden, J., Shephard, N., & Vignoles, A. (2016). *How English domiciled graduate earnings vary with gender, institution attended, subject and socioeconomic background*. Institute for Fiscal Studies.

- Brumfitt, S. (2004). *Innovations in professional education in speech and language therapy*. Whurr.
- Burgess, S., & Sievertsen, H. H. (2020, April 1). Schools, skills, and learning: The impact of COVID-19 on education. *VOX CEPR Policy Portal*. Retrieved from <https://voxeu.org/article/impact-covid-19-education>
- Canning, A-M. (2020, May 17). Widening participation matters too much for COVID-19 to shut it down [Blog post]. *WONKHE*. Retrieved from <https://wonkhe.com/blogs/widening-participation-matters-too-much-for-covid-19-to-shut-it-down/>
- Cantt, J. A., & Wated, G. (2011). Retention among first year college students: An application of the theory of planned behavior. *Modern Psychological Studies*, 16(2), 3.
- Clayton, K., Wessel, R. D., McAtee, J., & Knight, W. E. (2018). KEY careers: Increasing retention and graduation rates with career interventions. *Journal of Career Development*, 46(4), 425–439. <https://doi.org/10.1177/0894845318763972>
- Cockx, B. (2016). Do youths graduating in a recession incur permanent losses? *IZA World of Labor*, 281. <https://doi.org/10.15185/izawol>.
- Crebert, G., Bates, M., Bell, B., Patrick, C.-J., & Cragolini, V. (2004). Ivory tower to concrete jungle revisited. *Journal of Education and Work*, 17(1), 47–70.
- Daniels, J., & Brooker, J. (2014). Student identity development in higher education: Implications for graduate attributes and work-readiness. *Educational Research*, 56(1), 65–76.
- Department of Education and Training. (2016). *Driving innovation, fairness and excellence in Australian Higher Education*. Commonwealth Government of Australia.
- Divan, A., Knight, E., Bennett, D., & Bell, K. (2019). Marketing graduate employability: Understanding the tensions between institutional practice and external messaging. *Journal of Higher Education Policy and Management*, 41(5), 485–499. <https://doi.org/10.1080/1360080X.2019.1652427>
- Downey, J., McGaughey, R., & Roach, D. (2011). Attitudes and influences toward choosing a business major: The case of information systems. *Journal of Information Technology Education*, 10, 231–251.
- Farenga, S. A., & Quinlan, K. M. (2016). Classifying university employability strategies: Three case studies and implications for practice and research. *Journal of Education and Work*, 29, 1–21. <https://doi.org/10.1080/13639080.2015.1064517>

- Fosnacht, K., Sarraf, S., Howe, E., & Peck, L. K. (2017). How important are high response rates for college surveys? *The Review of Higher Education*, 40(2), 245–265.
- Freudenberg, B., Brimble, M., & Cameron, C. (2011). WIL and generic skill development: The development of business students' generic skills through work integrated learning. *Asia-Pacific Journal of Cooperative Education*, 12(2), 79–93.
- Goodyear, P. (2015). Teaching as design. *HERDSA Review of Higher Education*, 2, 27–50.
- Gracia, L. (2009). Employability and higher education: Contextualising female students' workplace experiences to enhance understanding of employability development. *Journal of Education and Work*, 22(4), 301–318.
- Harvey, A. (2020, May 10). Helping disadvantaged students deal with COVID-19. *Campus Morning Mail*. Retrieved from <https://campusmorningmail.com.au/news/helping-disadvantaged-students-deal-covid-19/>
- Helyer, R. (2011). Aligning higher education with the world of work. *Higher Education, Skills and Work-Based Learning*, 1(2), 95–105.
- Hewitt, A., Owens, R., & Stewart, A. (2018). Mind the gap: Is the regulation of work-integrated learning in higher education working? *Monash University Law Review*, 44(1), 234–266.
- 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>
- Hooley, T., Sultana, R., & Thomsen, R. (Eds.). (2018). *Career guidance for emancipation: Reclaiming justice for the multitude*. Routledge.
- Innovation and Science Australia. (2017). *Australia 2030: Prosperity through innovation*. Commonwealth Government.
- Jackson, D. (2014). Testing a model of undergraduate competence in employability skills and its implications for stakeholders. *Journal of Education and Work*, 27(2), 220–242.
- James, R. (2002). Students' changing expectations of higher education and the consequences of mismatches with reality. In *Responding to student expectations*, 71–83. Paris: OECD.
- Kalfa, S., & Taksa, L. (2015). Cultural capital in business higher education: Reconsidering the graduate attributes movement and the focus on employability. *Studies in Higher Education*, 40(4), 580–595.
- Kift, S. M., & Nelson, K. J. (2005). Beyond curriculum reform: Embedding the transition experience. In A. Brew & C. Asmar (Eds.), *HERDSA conference 2005* (pp. 225–235). University of Sydney.

- Klemenčič, M., & Chirikov, I. (2015). How do we know how students experience higher education? On the use of student surveys. In M. E. Menon, D. G. Terkla, & P. Gibbs (Eds.), *Using data to improve higher education* (pp. 361–379). Sense Publishers.
- Li, I. W., & Dockery, A. M. (2015). Does schools' socio-economic status influence university outcomes? *The Australian Journal of Labour Economics*, 18(1), 75–94.
- Li, I. W., Mahuteau, S., Dockery, A. M., & Junankar, P. N. (2017). Equity in higher education and graduate labour market outcomes in Australia. *Journal of Higher Education Policy and Management*, 39(6), 625–641.
- Mackaway, J., & Winchester-Seeto, T. (2018). Deciding access to work-integrated learning: Human resource professionals as gatekeepers. *International Journal of Work-Integrated Learning*, 19(2), 141–154.
- Malgwi, C. A., Howe, M. A., & Burnaby, P. A. (2005). Influences on students' choice of college major. *Journal of Education for Business*, 80(5), 275–282. <https://doi.org/10.3200/JOEB.80.5.275-282>
- Morley, L. (2007). The X factor: Employability, elitism, and equity in graduate recruitment. *Twenty-First Century Society: Journal of the Academy of Social Sciences*, 2(2), 191–207.
- Morrison, A. R. (2014). 'You have to be well spoken': Students' views on employability with the graduate labour market. *Journal of Education and Work*, 27(2), 179–189.
- Nerlich, S. (2013). Australians as international students – Where they go, what they do and why they do it. *Journal of Higher Education Policy and Management*, 35, 386–395. <https://doi.org/10.1080/1360080X.2013.812056>
- O'Shea, S. (2019). *Mind the gap!* Exploring the post-graduation outcomes and employment mobility of individuals who are first in their family to complete a university degree. Context Paper, NCSEHE Research Fellowship. NCSEHE.
- Pegg, A., Waldock, J., Hendy-Isaac, S., & Lawton, R. (2012). *Pedagogy for employability*. Higher Education Academy.
- Pitman, O. S. (2016). Employability development opportunities (EDOs) as measures of students' enhanced employability. *Higher Education, Skills, and Work-Based Learning*, 6(3), 288–304.
- Pitman, T., & Broomhall, S. (2009). Australian universities, generic skills and lifelong learning. *International Journal of Lifelong Education*, 28(4), 439–458. <https://doi.org/10.1080/02601370903031280>
- Pitman, T., Roberts, L., Bennett, D., & Richardson, S. (2019). An Australian study of graduate outcomes for disadvantaged students. *Journal of Further*

- and Higher Education*, 43(1), 45–57. <https://doi.org/10.1080/0309877X.2017.1349895>
- Porter, S. R. (2004). Raising response rates: What works? *New Directions for Institutional Research*, 2004(121), 5–21.
- Porter, S. R. (2011). Do college student surveys have any validity? *The Review of Higher Education*, 35(1), 45–76.
- Potgieter, I. (2012). The relationship between the self-esteem and employability attributes of postgraduate business management students. *SA Journal of Human Resource Management*, 10(2), 419–434.
- Reardon, R. C., Melvin, B., McClain, M., Peterson, G. W., & Bowman, W. J. (2015). The career course as a factor in college graduation. *Journal of College Student Retention: Research, Theory & Practice*, 17(3), 336–350. <https://doi.org/10.1177/15210251155575913>
- Riebe, L., Roepen, D., Santarelli, B., & Marchioro, G. (2010). Teamwork: Effectively teaching an employability skill. *Education + Training*, 52(6/7), 528–539.
- Riebe, L., Sibson, R., Roepen, D., & Meakins, K. (2013). Impact of industry guest speakers on business students' perceptions of employability skills development. *Industry & Higher Education*, 27(1), 55–66.
- Smith, M., Bennett, D., Bell, K., & McAlpine, A. (2018). *Employability in a global context: Evolving policy and practice in employability, work integrated learning, and career development learning*. Graduate Careers Australia. Retrieved from https://www.researchgate.net/publication/326264677_Employability_in_a_Global_Context_Evolving_Policy_and_Practice_in_Employability_Work_Integrated_Learning_and_Career_Development_Learning
- Soria, K. M., & Stebleton, M. (2013). Major decisions: Motivations for selecting a major, satisfaction, and belonging. *NACADA Journal*, 33(2), 29–43. <https://doi.org/10.12930/NACADA-13-018>
- Spence, S., & Hyams-Ssekasi, D. (2015). Developing business students' employability skills through working in partnership with a local business to deliver an undergraduate mentoring programme. *Higher Education, Skills and Work-Based Learning*, 5(3), 299–314.
- Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy*, 25(4), 407–431.
- Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education + Training*, 59(4), 338–352.

- Werth, S. (2012). Negative events, positive outcomes: Improving labour force outcomes via tertiary study for individuals with disability and chronic illness. *Australian Bulletin of Labour, National Institute of Labour Studies*, 38(4), 345–366.
- Williams, J. (2014). Student feedback on the experience of higher education: A significant component of institutional research data. In *Using Data to Improve Higher Education*, 65–80. Brill Sense.
- Winstead, A. S., Adams, B. L., & Sillah, M. R. (2009). Teaching the ‘soft skills’: A professional development curriculum to enhance the employability skills of business graduates. *American Journal of Business Education*, 2(5), 35–44.