# 10. The use of Career Registration data to develop and support employability initiatives

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## *Institutional Context*

The Royal Melbourne Institute of Technology (RMIT) is an international university of technology, design and enterprise with more than 90,000 students globally. As a dual-sector university, the student cohort consists predominantly of undergraduate and postgraduate students, with approximately 20% of vocational education students. Along with the entire tertiary sector, RMIT is engaged with the complex task of securing strong employability outcomes for graduates.

Historically, the university's approach to employability initiatives has evolved through a range of strategies and interventions. In 2019, a process of program transformation entitled RMIT's *Ready for Life and Work Strategy* specified as priority that by 2020, RMIT graduates would be "widely recognised for their work-ready skills and sought after by recruiters and employers", able to "demonstrate and articulate their graduate attributes" and to "adapt to changing job markets" (RMIT, 2015, p. 11). The strategy specified an integrated approach to learning and work through every stage of the student journey, stating that "Work-integrated learning (WIL) is fundamental to the design, delivery and review of every program" and that "Enterprise opportunities are widely available and embedded in program design" (RMIT, 2015, p. 12).

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At the time of writing, clear and specific Program and Course Policy requirements prescribe demonstrably scaffolded WIL and career development learning (CDL) across all RMIT curricula, ensuring their prominence across the student journey. A growing consensus in research supports the provision of this kind of learning in curricular (rather than co-curricular) settings to ensure equitable access and a contextualised learning experience (Bennett, 2018; Bridgstock et al, 2019; Bridgstock & Jackson, 2019; Dean et al., 2022). Career Registration (CR) data, now in use across RMIT, is used to support and inform the development and scaffolding of careers-focused learning in curricula. As this case study illustrates, CR data enables an iterative approach to strategically aligning career development learning experiences and employability initiatives with the evolving needs of RMIT's student cohorts.

### *Using data to inform employability initiatives*

Through the process of integrating CR data into RMIT's approach to supporting students' career development and work readiness, complexities in the nature and use of the data have become clear. Careers practitioners have developed strategic and theory-informed approaches to support processes of interpretation, analysis and application. When used to inform and evaluate employability initiatives in a curriculum a nuanced approach is required, involving triangulation with a range of other data sets and insights, underpinned by scholarly research and theory. The development and nurturing of collaborative relationships between careers practitioners and educators is also key to RMIT's integration of CR data into its careers and employability-focus.

RMIT's careers practitioners support educators and learning designers to analyse CR data and to interpret it alongside other data sets such as Course Experience Surveys (CES), in which students provide feedback on the teaching quality and experience of their subjects. Educators are supported to develop and incorporate questions pertaining to career development learning. This enables access to qualitative data to complement the quantitative insights gained through CR. When strategically integrated in this way, complex data analysis offers rich, detailed and meaningful accounts of career readiness developing through

the student journey. Careers practitioners and educators are working together with these insights to scaffold Career Development Learning experiences into curriculum, drawing on key insights into student's self-perceptions of their career readiness and their accounts of related experiences through their studies.

Another significant data set analysed alongside CR data is the Graduate Outcome Survey (GOS) used to measure employability in Australian higher education institutions. Surveys are completed by students four months post-graduation, and again three years after graduation. The survey captures information such as employment status, type of employment, perceptions of qualifications, and further study pathways. Studies indicate an association between students' self-reported career readiness in CR data and actual graduate outcomes captured by data such as GOS, both in the UK (Cobb, 2019) and Australia (Lin-Stevens et al., forthcoming). Students identifying with higher career readiness stages are more likely to obtain employment. Although GOS data has significant limitations, most notably the incompleteness of the data set and the often very small sample size, connections between CR data and GOS data form part of RMIT's integrated approach to data analysis. Some of the limitations of GOS data highlight the value of CR data insights, such as the size and completeness of the data set, and the ability to gain insights into a time in which interventions can be developed and implemented – that is, while the student journey is still underway.

Careers practitioners and educators also work together to understand the labour markets and their influence on students' ideas and confidence regarding their career readiness, building these insights into data interpretations. Phenomena such as the Covid 19 pandemic, major developments in technologies such as AI and their impact on workforces, along with economic fluctuations all have capacity to impact on students' career confidence and sense of readiness. These insights also support appropriately complex and contextualised interpretations of CR data, supporting its role in understanding students' needs and concerns and shaping curricula accordingly.

CR data has significant implications and applications for employability initiatives focused on WIL. At RMIT, WIL is supported by information management systems, capturing the number of students

undertaking WIL and the types of experiences they engage with. Analysed alongside CR data, this WIL-focused data set creates a range of further opportunities for triangulation and cross-referencing. Firstly, it offers insight into an aspect of the fidelity of CR data, which relies on self-reporting of information such as access to industry projects and professional experience. Discrepancies, for example where WIL data reveals higher numbers of students undertaking WIL than are reported in CR data, can be used to understand more about the accuracy of the latter. Perhaps more importantly, this process of cross referencing may enable insights into students' understanding of their WIL experiences by indicating that they are not interpreting them as industry projects and professional experience. In response, the language used in communicating WIL activities to can be adjusted to frame this professional experience in ways that support students to understand the career asset it represents for them as graduates. Secondly, exploring the relationship between career readiness as indicated by CR data and WIL activities captured in WIL data management systems could demonstrate the effectiveness of WIL initiatives via shifts in career readiness regardless of direction, a point to be discussed further on (Lin-Stevens et al., forthcoming).

### *Illustration of practice*

RMIT's Bachelor of International Studies provides a useful example of the workings of the described approaches to CR data in its capacity to inform employability initiatives at RMIT. It also exemplifies the importance of a complex, nuanced and theory-informed approach to the use of CR data to inform and shape curricula. The degree specialises in equipping students with competencies in cross-cultural communication, global analysis, international politics and development (Bell et al., 2021). It is, however, a degree that does not overtly lead to specific career outcomes. CR data for 2020 showed final year students identifying with the less ready categories of Decide (67%) and Plan (23%), with modest numbers in the more ready Compete (7%) and Sorted (3%) categories. Triangulating these insights with other data sources, such as student feedback, created a strong basis for redesigning content and assessment to better meet their career development needs. In collaboration with

careers practitioners and drawing from resources strategically designed for educators and curriculum developers, a set of interventions was designed to be scaffolded across each year level through the degree. These were structured to support career development and readiness appropriate to different stages mapped across the student journey (see Branford et al., 2024). In students' very first semester, students now encountered assessments and class activities that incorporated career development learning activities and prompts within one of their very first pieces of assessment. These foundations in career development were strengthened in second year in a class called Global Careers, covering strategies and specific steps students can take to discover and pursue suitable careers. In their final year, students had always taken an internship. Assessment redesign now revisited career development learning and supported students to produce artefacts relevant to the start of their career trajectories, such as resumes and prepared job interview responses.

In 2024, CR data for the degree still indicated that the most common category for final year students was Decide, followed by Plan, then Compete and lastly Sorted. At first glance, it may have been possible to assume that the interventions had been ineffective. However, a closer examination reveals notable shifts. These include much smaller proportions of students in the categories of Decide (49%) and Plan (22%), and more in Compete (16%) and Sorted (13%). Examination of the intervening years of 2021, 2022 and 2023 reveals that the movement in the numbers of students in each category shifted gradually year by year away from the less confident categories and towards the more confident categories. These shifts correlate with the step-by-step implementation of career development learning into students' coursework and assessments described above. A holistic view of employability in the student journey builds into its considerations the impact of economic and geopolitical uncertainties and a rapidly evolving job market still settling in the aftermath of a global pandemic. With this context, and with qualitative CES data adding students' voices to quantitative CR data insights, ongoing iterations of scaffolded learning experiences continue to evolve in the Bachelor of International Studies.

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### *Future focus for CR data at RMIT University to inform employability initiatives*

Moving forward, RMIT's use of CR data to inform curriculum is likely to focus increasingly on significant shifts in data as indicative of valuable learning taking place. This approach aligns with the principle of quality WIL curriculum design outlined by Smith et al. as containing "embedded, accessible, and *transformative* learning and assessment" (2023, p.107). The focus is distinct from one in which the ideal trajectory is understood as a simple, linear increase in students' sense of their own career readiness, denoted by a steady progression from *Decide* through to *Compete* and *Sorted*. As illustrated by the example of the Bachelor of International Studies, even exemplary approaches to career development learning may not be reflected by data in this way. A focus on data shifts, rather than linear 'progress', acknowledges the value of learning that challenges and disrupts students' sense of their career readiness. Career development theories of planned happenstance and chaos have long acknowledged and affirmed career journeys as dynamic and non-linear (Lin-Stephens et al, forthcoming). Kolb's (1984) model of 'experiential learning' represents cyclical processes of learning through experience, reflection and action. The influential DOTS model of career development (Law & Watts, 1977) supports a strongly non-linear conception of the acquisition of self-awareness, opportunity awareness, skills in decision making and navigating transitions. Given this emphasis in relevant theory, an approach to data collection processes that assumes linear modes of progress seems unlikely to make best use of insights into the complex student journey of career development.

Research highlights WIL as a point in the student journey characterised by rapid growth, challenge, development, confrontation, evaluation, re-evaluation and affirmation (Billet et al, 2011; Lee & Branford, 2024; Smith et al, 2019; Zegwaard et al, 2023). For these reasons, WIL is likely to shift into focus as RMIT's approach to CR data evolves. For example, Zegwaard & McCurdy (2017) point to WIL as a significant catalyst for undergraduate science students' decisions to pursue postgraduate studies. Students interviewed for the study offer their accounts of realising, through experiences and conversations

encountered during WIL, that greater opportunities were available to more qualified graduates, and that there was a significant difference in the workplace status of a technician (bachelor qualification) versus a scientist (post graduate qualification). Students also reported new confidence in their ability to tackle postgraduate qualifications. Had CR data been collected for these students, it is reasonable to speculate significant shifts coinciding with WIL. Studies also point to WIL as an experience that can actively challenge students' sense of their career readiness. Trede & Jackson found that for their sample of students, the greatest inhibiting factors in 'becoming a deliberate professional' through WIL were deficits they discovered in their own experience and skills compared with the expectations of employers, a mismatch which "unsettled their confidence" (2019, p.179). Studying the impacts of this kind of unsettling in emerging CR data, associated both with changing study plans and new awareness of professional deficit, should enable valuable insights to be explored.

A range of opportunities emerge when CR data is approached in this way. One is encouragement and affirmation of tertiary curricula that successfully challenge ill-founded confidence. This includes confidence that can be attributed to the Dunning-Kruger effect, a lack of understanding of industry demands, job markets, career pathways or opportunities, or unexamined values and career goals. As Cobb observes of this kind of scenario, "They will appear to go 'downwards' on the scale but their career thinking has become more realistic" (Cobb, 2019, p.23). Greater insights into fluctuations in students' career confidence, and likely alignments with key learning experiences such as WIL, have the potential for significant impact in their capacity to inform the development of curricula, most notably interventions to support the careful navigation of these key points in the student journey of career development.

This future direction should also support management of risks associated with a neoliberal culture of audit which can cause anxiety for educators and detriment to their curricula (Branford & Leon, forthcoming; Loveday, 2018). Heath & Burdon describe "regimes of oversight, accountability and audit which ensure every academic knows that [they are] constantly being watched and judged" (2013, p. 385). This unease can intersect with more general concerns regarding an

'employability agenda' in tertiary education, motivated by corporate and economic interests. Introduced and applied clumsily or uncritically, CR data may be at risk of contributing to these concerns by creating an unrealistic and counterproductive ideal, seeming to equate quality career development learning with clear, steady, measurable growth in students' self-reported career confidence. Working closely with theories of the complex, non-linear nature of career development, and its likely reflection in complex and fluctuating data, will be important for evolving applications of CR data across employability initiatives at RMIT.

### *Conclusion and recommendations*

Drawing on experience of using CR data to inform and develop employability initiatives at RMIT, this case study concludes with a series of recommendations, as follows:

- While CR data can be usefully applied to identify and address problems in curriculum, it also offers significant value as a strategy for identifying, acknowledging and celebrating strength. RMIT careers practitioners foster and strengthen relationships with educators by building it into celebrated exemplars of best practice and coaching them to use it in applications for promotions and awards.
- Across the tertiary sector, concerns with scalability can lead to one-size-fits-all approaches. In analysing and applying CR data, careers practitioners can play a key role in ensuring flexibility, strategic triangulation and careful tailoring to support the needs of different university cultures, disciplines, educators, and student cohorts.
- Champions among leaders, educators, curriculum designers and learning designers support meaningful adoption of CR data within the culture of the university, and a 'train the trainer' model enables scalable usage with widespread benefit.

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