



TOWARD AN INTEGRATIVE PEDAGOGY OF CAREERS AND EMPLOYABILITY  
LEARNING IN HIGHER EDUCATION

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**ABSTRACT**

Graduate employability has become a core strategic concern for universities, representing an important outcome of and the return on public and private investment in higher education. In response, universities have adopted a variety of pedagogical and strategic approaches, in and alongside the curriculum, to support their students in developing employability capital, career management skills, and professional identity. Two fields of research have explored how university graduates achieve career success: graduate employability and career development. Graduate employability research has investigated the individual, institutional, and socio-economic factors that influence graduates' career success, with particular attention paid to pedagogical strategies that contextualise employability within the curriculum of particular disciplines. Career development, as a subdiscipline of applied psychology, has focused on how people form career interests, make career decisions, pursue career goals, and cope with career challenges. However, despite a clear alignment of educational goals, there remains limited conceptual or practical integration of the two disciplines. In this thesis, I set out to bridge this gap between career development and graduate employability in higher education. This thesis is composed of three journal articles, two published and one submitted for review. The first is a systematic bibliometric review of the graduate employability and career development literature. This article demonstrates the gulf between the two bodies of literature, identifies research themes within them, and argues for more purposeful exchange of ideas between scholars in each field. The second is a document analysis of 376 job advertisements for careers and employability professional roles in Australian universities. This article describes employability as a professional proto-jurisdiction made up of several distinct specialty areas of expertise. It warns that, collectively, the professional field lacks a cohesive foundation of shared theoretical and professional principles. Together, these first two articles illustrate the gap between graduate employability and career development in research and in practice, respectively. The third article, a conceptual paper, describes the key pedagogical principles that underpin an approach to careers and employability learning which bridges that gap in current research and practice. This paper concludes this thesis by articulating a vision of an integrative pedagogy of careers and employability learning, which honours the shared concern of both career development and graduate employability for student agency and success, draws on the conceptual and practical strengths of each, and integrates key pedagogical theories and methods from each.

**CERTIFICATION OF THESIS**

This Thesis is the work of Michael Joseph Healy except where otherwise acknowledged, with the majority of the authorship of the papers presented as a Thesis by Publication undertaken by the student. The work is original and has not previously been submitted for any other award, except where acknowledged.

Principal Supervisor: Professor Peter McIlveen

Associate Supervisor: Associate Professor Sara Hammer

Student and supervisors' signatures of endorsement are held at the University of Southern Queensland.

**STATEMENT OF CONTRIBUTION****Article One: Healy et al. (2020)**

Healy, M., Hammer, S., & McIlveen, P. (2020). Mapping graduate employability and career development in higher education research: A citation network analysis. *Studies in Higher Education*. <https://doi.org/10.1080/03075079.2020.1804851>

Michael Healy contributed no less than 75% to the preparation, writing, and revision of this article.

**Article Two: Healy, Brown, and Ho (2021)**

Healy, M., Brown, J. L., & Ho, C. (2021). Graduate employability as a professional proto-jurisdiction in higher education. *Higher Education*. <https://doi.org/0.1007/s10734-021-00733-4>

Michael Healy contributed no less than 70% to the preparation, writing, and revision of this article.

**Article Three: Healy (2021b)**

Healy, M. (2021). *Careers and employability learning: pedagogical principles for higher education*. Manuscript under review.

Michael Healy contributed the entirety of the preparation and writing of this article.

A full statement of authorship, detailing the contribution of each co-author, is provided for each of the co-authored papers presented in this Thesis is included in Appendix 2.

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Career development is an extraordinarily collegial professional community, and I thank all the colleagues that I have worked with over the years and the members of the various professional associations I have been involved with: the Career Development Association of Australia, the National Association of Graduate Careers Advisory Services, the Asia-Pacific Career Development Association, and the Career Development Association of New Zealand. I look forward to many more years of engagement and collaboration with these communities.

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**LIST OF PUBLICATIONS**

In this PhD by publication, I am submitting three journal articles, two of which have been published and the third of which is currently under review for publication. In addition to these three articles, throughout my PhD candidature between 2016 and 2021, I have authored or co-authored several other peer-reviewed article or chapters. The abstracts of these additional publications are presented in Appendix C. Aside from peer-reviewed publications, I have also published other scholarly or professional writing, including blog posts, LinkedIn articles, or newsletter articles, in which I have advanced and refined my scholarly ideas.

***Publications Submitted in this PhD by Publication Thesis***

- Healy, M.,** Hammer, S., & McIlveen, P. (2020). Mapping graduate employability and career development in higher education research: A citation network analysis. *Studies in Higher Education*. <https://doi.org/10.1080/03075079.2020.1804851>
- Healy, M.,** Brown, J. L., & Ho, C. (2021). Graduate employability as a professional proto-jurisdiction in higher education. *Higher Education*. <https://doi.org/0.1007/s10734-021-00733-4>
- Healy, M.** (2021). Careers and employability learning: Pedagogical principles for higher education. Manuscript under review.

**Additional Peer-Reviewed Publications Authored or Co-Authored During Candidature, Published**

- Healy, M.,** McIlveen, P., & Hammer, S. (2018). Use of my career chapter to engage students in reflexive dialogue. In F. Meijers & H. J. M. Hermans (Eds.), *The Dialogical self theory in education: A multicultural perspective* (pp. 173–187). Springer. [https://doi.org/10.1007/978-3-319-62861-5\\_12](https://doi.org/10.1007/978-3-319-62861-5_12)
- Brown, J. L., **Healy, M.,** Lexis, L., & Julien, B. (2019). Connectedness learning in the life sciences: LinkedIn as an assessment task for employability and career exploration. In R. Bridgstock & N. Tippett (Eds.), *Higher education and the future of graduate employability: A connectedness learning approach* (pp. 100–119). Edward Elgar. <https://doi.org/10.4337/9781788972611.00015>

- Brown, J. L., **Healy, M.**, McCredie, T., & McIlveen, P. (2019). Career services in Australian higher education: Aligning the training of practitioners to contemporary practice. *Journal of Higher Education Policy and Management*, 41(5), 518–533.  
<https://doi.org/10.1080/1360080X.2019.1646380>
- Healy, M.**, & McIlveen, P. (2019). My career chapter: The dialogical self as author and editor of a career autobiography. In N. Arthur, R. Neault, & M. McMahon (Eds.), *Career theories and models at work: Ideas for practice* (pp. 147–158). CERIC.
- Healy, M.** (2021). Microcredential learners need quality careers and employability support. *Journal of Teaching and Learning for Graduate Employability*, 12(1), 21–23.  
<https://doi.org/10.21153/jtlge2021vol12no1art1071>
- Knight, E., Staunton, T., & **Healy, M.** (In Press). About University Career Services' Interaction with EdTech. In A. Kaplan (Ed.), *Digital transformation and disruption of higher education*. Cambridge University Press.
- McIlveen, P., Perera, H. N., Brown, J. L., **Healy, M.**, & Hammer, S. (2021). Career assessment. In P. J. Robertson, T. Hooley, & P. McCash (Eds.), *The Oxford handbook of career development* (pp. 313–324). Oxford University Press.  
<https://doi.org/10.1093/oxfordhb/9780190069704.013.23>

**Additional Peer-Reviewed Publications Authored or Co-Authored During Candidature, Under Review or in Preparation**

- Healy, M.**, Bell, A., & Ryan, G. (2021). *Constructing a life narrative for student paramedic career & employability learning: A collaborative study*. Manuscript in preparation.
- Healy, M.**, Brown, J., & McIlveen, P. (2021). *Employability: A bibliometric systematic review of the literature*. Manuscript in preparation.
- Healy, M.**, Cochrane, S., Grant, P., & Basson, M. (2021). *Linkedin as a pedagogical tool for careers and employability learning: A scoping review*. Manuscript under review.
- Healy, M.**, & Hammer, S. J. (2021). *The long tail of graduate employability research*. Manuscript in preparation.

**Supplementary Scholarly or Professional Writing**

- Healy, M.** (2017a). *My curricular vision of careers and employability learning* [Post]. LinkedIn. <https://www.linkedin.com/pulse/my-curricular-vision-careers-employability-learning-michael-healy/>
- Healy, M.** (2017b). *What is best practice in careers education? An outline of the evidence* [Post]. LinkedIn. <https://www.linkedin.com/pulse/what-best-practice-careers-education-outline-evidence-michael-healy/>
- Healy, M.** (2018). *Dialogical approaches to careers and employability learning* [Post]. LinkedIn. <https://www.linkedin.com/pulse/dialogical-approaches-careers-employability-learning-michael-healy/>
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- Healy, M. & Davies, A.** (2019). Experiences and learnings from the 2019 APCDA annual conference [Blog post]. Retrieved from <https://www.cdaa.org.au/Web/Blog/Posts/Experiences-and-Learnings-from-the-2019-APCDA-Annual-Conference.aspx>
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- Healy, M.** (2020). *Why careers and employability learning matters in higher education* [Post]. LinkedIn. <https://www.linkedin.com/pulse/why-careers-employability-learning-matters-higher-education-healy/>
- Healy, M.** (2021). Authorship agreements for co-authored articles in a PhD by publication [Post]. Retrieved from [https://mojohealy.com/post/phd\\_by\\_publication\\_authorship\\_agreement/](https://mojohealy.com/post/phd_by_publication_authorship_agreement/)
- Healy, M.** (2021). Careers and employability learning: We need a more integrated pedagogy. *Campus morning mail*. <https://campusmorningmail.com.au/news/careers-and-employability-learning-we-need-a-more-integrated-pedagogy/>
- Healy, M.** (2021). *The three levels of employability research* [Post]. LinkedIn. <https://www.linkedin.com/pulse/three-levels-employability-research-michael-healy/?published=t>
- Healy, M., & Brown, J.** (2021). QS graduate employability rankings: What they measure and what they don't. *Campus morning mail*. <https://campusmorningmail.com.au/news/qs-graduate-employability-rankings-what-they-measure-and-what-they-dont/>



## CHAPTER 1: INTRODUCTION

In the first two decades of the twenty-first century, the career development and employment outcomes of university graduates have become a central concern of higher education institutions, policymakers, employers, and the graduates themselves. The notion of *graduate employability* has come to signify a central question in these discourses: what is it that enables success in graduates' post-study career? Many have attempted to answer this question by enumerating lists of transferable skills that employers value, arguing that universities need to do more to ensure their students learn these skills through their education, over and above discipline- and profession-specific knowledge and skills. Contemporary graduate employability scholarship has adopted broader views of what graduate employability is, typically focused on psychological orientations or on a range of human, social, cultural, and psychological capitals possessed by the student or graduate. Others have considered contextual factors, such as labour markets, structures of class and privilege, and the prestige economies of higher education and graduate employment. Others still have considered how university educators can best support the graduate employability development of their students, through strategies such as work-integrated learning, project-based learning, or the inclusion of career development learning in the curriculum.

Graduate employability scholarship is well known for being difficult to define or synthesise due to this diversity of perspectives and priorities. However, one perspective that is almost entirely absent from graduate employability scholarship and practice is that of *career development*, a relatively more defined field of scholarship and professional practice. Scholarship or principles of practice from the field of career development are seldom acknowledged in detail in graduate employability discourses. This thesis is predicated on the fact that graduate employability and career development, as fields of scholarship and professional

practice, share the same fundamental concern—student career and employment success—but are essentially separate fields, and that this undermines collective efforts among university educators to understand and support students in pursuing their career goals.

Doctoral research, and indeed all research, is expected to address a gap in the existing scholarly literature. In this PhD by publication, I address the gap between these two parallel bodies of literature and fields of professional practice: graduate employability and career development. I have published two journal articles which empirically demonstrate this gap in scholarship (Healy et al., 2020) and in professional practice (Healy, Brown et al., 2021). Both articles explain how this gap undermines the cohesion and quality of universities' strategies in support of students' careers and employability development and point instead toward an integrated pedagogy of *careers and employability learning*, which purposefully draws on theory and evidence from both fields.

The third article in this PhD by publication (Healy, 2021b), currently under review, elaborates on my curricular vision of an integrative pedagogy of careers and employability learning. By pedagogy, I do not mean a didactic instructional method, but rather an ethic of reflexivity on the part of the educator, a “form of inquiry” (van Manen, 1994, p.139) in which they critically examine how they understand careers and employability and how they seek to create learning experiences, environments, and relationships for their students (Loughran 2013; van Manen, 1992, 1994). The third article of this thesis knits together concepts from graduate employability and career development, anchored around six pedagogical principles that I believe have been neglected in graduate employability scholarship to this point:

1. careers and employability learning is a psycho-social process, not an outcome;
2. careers and employability learning is contextual;

3. careers and employability learning is ubiquitous;
4. careers and employability learning is relational, dialogical, and narrative;
5. careers and employability learning can be traumatic; and,
6. careers and employability learning can be emancipatory..

In this PhD by publication, I present these three journal articles as the substantive original research content that explores and advances my argument:

1. Healy, M., Hammer, S., & McIlveen, P. (2020). Mapping graduate employability and career development in higher education research: A citation network analysis. *Studies in Higher Education*. <https://doi.org/10.1080/03075079.2020.1804851> [Chapter four of this thesis]
2. Healy, M., Brown, J. L., & Ho, C. (2021). Graduate employability as a professional proto-jurisdiction in higher education. *Higher Education*. <https://doi.org/0.1007/s10734-021-00733-4> [Chapter five of this thesis]
3. Healy, M. (2021). *Careers and employability learning: Pedagogical principles for higher education*. Manuscript under review. [Chapter six of this thesis]

### **1.1 The Structure of This Thesis by Publication**

A key challenge for the PhD by publication candidate is the structuring of the portfolio and ensuring the project is presented as a cohesive whole (Mason & Merga, 2018; Merga et al., 2019). The University of Southern Queensland Higher Degree by Research Thesis Presentation Schedule (see Appendix 1) requires that the PhD by publication must act as one cohesive document, must flow logically and coherently, and mandates the inclusion of an introduction that contextualises the research project. Although there is no mandated structure, the PhD by

publication must nonetheless flow logically and act as one cohesive document. In practice, PhDs by publication have been presented in many distinct structures (Mason & Merga, 2018). From Mason and Merga's (2018) typology of PhD by publication structures, this portfolio most resembles "Sandwich Model C", with an introduction, literature review, and research aims and methods chapters preceding the presentation of each article as an individual chapter.

When considering how to bring publications together in their portfolio, the PhD by publication candidate must balance the need to elaborate on elements of the research project with letting the publications speak for themselves (Håkansson Lindqvist, 2018; Mason & Merga, 2018; Merga et al., 2019). In this PhD by publication portfolio, I have resisted the temptation to write a full thesis around my publications, and instead intend to let my articles stand on their merits. Nonetheless, in the exegesis of this thesis I will elaborate on the rationale for my broader research project, the underlying research paradigms that have guided me, and my research aims and methods. I will then offer each publication as a chapter, with some additional elaboration on the research topic and method and brief autoethnographic accounts of my experience conducting the research and writing and publishing the articles.

In addition to the three articles presented in this PhD by publication portfolio proper, I will at times also present portions of various additional writing that I have completed throughout my candidature. Such texts include book chapters and journal articles, abstracts submitted to conferences or journals, newsletters and blog posts, conference presentations, among others. The inclusion of such texts reflects the fact that a PhD by publication candidate is, in many respects, an active researcher and contributor to the scholarly community, even as they are undergoing their academic apprenticeship (Håkansson Lindqvist, 2018; Kamler, 2008; Merga et al., 2019; Merga, 2015). As a part-time PhD candidate and full time non-academic higher education

professional, this supplementary scholarly writing has played a significant role in helping me maintain momentum in my research and writing, test and refine ideas, hone my communication skills, and build my scholarly and professional profile. Any such text will be presented in its original form, with a heading of *Supplementary Writing* and a border around the text to clearly distinguish it from the rest of the unpublished text from this thesis. For blog posts and newsletters, hyperlinks will be removed from the text and citations added. In the interest of concision, reference lists will be removed from these supplementary texts and cited references included in the reference list of this thesis.

For each of the three journal articles presented in this thesis, I will provide a brief elaboration on the rationale of the research and the literature review that informed it. This is necessary to overcome another challenge I experienced in my PhD by publication, that of revising my reading and research down to fit within the narrow scope of a journal article. Behind every point made and reference cited is a wealth of additional reading and thought that could not be explicitly included in the final article. I will elaborate on certain elements of the relevant literature, methodology, findings from the analysis, or meaning and importance of the arguments.

I will also include in my rationale for each article an autoethnographic account of how I conceived, approached, and completed the research and writing, following McIlveen's (2007, 2008) model of the reflexive scholar-practitioner. This model of scholar-practitioner adopts an orientation that values the scientific and clinical foundations of vocational psychology and career development practice, but not without also attending to the personal and professional dimensions of the researcher's own self-concept and experience (McIlveen, 2007, 2008). To this end, I will comment on my own career development through my PhD candidature, considering how certain career development theories have helped me reflect on my experience and my future ambitions.

I will present the version of record of published articles and the most recent manuscript of my submitted article. Each article is presented as published in or prepared for their host journals, and therefore may vary slightly in format and style, including citation and referencing style. Each article will retain the page numbering of the version of record or submitted manuscript, with additional page numbers showing their position in this PhD by publication portfolio. When quoting from published articles, any page numbers refer to the source pagination of the version of record or the submitted manuscript, not their position in this portfolio.

In addition to the version of record or final submitted manuscript of each article, I will present additional textual records related to their publication, such as covering letters and responses to peer review. These texts will reveal how the articles were shaped through the peer review process. I include them to recognise the fact that these texts are themselves fundamentally important forms of scholarly writing and practice, as invisible as they usually are (Håkansson Lindqvist, 2018; Merga et al., 2019; Thomson & Kamler, 2012).

I will also share detailed statements of authorship for each of the co-authored papers in Appendix 2. I created a more detailed authorship agreement of my own design, which not only helped record the contributions made by each author, but also helped me to manage co-writing relationships, a vitally important part of my development as a competent scholar. In the following blog post on my personal website (Healy, 2021a), I shared these authorship agreements and explained their value to me.

*1.1.1 Supplementary Writing: Authorship Agreements for Co-Authored Articles in a PhD by Publication*

Healy, M. (2021). Authorship agreements for co-authored articles in a PhD by publication [Blog post]. Retrieved from <https://mojohealy.com/post/phd-by-publication-authorship-agreement/>

As much as a traditional PhD thesis might benefit from constructive feedback from supervisors and others, it is, or should be, a single-author text. But if you've chosen to pursue a PhD by publication, it's possible or likely, depending on the norms in your discipline, that some of the constituent articles will be written in collaboration with others, including your supervisors. This is one of the advantages of a PhD by publication, but undoubtedly introduces several challenges and risks.

Co-authoring can be a fantastic or a challenging experience; it can enable meaningful collaboration or be a source of tension and conflict. In a PhD by publication, co-authoring is also subject to the institutional rules that govern what kind of work is acceptable for inclusion in the candidate's portfolio. At my university the policy is clear: "a student would be expected to make 50% or greater contribution to each paper".

The policy refers to the need for a statement affirming the student's leading role in authorship, and indeed the graduate research school provides a template for a record of authorship. I googled for other examples of what an authorship agreement might look like, but wasn't totally satisfied with any that I found, so I made one for myself. You can download it and edit it to suit your own needs. You can also have a look at the actual authorship agreement that I completed for the article I wrote with my supervisors.

The authorship agreement is quite self-explanatory. The first section states the provisional title, abstract or project summary, author list, and research ethics details. The second section indicates the research outputs that the article is being written for, most importantly the

primary and alternative target journals. I included the third section, an emphatic statement that this project is my project, when I initiated a collaboration with scholars other than my supervisors. It's important to communicate expectations early in co-authored projects, and this statement allowed me to be crystal clear that the lion's share of the work belongs to me.

The fourth section, the record of author contribution, serves two purposes. When I initiate a project, it allows me to be very clear to my co-authors about what I am asking them to do. I have been told by collaborators that they have appreciated this, as it allows them to better assess their prospective workload and decide if they want to take the project on. Then, as the project progresses, I can update the actual contributions of each author. Of course, it's impossible to enumerate the exact percentages of each author's contributions in this section, so the numbers are broad estimates rather than precise records. The final section is for signatures of all authors, attesting that it is an accurate reflection of their relative contributions, and in the case of the PhD by publication, that the student lead author is playing by the rules.

I can think of two improvements that I might make to this agreement, particularly if I go on to pursue projects with people that I don't know as well as my current collaborators. The first is an indication of what kind of co-writing strategy I am proposing, to ensure that our respective writing practices are compatible. The second would be the inclusion of a termination clause, specifying what happens if one of the authors doesn't meet their obligations, along with being clear about what "not meeting obligations" actually means. For example, does their name slip down the list of authors, or is it removed entirely?

I expect to co-author most of my academic writing, PhD and otherwise, which is the norm in my field. So far, I have enjoyed co-writing and have not suffered any bad experiences.



Although I created my authorship agreement specifically to serve my PhD by publication, I anticipate using it as standard practice for all future collaborative academic writing projects.

I will end this PhD by publication with a conclusion in which I describe my research's contribution to the fields of graduate employability and career development, acknowledge certain limitations in the research, and describe a future research agenda.

## CHAPTER 2: RATIONALE AND REVIEW OF THE LITERATURE

As noted in the introduction to this thesis, a challenge of the PhD by publication is that the limited scope of journal articles does not allow for a full account of the context and rationale for the research or for a suitable survey of the relevant literature. Therefore, in this chapter I will provide an elaboration on my reading and reasoning as approached the broader research project and the individual journal articles. I will begin by noting that employability is not a single distinct concept, but one that exists and is understood differently in several different fields of research. I will then focus on certain characteristics of graduate employability and career development as fields of scholarship and professional practice, before arriving at the problem at the core of this doctoral research: the gap between the two fields.

### 2.1 Employability: Multidisciplinary and Dis-integrated

Before turning to my discussion of *graduate* employability and career development in the context of higher education, it is important to first confront the multidisciplinary nature of the term employability itself. To do so, I will provide an excerpt from a proposal submitted to, and accepted for, a call for papers for a special issue of the *European Journal of Work and Organizational Psychology*, due to be published in 2022, focused on advancing employability research to be more integrated, contextual, and conceptually and empirically mature (European Journal of Work and Organizational Psychology, 2021).

### *2.1.1 Supplementary Writing: Employability: A Bibliometric Systematic Review of the Literature*

Healy, M., Brown, J. L., & McIlveen, P. (2021). Employability: A bibliometric systematic review of the literature. Abstract accepted in principle for the *European Journal of Work and Organizational Psychology*, manuscript due January 2022.

In the last decade, employability has become one of the most studied topics in psychological career development research (Akkermans & Kubasch, 2017). The relevance of employability to psychological research into work and careers is particularly salient given the career shocks associated with the global pandemic (Akkermans et al., 2020). De Vos et al (2021) provided an account of the development of employability as a concept in psychological career research, distinguishing between developments in the sub-fields of vocational and organisational psychology. However, employability is not interdisciplinary, but multidisciplinary.

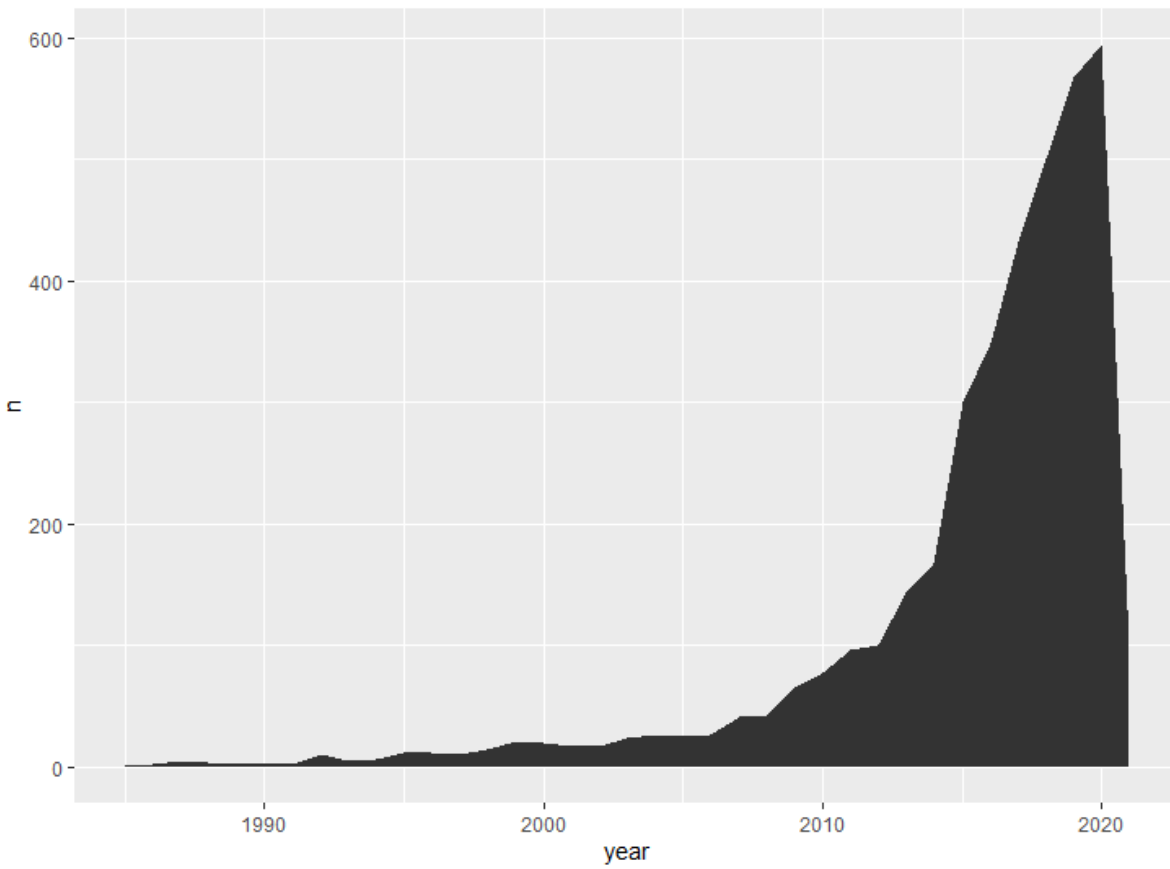
Psychological research into employability is itself only a part of the broader body of research into the concept.

Employability has also become a focus of research in the fields of higher education, disability and rehabilitation, and the sociology of education and work. Among these various disciplines, employability has been studied at multiple levels of analysis (Guilbert et al., 2015; Holmes, 2013). First is the macro level of social, economic, and political systems. Second is the micro level of individual characteristics that influence a person's employability, including their perceptions of their own employability. Third is the meso level between the macro and the micro, where individuals develop and exercise their employability through interactions with educational, employment, and other systems. As important as employability is as a focus of research, it lacks a cohesive conceptual foundation, particularly one that can traverse the various disciplinary fields in which it is studied.

In order to advance a more mature employability research agenda, extending from previous reviews of employability's conceptualization (Guilbert et al., 2015; Williams et al., 2016) it is necessary to first provide a formal account of the breadth and diversity of research literature to this point. Our prior research distinguished two disciplinary domains within the field of graduate employability (Healy et al., 2020). However, the parameters of that research did not account for multiple other disciplines and wider fields of research and practice.

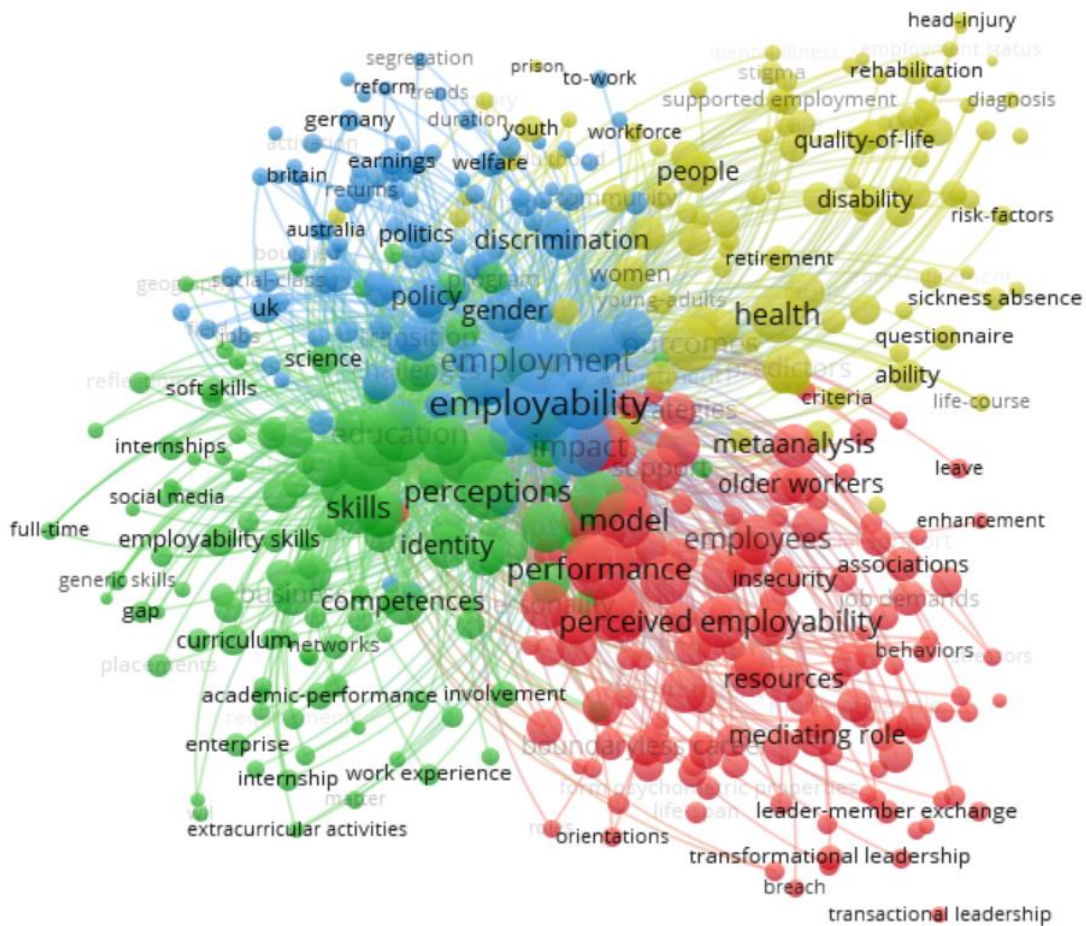
In this article, we will report findings from a bibliometric systematic literature review (Linnenluecke et al., 2020) of 3848 research articles focused on employability, drawn from a broadly inclusive search of the Web of Science database. We will first report on a descriptive analysis of publication rates, authorship, and key journals. We will then illustrate employability research's intellectual structure, as represented by co-citation networks and the clusters that can be observed in them, and conceptual structure, as represented by topic modelling applied to the titles, keywords, and abstracts of the articles (Aria & Cuccurullo, 2017).

Figure 1 below is a preliminary illustration of the annual scientific production of employability research, showing a rapid acceleration in the number of published articles since approximately 2006, with 594 new articles being published in 2020.



*Figure 1. Annual scientific production of employability research*

Figure 2 below is a preliminary illustration of the conceptual structure of employability research, showing co-occurrence networks among the 1,000 most common keywords—from article titles, abstracts, and author designated keywords—from articles within our data set. This reveals four themes in employability research: social policy (blue), disability and rehabilitation (yellow), vocational and organisational psychology (red), and higher education (green).



*Figure 2. Conceptual structure of employability research*

The aim of this research is to provide an empirically derived description of the current state of employability research, upon which an integrative research agenda can be built. For some time, career development scholars have argued for greater integration of vocational and organisational psychology (Fouad & Kozlowski, 2019). With regard to employability, we go further to argue that researchers look beyond the horizons of career development fields for parallel research happening in adjacent fields to advance employability to a more mature, integrated, and impactful field of research.

In the proposal above (Healy, Brown, & McIlveen, 2021), preliminary findings show that employability is a focus of scholarship in several distinct fields: social policy, disability and rehabilitation, vocational and organisational psychology, and higher education, roughly in proportion with one another. This fact goes some way to explaining why, when reading broadly in the employability literature, it is difficult to find a single clear and cohesive conceptual foundation (Artess et al., 2017; Cheng et al., 2021; Clarke, 2018; Guilbert et al., 2015; Fakunle et al. 2021; Harten et al., 2021; de Vos et al., 2021). It also explains why contemporaneous reviews of employability scholarship from higher education (Small et al., 2018; Williams et al., 2016) and career development (Fugate et al., 2021; Harten et al., 2021; de Vos et al., 2021) can reflect so little, in some cases nothing at all, of the other field. Some of the consequences of this dis-integration of employability literatures will be described later in this chapter, in the section titled “The Gap Between Graduate Employability and Career Development”. For the rest of this PhD by publication, the primary focus is on *graduate* employability, as conceived in the field of higher education research.

## **2.2 The Rise of Employability Outcomes as a Concern in Higher Education**

Over the last 30 years, graduate employability and career success have become central strategic concerns for universities around the world. This trend is the result of the massification and commercialisation of higher education, in which career success, employability, and employment outcomes are at the heart of the products and services provided by universities (Jackson & Bridgstock, 2018; Knight, 2020; Matherly & Tillman, 2015; Tomlinson, 2018). Careers and employability success is promised to students as the return on their personal investment in course fees and other costs (Bennett et al., 2017; Divan et al., 2019), and the delivery of skilled professionals into the labour market is promised to policymakers and the

public as the return on public investment into higher education in general (Cheng et al., 2021; Harvey, 2001; Tomlinson, 2021). In addition, university graduates are entering increasingly challenging and changing labour markets in which university degrees are not as certain to provide passage into professional work as they might have been in the past.

Employability outcomes are now also grist for the mill of media outlets and university ranking agencies (Bridgstock & Jackson, 2019; Christie, 2016; Hou et al., 2021). Reporting on employability outcomes is increasingly common and tends to insinuate that these outcomes are a marker of university quality and performance. However, this reporting usually in fact describes *employment* outcomes, measured at a particular moment after graduation (Bridgstock & Jackson, 2019; Christie, 2016; Harvey, 2001; Small et al., 2021). Narrow views of employability are also evident in public policy, with governments most concerned about employment outcomes and graduates meeting the needs of the labour market (Cheng et al., 2021; Harvey, 2001; Minocha et al., 2017; Small et al., 2021; Tomlinson, 2021).

In Australia, the federal government has adopted this approach in their *Job-Ready Graduates* funding framework, which attempts to influence students toward degrees with higher rates of graduate employment, such as Health and Science and Technology, and offers funding incentives based in part on graduate outcomes (Australian Department of Skills, Education, and Employment, 2021). The *Job-Ready Graduates* funding package has been criticised for not recognising how career decisions such as university degree selection actually happen (J. L. Brown, 2020) and for not actually resulting in any significant changes in enrolment patterns (Norton, 2021). Despite these questions about the funding model's validity and impact, it provides a clear example of an overriding focus on employment outcomes in public and policy discourses.



For decades, graduate employability scholars have critiqued this reduction of employability to little more than employment at an arbitrary moment of time (Boden & Nedeva, 2010; Bridgstock & Jackson, 2019; J. L. Brown et al., 2021; Christie, 2016; Dacre Pool & Sewell, 2007; Harvey, 2001; Moreau & Leathwood, 2006; Tomlinson & Holmes, 2017; Yorke, 2005). Critics have also described how narrow conceptualisations of employability have coloured perceptions of the value of higher education to individuals and society (Bennett, 2019a; Bridgstock & Jackson, 2019; Divan et al., 2019; Knight, 2020; Tomlinson, 2021; Tran, 2019). Some sociologically inflected higher education research has highlighted how factors such as social class (Allen et al., 2013; Burke et al., 2019; Harvey, 2001; Souto-Otero & Białowolski, 2021) or nationality, culture, and language (Fakunle & Higson, 2021; Pham, 2021, 2020) constrain some people's perceptions and expressions of their graduate employability and the employment outcomes that they can achieve. However, outside the niche field of graduate employability scholarship, employability remains practically—at times exclusively—synonymous with employment.

In response to a specific instance of this reductive graduate employability discourse, I and my colleague Jason Brown recently published a column (Healy & Brown, 2021) in the *Campus Morning Mail* daily newsletter, Australia's leading higher education industry news source. We were responding to a particular article describing—uncritically, in our opinion—recently released results of the Quacquarelli Symonds graduate employability rankings (Calderon, 2021), but we also took the opportunity to more broadly critique the higher education sector's tendency to conflate employability with employment.

*2.2.1 Supplementary Writing: QS Graduate Employability Rankings: What They Measure and What They don't*

Healy, M. & Brown, J. L. (2021) QS graduate employability rankings: What they measure and what they don't. *Campus morning mail*. <https://campusmorningmail.com.au/news/qs-graduate-employability-rankings-what-they-measure-and-what-they-dont/>

We read with interest Angel Calderon's Campus Morning Mail column (Calderon, 2021) on the new QS employability ranking. However, we are not persuaded that those rankings are a valid measure of employability. In this response, we explain why.

Mr Calderon ends his column by encouraging readers to "look beyond the vagaries of the metrics of this ranking" and accept them as "valuable tools to drive social and labour market policy reforms". But what are "vagaries of the metrics" if not gaps in their validity? By our analysis, the QS employability rankings are a thoroughly inadequate representation of what they claim to measure.

He correctly notes that employability is a slippery term, and that employment and career success is inherently tied to many kinds of social inequity. Despite this, he does not confront the fact that the QS employability rankings are a better measure of university prestige than they are of any defensible conceptualisation of employability. A previous close look at what the component metrics measure and what they don't (Healy, 2020a) demonstrated this, as well as how the rankings actively disadvantage regional, online, and/or otherwise modest universities.

Our specific concerns include:

*"Employer reputation"*: Only 1.92% of respondents are Australian firms and there does not seem to be any certainty that employers actually employ graduates from the universities they nominate.

*“Alumni outcomes”*: Considers only the highest of high-fliers, such as senior leadership of the top 500 firms in the world, global lists of influence by the likes of Forbes, Fortune, and Time, and prestigious medal and award winners. These are outcomes that will be removed by 20 years, at least, from those people’s initial university degree. This measure disregards the more humble aspirations and achievements of most students, and nurses and teachers may as well not exist.

*“Partnership with employers”*: Excludes government agencies, such as education and healthcare, and privileges fast-track job applications and work experience arrangements, which are not a feature of Australian graduate recruitment.

*“Employer-student connections”*: privileges on-campus and discounts online activities, in effect discriminating against regional universities and those that serve part-time students with work and caring responsibilities.

*“Graduate employment rates”*: perhaps the most valid and transparent measure, but still one that conflates employability with employment.

Most importantly, the imprecise use of term employability outcomes continues to confuse rather than inform. We argue that employment should not be considered a direct outcome of employability. An individual’s employability (i.e., their professional knowledge, skills, and attributes; Bennett, 2019b) can influence the quality of job that is obtained but does not necessarily predict the attainment of employment itself.

There are several factors that complicate the relationship between employability and employment. Firstly, in the absence of obtaining a desired graduate job, most people will accept other forms of employment to pay their bills. The 2020 Graduate Outcome Survey (*Graduate Outcomes Survey*, 2020) reports that 28 per cent of graduates perceive themselves to be

overqualified for the job they hold. Secondly, an employment outcome requires the availability of suitable job vacancies in the labour market. 70 per cent of those graduates who say they are overqualified noted that they weren't in more suitable work simply because there were none available.

Finally, there is recent research that questions the assumption that so-called employability skills and graduate qualities translate into employment outcomes. Using 110,000 responses to the Graduate Outcome Survey and Course Experience Questionnaire, J. L. Brown et al. (2021) demonstrated near zero correlation between graduates' perceptions of their skills and qualities and employment outcomes. Rather, quality employment outcomes are achieved through complex self-regulatory job search behaviours (van Hooft et al., 2021) over a sustained period, starting well before the end of a student's degree.

These factors are fundamentally outside the influence of universities. So, why do we measure universities' performance on the employment outcomes of their graduates? And how do we justify comparing the employment outcomes of students in regional Queensland, for example, with those studying the same field of study in Sydney and Melbourne, let alone in Beijing or Los Angeles?

Universities should certainly be responsible for supporting the careers and employability learning of their graduates (Healy, 2021c). But we need to do so with much more meaningful and precise concepts and metrics for understanding employability outcomes than those offered by the QS rankings.

As a result of the economic and political trends described above, graduate employability is now targeted, implicitly if not explicitly, in universities' curricula and teaching and learning

and student support strategies. Accordingly, researchers and educators have developed a scholarly and pedagogical interest in graduate employability, giving rise to a sizable body of graduate employability literature (Healy et al., 2020).

### **2.3 Graduate Employability Scholarly Literature**

Graduate employability scholarship is best understood as a sub-field of higher education research, and as such it reflects many characteristics of the broader field (Healy et al, 2020). Higher education research has been characterised as diverse in theory and method (Tight, 2019), open to researchers coming from many disciplinary backgrounds (Clegg, 2012; Harland, 2012), or scattered and disintegrated (Daenekindt & Huisman, 2020). Graduate employability research shares these characteristics (Healy et al., 2020). It has been critiqued for a lack of conceptual cohesion and a proliferation of constructs, frameworks, and models, with little evident effort toward synthesis and integration (Artess et al., 2017; Cheng et al., 2021; Harvery, 2001; Römngens et al., 2020; Tomlinson, 2012).

Graduate employability scholarship tends to be conducted at three levels of analysis: the macro level of political, economic, and educational systems and policy; the micro level of individual psychology, experience, and perceptions; and the meso level, between the macro and the micro, where individuals experience, navigate, and are influenced by the systems and contexts in which they work and study (Clarke, 2018; Guilbert et al., 2015; Holmes, 2013; Small et al., 2018). Understanding the difference between these levels of analysis is important for making sense of graduate employability scholarship, as there can be significant differences between them in how employability is conceptualised, understood, and investigated. Below, I share a short article that I posted to LinkedIn to help my colleagues in the higher education careers and employability community understand these differences, as I have found them to have

significant practical consequences for how university strategies are defined, how resources are allocated, and how work is divided, managed, and conducted across the institution.

### 2.3.1 Supplementary Writing: *The Three Levels of Employability Research*

Healy, M. (2021). *The three levels of employability research* [Post]. *LinkedIn*.

<https://www.linkedin.com/pulse/three-levels-employability-research-michael-healy/>

Employability is a term that carries multiple meanings, can be interpreted in many ways, and is applied differently in different situations. This creates a challenge when reading the research literature and complicates practical discussions about the design and delivery of employability programs and services. You can make a little more sense of employability by recognising three broad themes in employability research:

*The macro level:* the big picture of political and educational systems and socio-economic contexts.

*The micro level:* the finer points of individuals' employability, particularly their perceptions of their own employability.

*The meso level:* the interplay between education, work, and individual learning.

I can't claim to have identified these themes myself. I first learned about them in Leonard Holmes's (2013) influential article "Competing perspectives on graduate employability: Possession, position or process?". Many have agreed that Holmes's three themes are a useful way to recognise different kinds of employability discussions. I and my co-authors used them in our article published in 2020, "Mapping graduate employability and career development in higher education research" (Healy et al., 2020).

These three themes are by no means a hard and fast typology. Some work will span two levels, or move between them. Some work might resist easy assignment to a particular level. Nonetheless, these three themes are a useful starting point for anyone looking to get their head around employability.

### **The Macro Level: The Big Picture of Political and Educational Systems and Socio-Economic Contexts**

The macro level is where we talk about systems that employability operates within, such as governments, higher education, and industry bodies. The labour market, the demand side, is a crucial influence at this level. Often, discussions at this level consider employability as an important economic and social outcome of university education, or as the “return on investment” of higher education funding. Research at this level is often done by those with an interest in educational policy or the sociology of education. If you ever get the sense that people are actually talking about employment when they say employability, there’s a chance that it’s because they’re approaching it primarily at this macro level, rather than at the micro or meso levels.

An example of research at the macro level is this recent article: “Graduate Employability: The Higher Education Landscape in Australia” (Small et al., 2020). Note the use of the word employability in the title, but the exclusive focus in the article on employment outcomes.

### **The Micro Level: The Finer Points of Individuals’ Employability**

The micro level is where we focus on the individual and the skills, attitudes, and behaviours make them employable. This work frequently looks at the various kinds of employability capitals that enable people to achieve their employment and career goals. For a long time, few looked past so-called employability skills, but most contemporary scholars

understand that there is a much more complex range of human, social, cultural, and psychological capitals at play.

It is at this level where we see the as-yet limited integration of career development theory into graduate employability research and practice. Most of this research is focused on students' perceptions of their own employability and draws from the field of organisational psychology. But there is a promising trend of employability scholars introducing other contemporary career development theories such as career adaptability, social-cognitive career theory, proactive behaviours, or career values into their work.

### **The Meso Level: The Interplay of Education Systems and Individual Learning**

The meso level is the between level: where we consider how individuals learn and develop employability within educational and other systems. It is at this level where employability becomes a matter of pedagogy, as educators try to understand the employability of their students so that they may design and deliver better educational programs or support services to support it. Researchers at this level have investigated a range of employability-building activities such as work-integrated learning, graduate attributes, connectedness learning, employability award programs and modules, and extracurricular activities, to name a few.

Career development learning has often been cited as a crucial component of graduate employability. However, career development theory and evidence is seldom considered in great depth in employability research or practice, which I think is a serious gap. I believe that students will be best served by a more integrated pedagogy for careers and employability learning, which draws on the best of both worlds.

### **Why the Three Levels Matter**



Consider a meeting of higher education staff, discussing employability. There is an executive dean or a head of school, concerned primarily with the macro level: graduate employment outcomes or related rankings. There are program directors, teaching academics, and educational designers who are mainly focused on the meso level: the design of a high-quality curriculum that supports students to become competent professionals in their field. And there are careers and employability educators who are experts at the micro level: the social-cognitive factors that influence students' decision-making, proactivity, and adaptability.

Many of you reading this may have been in meetings like this. You might have come away frustrated that there does not seem to be a shared understanding of what employability is and how it is best supported. You may have seen discussions dominated and strategies set by one approach, to the exclusion of others. Certainly, you'll know just how long it can take to develop a common understanding and language, and how dependent this is on strong, mutually respectful relationships.

I am not suggesting that these different themes in employability research are in and of themselves a problem. In fact, I believe the opposite: different scopes and approaches reflect a degree of maturity as a research field. Nor is identifying these three levels of analysis in employability research simply an intellectual exercise for academics to argue about in journal articles. I believe that considering the purpose, the intellectual and conceptual foundations, and the contributions and gaps of each level can help us, as higher education leaders and educators, deal with some common challenges we face when trying to work collaboratively on employability strategies.

I wrote the account above in large part to help myself understand why different kinds of graduate employability literature seemed to approach the concept so differently. These three levels of graduate employability research should be a crucial consideration for those researching and practicing graduate employability, but often seems to be overlooked.

The macro level of graduate employability research tends to be based in the sociology-informed disciplines of higher education policy: the sociology of education, or work and labour studies. This research focuses on how labour market conditions, socio-economic trends, and educational and economic policy influence graduate employability outcomes, particularly employment. Understanding the macro level of graduate employability is crucial for all graduate employability research, as it describes the practical consequences of how employability is understood and discussed, in the form of higher education policy (Australian Department of Education, Skills, and Employment, 2021; Minocha et al., 2017; Sin & Neave, 2016; Small et al., 2021) and, in turn, institutional strategies and resourcing (Bridgstock & Jackson, 2019; Cranmer, 2006; Farenga & Quinlan, 2016; Harvey, 2001; Healy et al., 2021).

The macro level is where some of the most vigorous criticism of the graduate employability agenda can be found, often citing graduate employability as a symptom of the neo-liberalisation and marketisation of higher education (Boden & Nedeva, 2010; Matherly & Tillman, 2015; Sin & Neave, 2016; Tomlinson & Holmes, 2017). Several researchers have critically considered the degree to which it is reasonable to hold university educators responsible for their students' employability, and by extension, their employment outcomes (Amiet et al., 2021; Cotronei-Baird, 2020; Daubney, 2021; Sarkar et al., 2020; Sin et al., 2019).

The micro, individual, level of graduate employability, tends to be conducted by learning and teaching scholars, work-integrated learning educators, or within particular academic and

professional disciplines. Research at this level can be broadly categorised into two themes: perceived employability and employability capitals. Perceived employability is a stream of research from field of organisational and industrial psychology, which investigates how individuals subjectively perceive their ability to secure and maintain quality employment, as a cognitive process (Harari et al., 2021; Vanhercke et al., 2014). Perceived employability scholarship is the exception to the rule that graduate employability does not make use of research from the field of career development (Byrne, 2020; Calvo & García, 2021; Monteiro, Ferreira, et al., 2020; Rothwell et al., 2008). In fact, in my bibliometric analysis of citation networks within and between the two bodies of literature (Healy et al., 2020), the clustering algorithm recognised perceived employability articles as being part of the graduate employability cluster, rather than the career development cluster. This seems to be the result of the influence of Rothwell et al.'s (2008) work applying the notion of perceived employability in the context of higher education graduate employability.

Recently, some graduate employability scholars have begun to integrate other psychological concepts and constructs from career development theory and evidence, such as career adaptability (Donald et al., 2019; Monteiro, Almeida, et al., 2020), professional identities (Tomlinson & Jackson, 2019), and proactive behaviours (Bennett & Ananthram, 2021; Jackson & Tomlinson, 2020; Okay-Somerville & Scholarios, 2017). Although research using perceived employability or other psychological constructs is an important theme in graduate employability scholarship, this research is not necessarily conducted by scholars of or working in the disciplinary context of psychology or its related sub-disciplines.

In the second theme of the micro level of graduate employability research, scholars have focused on describing and conceptualising various kinds of *employability capitals*, including

human, social, cultural, and psychological capitals (Clarke, 2018; Nghia et al., 2020; Pham & Soltani, 2021; Tomlinson et al., 2021; Tran, 2019). Much of this work draws on the theories of capital and agency of Bourdieu (Bourdieu & Richardson, 1986). Graduate employability research focused on employability capitals (Nghia et al., 2020; Pham & Soltani, 2021; Tomlinson et al., 2021) have explored how employability capitals and agency operationalised in the social systems of graduate labour markets, or the impact on employability arising from social class and other forms of privilege or marginalisation (Burke et al., 2019; Burke & Christie, 2018). As such, this capital focused theme in micro level research is often positioned near or within the meso level of graduate employability research, where individuals interact with institutional, economic, and social systems.

However, graduate employability scholars conducting this research have not included similar career education and guidance scholarship (Guichard & Cassar, 1998; Hodkinson & Sparkes, 1997; Vilhjálmsdóttir & Arnkelsson, 2003; Vilhjálmsdóttir & Arnkelsson, 2013), also based on the theories of Bourdieu (Bourdieu & Richardson, 1986), further illustrating the strength of disciplinary boundaries. A recent article in the vocational psychology literature (Delva, et al. 2021) applied Bourdieu's theories to career development, but exemplifying the disciplinary boundaries noted in this thesis, did so with no reference at all to the related scholarship described above.

This elaboration on forms of employability capitals is in part an effort to move the graduate employability discourses on from narrow conceptions of “employability skills”, or those skills considered to be most useful in the workplace and valued by employers (Suleman, 2018).

However, despite these efforts to argue for broader, more nuanced conceptions of employability capitals (Nghia et al., 2020; Pham, 2020; Tomlinson et al., 2021; Tran, 2019), the employability

skills agenda in graduate employability scholarship remains strong, particularly outside the core community of graduate employability specialists. Skills-focused graduate employability literature assumes a link between employability skills and employment outcomes, but recent research into that link has not supported a causal relationship (J. L. Brown et al., 2021). The graduate employability literature is marked by a proliferation of frameworks that attempt to define configurations of employability skills and capitals (Römgens et al., 2020; Small et al., 2018; Williams et al., 2016), but limited empirical research has been done to test their validity. There is a tendency to reinvent graduate employability in new frameworks, rather than to substantively integrate existing ones.

The meso level of graduate employability scholarship is where the individual—the student or the graduate—interacts with educational, societal, and economic systems—the university curriculum or the labour market. Meso level graduate employability researchers focused on social systems of graduate employability tend to be from sociologically inflected disciplines, such as labour studies or the sociology of education. Researchers focused on pedagogical or support strategies to promote employability related learning outcomes or goals tend to be learning and teaching scholars, work-integrated learning educators, or educators in particular academic and professional disciplines.

University strategies to support students' graduate employability are, for the most part, operationalised through the curriculum and through student support and engagement services (Farenga & Quinlan, 2016). Commonly cited curricular employability strategies (Bridgstock & Jackson, 2019; Cranmer, 2006; Farenga & Quinlan, 2016) include integrating career development learning (Bridgstock et al., 2019; Dacre Pool & Sewell, 2007; Healy et al., 2020) and work-integrated learning (Kaider & Hains-Wesson, 2017) opportunities, and explicitly

targeting the recognition, development, and expression of employability capitals (Daubney, 2021; Yorke & Knight, 2006) or graduate attributes (Hammer et al., 2020), particularly by ensuring that they are explicitly accounted for in formal assessment (Jorre de St Jorre & Oliver, 2018; Knight & Yorke 2003a).

Several models of graduate employability have been particularly influential in higher education. Foremost among them is the work of Knight and Yorke (2002, 2003a, 2003b, 2003c; Yorke, 2005, Yorke & Knight, 2006), specifically their USEM model, which describes employability as a synergistic combination of *Understanding* of disciplinary knowledge, *Skilful* practices in the context of the profession and workplace, *Efficacy* beliefs, and *Metacognition*. Another influential model is Dacre Pool and Sewell's (2007) Career EDGE model, which consists of *Career* development learning (referring to the DOTS model, which will be discussed later in this chapter), work and life *Experience*, *Degree* subject knowledge, *Generic* skills, and *Emotional* intelligence. Each model has been enormously influential and has informed careers and employability learning practice over the last 20 years.

However, each model exhibits the same predominant focus on skills and capitals as learning outcomes as the graduate employability field at large. They describe competencies and capitals that signal employability, but do not offer any predictive or explanatory account of how students develop employability, as a process of learning and personal development. Neither model was empirically derived, and notwithstanding some reference to metacognitive processes and the inclusion of the DOTS model in CareerEDGE, neither offers any substantive reference to or integration of career development theory or evidence. These models focus much more on *what* qualities make students and graduates employable than *how* they develop those qualities.

Graduate employability research and pedagogical models seldom incorporate career development theory or evidence in any meaningful way. In fact, as will be noted later in this chapter, across the body of their work, Knight and Yorke do not once refer to career development as a field of scholarship or professional practice. In another example, Dacre Pool and Sewell (2007) incorporated the notion of self-efficacy beliefs of Bandura (2001) into their CareerEDGE model but were seemingly unaware of Lent and Brown's (1994, 2019) social cognitive career theory, which offered a systematic, empirical integration of Bandura's theories to career development, with more than a decade of empirical research behind it at the time that CareerEDGE was published. In addition to lacking any meaningful integration of career development theory and evidence, most pedagogically oriented graduate employability research still proceeds from the human capital paradigm that dominates the graduate employability discourse, and seldom conceptualises employability as a learning process through, rather than an outcome of, higher education.

#### **2.4 The Long Tail of Graduate Employability Scholarship of Teaching and Learning**

A key characteristic of both higher education and graduate employability research is the distinction between dedicated pedagogical, psychological, or sociological research and periphery, disciplinary oriented *scholarship of teaching and learning* (Booth & Woollacott, 2018; Canning & Masika, 2020; Tierney, 2020; Tight, 2018). Founded to promote the legitimacy of teaching as a scholarly activity relative to research, the scholarship of teaching and learning is a movement of reflective practice and scholarly sharing dedicated to informed and critical teaching practice in the context of the scholar's discipline (Kreber, 2005; Tight, 2018).

Dedicated pedagogical, psychological, and sociological higher education research is described as the "prestigious core" of the field (Kwiek, 2021), while the scholarship of teaching

and learning is often described as a less-valued “tail”. Core research tends to be conducted by specialists in those topics and published in the more prestigious higher education journals (Kwiek, 2021; Tight, 2017). The peripheral scholarship of teaching and learning tends to be conducted as discrete, localised research projects and is more often published in disciplinary teaching and learning journals (O’Brien, 2008; Tight, 2018, 2017).

Below, in an excerpt from an in-progress bibliometric study of the graduate employability literature, I explain in more detail how graduate employability scholarship reflects the distinction found in its parent field of higher education research, between core research and periphery scholarship of teaching and learning. I evidence this distinction by illustrating the “long tail” of employability research, in which only a small fraction of authors and journals have published more than two articles on graduate employability.

#### *2.4.1 Supplementary Writing: The Long Tail of Graduate Employability Research*

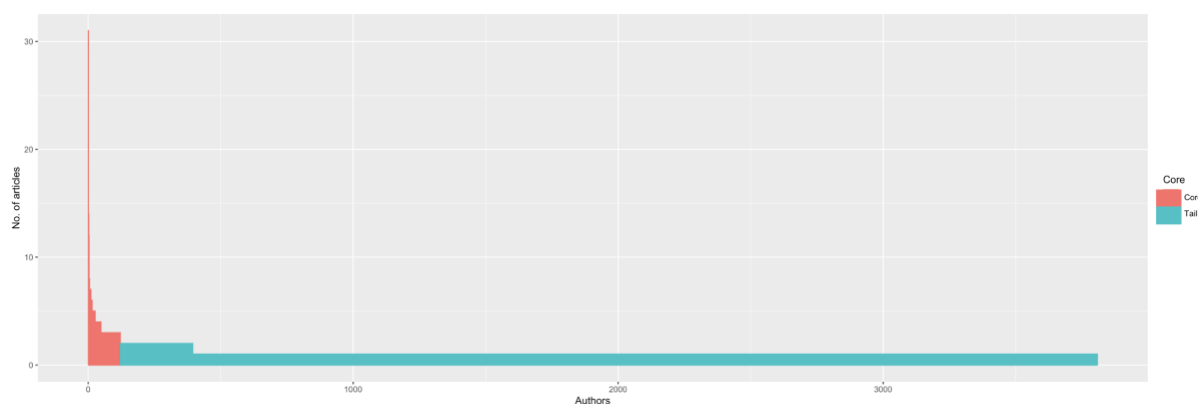
Healy, M. & Hammer, S. (2021). *The long tail of graduate employability research*. Manuscript in preparation.

As a sub-field of HE research, we would expect employability scholarship to exhibit a [...] bifurcation between larger scale, critical and theorised approaches and smaller-scale, discipline-based scholarship of teaching and learning approaches to graduate employability. Indeed, much of the core of graduate employability research is published in the prestigious generic (Kwiek, 2021; Tight, 2017) journals of higher education, such as *Studies in Higher Education*, *Higher Education Research & Development*, and *Higher Education*, or in journals focused on the higher education and labour market nexus, such as *Higher Education, Skills and Work-Based Learning*, *Education + Training*, and *Industry and Higher Education* (Healy et al.,



2020). The long tail of less specialised graduate employability research is published in a wide variety of topic-specific, discipline-specific, or scholarship of teaching and learning journals. The only journal dedicated to graduate employability, *The Journal of Teaching and Learning for Graduate Employability*, describes itself as a “scholarly forum for the dissemination of research and evidence-based practice in teaching and learning for graduate employability” (JTLGE, n.d.).

In this article, we apply a systematic workflow to the collection and analysis of bibliometric data from the results of a broad search of graduate employability literature. Our full data set consisted of 1653 articles, written by 3808 unique authors and published in 626 unique journals. Figure 1 below illustrates the long tail of employability research by author, with just 121 out of 3808 authors (3.18%) publishing three or more articles on the topic.



*Figure 1. The long tail of graduate employability research, by author*

Although the specific contexts of disciplinary education and employment are important factors in graduate employability, one practical consequence of this long tail is the dis-integration and lack of cohesion of graduate employability research as whole. The long tail complicates literature searches and makes synthesis challenging, as I will discuss in more detail

in my autoethnographic account of my first article (Healy et al., 2020). In addition, with discipline specific research being scattered throughout the long tail, the core of graduate employability research is less diverse than it could be, with only a handful of specialised scholars influencing how graduate employability is conceptualised and discussed.

### **2.5 Career Development Theory and Evidence in Graduate Employability Research**

Contemporary career development theory and evidence is not widely acknowledged or applied in graduate employability research. Some graduate employability scholars seem unaware that career development as a discipline exists. For example, Knight and Yorke (2002, 2003a, 2003b, Yorke & Knight, 2006), among the most influential authors in graduate employability, use the words *career development* in their work only a handful of times, and never in reference to a field of scholarship or professional practice. When it is acknowledged in graduate employability scholarship, career development tends to be referenced briefly as a support service that university careers services offer to students (Jorre de St Jorre & Oliver, 2018; Mackay et al., 2016), or as narrow conceptualisation of *career development learning*, which refers primarily to the development of essential career management skills (Bridgstock et al., 2019; Bridgstock, 2009; Dacre Pool & Sewell, 2007; Watts, 2006).

Almost all references to career development learning in the graduate employability literature originate to the venerable DOTS model of career development learning, which arranged career management tasks into four broadly defined domains: decision-making, opportunity awareness, transitions, and self-awareness (Law & Watts, 1977/2015; Watts, 2006). Some such literature cites the work of Watts (2006) directly—it is the totality of the career development learning element of CareerEDGE model (Dacre Pool & Sewell, 2007) —while others cite those that have cited it, but the vast majority of references to career development

learning in the graduate employability literature is essentially referring to the DOTS model and little else.

The DOTS model is popular, enduring, and influential (McIlveen et al., 2011a), to the extent that it has been described as almost synonymous with career education (McCash, 2006). However, the DOTS model is no more than a list of career management skills, organised generally into sequential categories. As useful as it has been to careers and employability learning practitioners, it does not describe a learning process, is not empirically derived, and does not offer any substantive introduction to, survey of, or integration of career development theory. For example, in Watts's (2006) influential report for the Higher Education Academy, *Career development learning and employability*, only four publications from the career development field are included in its reference list, and no explicit reference is made to any contemporary career development theory.

The DOTS model was first described in 1977 in the context of secondary schooling (Law & Watts, 1977/2015) and applied to graduate employability twenty years later (Law, 1996a). The DOTS model has been critiqued, including by one of its own original architects, as outdated, static, and focused more on identifying and organising career management skills than theorising career development as a process of formative learning and self-development (Law, 1996b, 1999; McCash, 2006; McIlveen et al., 2011b). Law (1999) subsequently offered a new "post-DOTS" theory of career development as a learning process. Similarly, McIlveen et al. (2011a, 2011b) described DOTS as a *content* model and offered a separate *process* model of reflective careers and employability learning to supplement it. Indeed, Watts (2006) himself recognised that it has fallen to others to better articulate career development learning processes than the DOTS model does. Recently, Sultana (2020) has gone further to critique the underlying concept of career

management skills as a technocratic approach to career development learning which promotes personal deficit narratives, occludes systemic inequities, and holds the individual responsible for their own success or failure.

As noted earlier in this chapter, some limited exceptions to the typically limited integration of career development evidence and theory into graduate employability research can be seen in some micro level graduate employability research. Perceived employability, from the field of organisational psychology, has for the last decade been the primary link between the graduate employability and career development fields (Healy et al., 2020). Some recent graduate employability scholarship has incorporated other career development theories, such as career adaptability (Monteiro et al. 2020a, 2020b), proactive career behaviours and attitudes (Jackson & Tomlinson 2019, 2020; Okay-Somerville & Scholarios 2017), and the social cognitive career theory (Bennett & Ananthram, 2021; Okolie et al., 2021). Notwithstanding this promising trend, the graduate employability scholarly community exhibits very little awareness of and engagement with the breadth and depth of career development theory and evidence.

## **2.6 Career Development Scholarship and Practice**

Vocational psychologists and career development practitioners have explored how people make career decisions, manage their career, and approach career challenges since the first decade of the 20th century (Parsons, 1909; Savickas et al., 2011). Since then, scholarly inquiry into these matters has, broadly speaking, coalesced into three distinct subfields of applied psychology research. *Vocational psychology* considers the psycho-social processes by which individuals make career decisions and pursue career goals (Akkermans & Kubasch, 2017; Byington et al., 2019; Fouad & Kozlowski, 2019; Spurk, 2021). *Industrial and organisational psychology* focuses on workplace practices, structures, and processes that enhance the engagement and

productivity of individuals in their workplaces (Bryan, 2020). *Career counselling, education and guidance* has developed methods by which career development practitioners can operationalise these bodies of knowledge to support the career development needs of their clients and students (S. D. Brown & Lent, 2021; Robertson et al., 2021). Career development as a field of scholarship has been founded in several theoretical and practical paradigms, reflective of broader trends in psychology, education, and the social sciences (Akkermans & Kubasch, 2017; Byington et al., 2019; Sampson et al., 2014).

Career development scholarship is not focused solely on study and work; much research has focused on life beyond these contexts and included considerations of leisure activities; family and community relationships; values, ethics, and faith; and culture. Similarly, the full breadth of career development research includes research into all manner of life stages and socio-cultural cohorts: from kindergarten children to retirees, from the poor and marginalised to the rich and privileged, and in countries and cultures around the globe. Despite this breadth, career development has at times (Blustein, 2001; Savickas, 2001) been accused of exhibiting a bias toward middle-class professional vocations, though recent surveys have acknowledged progress in this regard (Fouad & Kozlowski, 2019; McWhirter & McWha-Hermann, 2021). This bias is evident in both a common focus on the university degree as one of the first and foremost career decisions that people make, and in the fact that university students are one of the most common study samples in career development research (Akkermans et al., 2021; Fouad & Kozlowski, 2019; Whiston et al., 2017). The bias toward university education and professional careers in career is a perennial criticism of the career development field, but one that in fact supports my argument that this body of theory and evidence is relevant to graduate employability scholarship and practice. For the purpose of this thesis, the scope of the career development literature

referred to as relevant to graduate employability is largely limited to that based on or directly relevant to university students and graduates.

A full account of career development theories and paradigms is beyond the scope of this PhD by publication, but four key paradigmatic themes stand out in my research. The first theme is career decision-making and vocational choice. Decision-making and choice is the process at the heart of the person-environment fit paradigm, in which the field of career development was founded in (Parsons, 1909), developed over much of the 20th century (Holland, 1997; Leung, 2008), and which remains an enduring influence (Byington et al., 2019). In the 21st century, social cognitive career theory, which was developed principally as a career decision-making framework, represented a paradigmatic shift from the rational, information-based decision-making of person-environment fit, toward more experiential, intra- and interpersonal processes of learning and development (Lent & Brown, 2019, 2020). Recently, the career development field's focus on career decision-making has been challenged by those who note that career choice and work volition is a privilege not enjoyed by all (Autin et al., 2017; Blustein et al., 2016; Duffy et al., 2016).

The second theme is career self-concept, focused on how individuals form, understand, and express their vocational identities. Self-concept is at the heart of Super's (1980) developmental life-span, life-space theory of career, in which people assume different personal and professional roles as they develop through life (Hartung, 2021). Near the end of the 20th century, Savickas (Savickas, 1997, 2021) extended the notion of life space, drawing on constructivist, narrative theories emerging in social sciences in general, to develop his career construction theory and counselling model. A recent related theme in career development research is *career orientations* (Byington et al., 2019; Hirschi & Koen, 2021; Spurk, 2021),

investigating how people envision their future working selves, including their career adaptability, proactivity, optimism, and hope; how they adopt protean and boundaryless careers; and how they draw meaning from their work.

The third theme is career development as a learning process, which is the focus of the third article in this PhD by publication (Healy, 2021b). Career development has been approached as a learning process for more than 50 years (Krumboltz et al., 1976; Law & Watts, 1977/2015; Lent & Brown, 2013; Tiedeman, 1961). Krumboltz (1976; 2009) described career development as the accumulation of career learning experiences, including the unexpected as well as the planned, in his social learning and happenstance theories of career development. Law (1996b, 1999) drew on Krumboltz's social learning theories in his pedagogically oriented career learning theory, which extended the content and outcome focused DOTS model to describe a process of orientation toward, enactment of, and reflection on career learning experiences. Learning experiences such as mastery experiences, vicarious learning, and verbal persuasion from more expert others are, at the heart of social cognitive career theory (Lent & Brown, 2013), which applied Bandura's (2001) social cognitive theories of learning to career decision-making and management theories from vocational psychology. And although it is less explicitly described as a learning theory, career construction theory (Savickas, 2021) is predicated on a narrative process for the development and expression of vocational identities and personal epistemologies of career development.

The fourth theme is a critical, socio-political movement which has exhorted the career development community to take up the fight against marginalisation and exploitation in work. Scholars in this theme promote an emancipatory, communitarian ethic of career development, contesting the fundamentally individualist paradigm of much career development scholarship

and highlighting systemic inequities in education and work (Blustein et al., 2005, 2016; Christie et al., 2021; Hooley et al., 2017; Sultana, 2014). Blustein's psychology of working framework (Blustein et al., 2019; Blustein et al., 2018) provides a foundation for much of this work, which has laid bare the psychological trauma of un- and under-employment (Duffy et al., 2019; Kossen & McIlveen, 2018) and positioned critical consciousness as an ingredient of careers and employability learning for the marginalised (Kenny et al., 2019; T. Kim & Allan, 2021)

In this PhD by publication, I refer to these various sub-disciplines and theories collectively, as *career development*. I acknowledge that surveys of the career development field have noted some lack of exchange and integration between scholars in various sub-disciplines (Akkermans & Kubasch, 2017; Byington et al., 2019; Fouad & Kozlowski, 2019; Fugate et al., 2021; Harten et al., 2021; Savickas, 2001; Spurk, 2021) and that the distinction between and relative merits of career development paradigms will always be under discussion and up for debate. However, for the purpose of arguing that graduate employability scholars be more attentive to career development research and practice, this broad definition of career development is appropriate and practical. Similarly, although scholars within the field of career development often note the diversity of the field, and therefore would not necessarily describe it as *cohesive*, in comparison to the significantly more diffuse higher education research, career development can be meaningfully and accurately described in broad terms as a coherent field of scholarship.

## **2.7 The Value of Career Development Interventions in Higher Education**

In addition to the inherent relevance of career development to graduate employability, there is abundant empirical evidence for the efficacy and impact of quality career development interventions for higher education students. One of the most important differences between



graduate employability and career development is in the empirical basis of each field. As conceptually valid and practically useful graduate employability models such as Knight and Yorke's (2003a; 2003b) USEM, Dacre Pool and Sewell's (2007) CareerEDGE, or Watts's (2006) DOTS model are, they are not empirically derived or extensively tested. Furthermore, graduate employability pedagogical research tends to reinvent rather than extend, replicate, or challenge existing and concurrent research. Career development literature, on the other hand, offers a strong evidence base of empirical research which is strongly integrated into broader themes in disciplinary research, with projects of theory development and refinement sustained over decades (Byington, et al., 2019; Johnston, 2018; Lent & Brown, 2019; Savickas et al., 2011; Wang & Wanberg, 2017).

In the short article below, I provided a short summary of the career development empirical evidence base. It was intended as a resource for my peers in the higher education careers and employability profession, who often must justify the value of their work to university leaders. Notably, there is no equivalent evidence base in pedagogically oriented graduate employability research, as intervention studies are rare, and the lack of integrated research makes it difficult to synthesise what little empirical evidence there is.

### *2.7.1 Supplementary Writing: Why Careers and Employability Learning Matters in Higher Education*

Healy M. (2020b). Why careers and employability learning matters in higher education [Post]. LinkedIn. <https://www.linkedin.com/pulse/why-careers-employability-learning-matters-higher-education-healy/>

About three years ago I wrote an article summarising my research into the evidence base of and best practices in careers and employability learning (Healy, 2017b). I was pleased to see

the warm response it got from my peers. Career development educators appreciated how I provided them with a clear, evidence-based argument of the contribution they make to their clients' education and careers. Many have drawn on that evidence as they prepare proposals, report on their work, and in some cases, justify their roles.

Since then, I have continued to advocate for the value of career development theory, evidence, and practice. In this article I will share a little more of what I've learned from the literature about how university students benefit from quality higher education careers and Employability Learning.

### **What Careers and Employability Learning can do for Students**

Several meta-analytic studies of career development interventions have shown that quality careers and employability learning has a positive impact on clients' career decision making self-efficacy, decidedness, career maturity, career adaptability, and sense of vocational identity, among other things (Langher et al., 2018; Ozlem, 2019; Whiston et al., 2017).

Studies which evaluate careers and employability courses for university students have found positive impacts on both career and academic outcomes, including adjustment to university, retention, completion, and achievement (Clayton et al., 2018; Hansen & Pedersen, 2012; Reardon et al., 2015; Reardon & Fiore, 2014).

Research into job search skills and success has shown that interventions designed to teach people how to search and apply for jobs significantly increase clients' self-efficacy and employment outcomes (Liu et al., 2014). Other meta-analytic research has demonstrated the importance of job search self-efficacy in achieving successful outcomes (J. G. Kim et al., 2019; van Hooft et al., 2021). Crucially, the clarity of a person's goals and the quality of their job

search, both of which are stock in trade for career development educators, predict not only job search success, but also the *quality* of the employment they secure (van Hooft et al., 2021).

Finally, research has shown that targeted education can improve entrepreneurial self-efficacy, intentions, and attitudes (Nabi et al., 2017) and networking behaviours and connections (J. L. Brown, Healy, Lexis, et al., 2019; Jokisaari & Vuori, 2011; Spurk et al., 2015), both of which contribute to university students' career success.

### **What Quality Careers and Employability Learning Looks Like**

I've written before on the career education evidence base (Healy, 2017b), my curricular vision for careers and employability learning (Healy, 2017a), and in particular, dialogical approaches (Healy, 2018) that hold a lot of promise.

In summary, there is support for the effectiveness of: repeated interventions, facilitated by a career development expert, delivered to groups (S. D. Brown & Ryan Krane, 2000; Whiston et al., 2017); targeting specific student needs and applying appropriate theories in a rigorous fashion (Langher et al., 2018; Whiston & James, 2013); and certain critical ingredients of career interventions: written exercises, individual feedback, a strong working alliance between educator and student, labour market information and world of work exploration, mentoring and social support, values clarification, and psychoeducation (S. D. Brown & Ryan Krane, 2000; Langher et al., 2018; Whiston et al., 2017).

In addition, it's important to note an approach that is not currently supported by any evidence: computer-based interventions without the moderation of a career development educator (Whiston et al., 2017).

### **How to use this Body of Evidence**

The evidence is clear: the work of career development educators has a positive impact on student outcomes. These citations can certainly support any argument you put forward to advocate for the role of career development education at your university. But by themselves, they are not enough.

In my experience, the academics and executives that career development educators find themselves trying to convince are not going to be swayed by a few research papers. What they want to know is how your programs and services improve the outcomes of their students. So it's vital that you draw on this existing research to design your own rigorous evaluations, rather than just sprinkle a few citations through your proposals and reports.

You need to show that your professional expertise has a real and measurable impact on the students you work with. Assess the outcomes of your programs with valid and reliable measures. Collect stories about student experiences of your programs to enrich your measurements with qualitative data. Most importantly, be curious about how your decisions as an educator impact what the student learns.

We have an abundance of evidence here at our fingertips, but we need to learn how to better use it to design and evaluate high quality careers and employability support for our students.

Evidence for the efficacy of dedicated career development interventions continues to accumulate. If I were to update this article again, I could add further recent evidence for the positive impact of career development interventions in higher education (Crowne et al., 2021; Dodd et al., 2021; van der Horst et al., 2021; Veres, 2021), the role of career exploration in career decision-making (Kleine et al., 2021), the importance of students envisioning decent and

meaningful work (Allan et al., 2019; Ma et al., 2020), the role of calling in the university to work transition (Zhang et al., 2021), the impact of perceived career barriers and work volition (Duffy et al., 2016; Toyokawa & DeWald, 2020), the role of professional identity in academic persistence (Burleson et al., 2021), and job successful job search strategies (Okay-Somerville & Scholarios, 2021), among many others.

Unfortunately, this abundance of evidence for the impact of career development learning in higher education has made little meaningful impression in the graduate employability literature. Notwithstanding a few recent exceptions (Bennett & Ananthram, 2021; Donald et al., 2019; Jackson & Tomlinson, 2020; Monteiro, Almeida, et al., 2020; Okay-Somerville & Scholarios, 2017; Tomlinson & Jackson, 2019), the graduate employability literature seldom acknowledges career development beyond its narrow view of career development learning, described above, or broad gestures toward careers services as providers of a student support service. For some career development practitioners in higher education, this is a perennially perplexing and frustrating gap in how careers and employability is understood and approached.

### **2.8 The Gap Between Graduate Employability and Career Development**

The problem at the heart of this PhD by publication is the gap between graduate employability and career development, as fields of scholarship and of professional practice. The underlying premise of my research is that graduate employability and career development share the same fundamental concern with university student career success and therefore it does not make sense for them to be as separate as they are. The first article of this PhD by publication, “Mapping graduate employability and career development in higher education research: A citation network analysis” (Healy et al., 2020), illustrates the academic disciplinary gap in stark fashion in its visualisation of citation networks in careers and employability literature. The

second article, “Graduate employability as a professional proto-jurisdiction in higher education” (Healy, Brown, & Ho, 2021), demonstrates an equally stark gap between various professional specialisations focused on graduate employability and the more established career development profession. In each article, my colleagues and I argue that the gap presents several risks to the quality and cohesion of efforts to understand and support students’ careers and employability success.

A significant consequence to higher education research is that efforts to understand student careers and employability learning are not enriched by the wealth of evidence and theory from career development. Instead, graduate employability scholars are prone to re-invent already established concepts from career development, or to publish concepts that share the same name with but make little or no reference to established concepts from career development research and practice. This is known as the jingle jangle fallacy (Block, 1995), in which scholars in different fields apply the same name to distinct concepts or distinct labels to the same concept.

I can best illustrate the jingle jangle fallacy in graduate employability research with an account of my peer-review of a graduate employability research article that I provided to a higher education research journal. Unfortunately, I was moved to recommend rejection of the article on the basis that it claimed to identify a psychological construct integral to employability but made no reference whatsoever to a large body of directly relevant vocational psychology literature. In fact, some of the items in the article’s survey instrument were almost identical to items from among the one dozen scales and inventories that I cited in my review. Not only did the authors not cite any of this relevant career development research themselves, most of the graduate employability research (which included Dacre Pool and Sewell’s (2007) CareerEDGE model) that they cited did not either, which gave the authors the mistaken impression that the

construct they described was a novel one, when in fact it has been discussed in vocational and educational psychology for more than 20 years.

Aside from the jingle jangle fallacy creating parallel but entirely separate streams of research, the lack of integration between graduate employability and career development more simply results in misplaced claims to novelty. As noted earlier in this chapter, the CareerEDGE model (Dacre Pool & Sewell, 2007) is an example of this, applying Bandura's notion of self-efficacy to graduate employability, but without recognising the social cognitive career theory by then an influential theory in the career development literature (Lent & Brown, 1996).

In terms of the professional practice of graduate employability, the foremost consequence of the gap is a lack of cohesion in how universities resource and organise their employability strategies. Graduate employability in higher education suffers from a Tower of Babel problem, where the lack of a common view of and vocabulary for careers and employability learning impedes collaboration and undermines cohesion. With multiple groups of professionals each pursuing their own version of employability, there is a significant risk of duplication of effort, as well as jurisdictional conflicts as they compete over common ground for limited resources. In my professional practice as a careers and employability learning educator in higher education, I have seen senior leaders present their vision of employability more as a personal branding exercise than a collegial contribution to a shared interest, sometimes going so far as to block or diminish the contributions of others to protect their ownership of the agenda.

Although my concern about the gap between graduate employability and career development in higher is primarily focused on what graduate employability scholarship and professional practice is missing by not attending to career development, I have also noted some consequences of the gap for career development scholarship and practice. The greatest

consequence of the gap for career development scholarship is that, due to its focus on individual psychological, cognitive, and behavioural characteristics, it often overlooks the ways in which social identities and structures influence the lived experience of higher education and work. In their survey of the career development field, Fouad and Kozlowski (2019) called for more phenomenographic research into people's experiences of career development. For example, career development scholars might benefit from reading higher education research into widening participation, the intentional effort to attract and enable a more diverse range of people, usually the less privileged, into and through higher education (Breeze et al., 2020). Career development scholars might find useful evidence and theory in scholarship investigating those people's aspirations for higher education and associated professions (Delahunty & O'Shea, 2020; Kilpatrick et al., 2018), their subjective experiences of success in higher education and life in general (Delahunty & O'Shea, 2019; O'Shea & Delahunty, 2018), the impact of student debt on career decision-making and graduate financial security (Gayardon et al., 2021; Long, 2021), or the impact of spousal support on adult women's higher education experiences (Andrew, et al., 2020).

A significant practical consequence of the gap between graduate employability and career development for higher education career development practitioners is a professional boundedness that has been noted by many career development practitioner-scholars (J. L. Brown, Healy, McCredie, et al., 2019; Gough & Neary, 2021; Healy, Brown, & Ho, 2021; Hobson et al., 2018; Thambar, 2018). Many higher education career development practitioners struggle to reconcile their professional identities, shaped by qualifications and professional associations, with their organisational roles, shaped by priorities and processes that might not align with their professional values (Thambar, 2018). The boundedness of higher education career development



practitioners is recognised by some in the profession as an impediment to engaging in cross-institutional collaboration on careers and employability strategies (J. L. Brown, Healy, McCredie, et al., 2019; Hobson et al., 2018; Thambar, 2018). Several leaders in the higher education career development professional community have argued for more collaborative, less bounded, ways of working in “connected communities” across institutions (Bridgstock & Tippett, 2019; Dey & Cruzvegara, 2014; Thambar, 2018).

When I presented the main ideas in this PhD by publication to my peers and mentors in the 2021 European Doctoral Programme for Career Guidance and Counselling summer school, a consensus among the feedback was that the gap between career development and graduate employability clearly motivates my argument. They noted my evident frustration that the gap is so stark, but also my desire to draw the two sides together for the benefit of the higher education careers and employability community and ultimately for the benefit of the students for whom their work is done. Throughout my research, my efforts were focused on demonstrating the gap, explaining why the gap is a problem, and proposing a better approach: careers and employability learning.

In this chapter I have elaborated on the context and rationale of my research project as a whole and of its component journal articles. I have described certain characteristics of the graduate employability and career development fields of scholarship and professional practice, noting the limited exchange between them. I ended this chapter with a description of the research problem that motivated this doctoral research: the gap between graduate employability and career development in research and in practice. In the following chapter, I will elaborate on the aims of my research, to close this gap, and the paradigms in and methods in which I pursued it.

### CHAPTER 3: RESEARCH AIMS, PARADIGM, AND METHODS

#### 3.1 Research Aims

This PhD by publication was completed with five main aims in mind. The first aim was to demonstrate the gap between graduate employability and career development in both scholarly literature and professional practice. This is evident in the research questions from my first two articles (Healy et al., 2020, p. 4; Healy, Brown, & Ho, 2021, p. 2):

- “what are the boundaries of GE and CD research as represented by citation networks within and between each field, and where are the current and potential points of exchange?”
- “what are the characteristics of the professional ecology of employability in Australian higher education, and its component specialty areas?”
- “how are jurisdictional boundaries expressed in the job advertisements of this professional ecology?”

My second aim was to explain why approaching the two fields as related but distinct, or of career development as one discrete ingredient of graduate employability, is unnecessary and unhelpful. I articulated several risks that arise from the current dis-integrated approach. This aim is stated in the “Implications for Research and Practice” section of Healy et al. (2020): “What concerns us about the lack of exchange between GE and CD researchers is the missed potential for theory and evidence from one field to enrich the other, which ultimately means that their collective efforts to understand and support students’ careers and employability learning is less cohesive than it could be” (p. 10).

This aim is also expressed in the third research question from Healy, Brown, and Ho (2021): “What are the implications of this professional ecology’s jurisdictional composition for

the cohesion, quality, and sustainability of institutional strategies in support of employability?” (p. 2). This aim provides the warrant for my third article, Healy (2021b), which reiterates my arguments from my previous two articles: “The lack of exchange and integration between the two fields creates the risk of redundancy and inefficiency in research (Healy et al., 2020) and undermines the coherence, quality, and sustainability of universities’ efforts to support the career success of their students (Healy, Brown, et al., 2021)” (p. 9).

My third aim was to propose an integrated approach to careers and employability learning, to help close the gap between the two fields, leveraging the strengths of each and mitigating some of the weaknesses and risks highlighted in my first two articles (Healy et al., 2020; Healy, Brown, & Ho, 2021). Each of my previous articles alluded to an integrated approach to careers and employability learning but could not elaborate on what such an approach looks like. Early in my doctoral journey, I had adopted the phrase careers and employability learning in my public communications to refer to my belief that graduate employability and career development should not be approached as separate things. After the publication of Healy et al. (2020), I took the opportunity to argue this position more emphatically in the *Campus Morning Mail* newsletter.

### ***3.1.1 Supplementary Writing: Careers and Employability Learning: We Need a More Integrated Pedagogy***

Healy, M. (2021). Careers and employability learning: we need a more integrated pedagogy. *Campus morning mail*. <https://campusmorningmail.com.au/news/careers-and-employability-learning-we-need-a-more-integrated-pedagogy/>

Universities have long been under pressure to demonstrate their graduates are competitive in crowded and uncertain labour markets. Undoubtedly, the career shock of COVID-19

(Akkermans, Richardson, et al., 2020) will only intensify the focus on graduate employability as an outcome of higher education.

Employability has become a fundamental target of teaching and learning and student services strategies, often deployed in institution-wide initiatives and with strong mandates to influence the academic curriculum. University careers services, which for decades have supported students with career planning and job seeking, have been tasked with supporting such strategies, particularly in the form of integrating career development learning in the curriculum (Bridgstock et al., 2019) and collaborating across the institution in “connected communities” with shared goals for supporting student success (Bridgstock & Tippett, 2019). Indeed, there are many examples of innovative collaborations (J. L. Brown, Healy, Lexis, et al., 2019) between career development educators and teaching academics.

Nonetheless, despite the clear alignment of research inquiries, employability and career development are two distinct fields of research with limited theoretical or practical exchange between them (Healy et al., 2020). Similarly, the professional practice of supporting students’ employability consists of a distinct and bounded career development profession that sits alongside a range of less-bounded professional jurisdictions such as work-integrated learning, student development, and industry liaison.

As a result, employability strategies and interventions are often drafted without a foundation in quality career development theory and then executed with little contribution from career development educators. For their part, career development educators are sometimes constrained by their own professional boundaries and struggle to translate their expertise to broader institutional strategies. This lack of integration may undermine the quality and cohesion of pedagogical and strategic efforts to support students’ employability and career development.

Rather than continue to approach (and resource) employability and career development as different things, we should recognise their congruence and instead envision more integrative pedagogies of careers and employability learning for higher education to the benefit of all of our students.

My third article, Healy (2021b), which provides a more thorough elaboration of my vision of an integrated approach to careers and employability learning, was conceived of as a capstone of this PhD by publication and an effort toward realising this goal.

My fourth aim was to provide an autoethnographic account of my reflective sense-making, as a full-time careers and employability professional and part-time PhD candidate, through my academic and career journey as a reflexive scholar-practitioner (McIlveen, 2008, 2007). In addition to my academic writing, I have consistently pursued career writing (Lengelle et al., 2014; Lengelle & Meijers, 2014) in my research journal, blogging, and other outlets. My autoethnographic writing is not yet prepared for publication, but I address plans for publication in the future research section of this PhD by publication, and some element of it is included in a collaborative auto-ethnography I am writing with a paramedicine lecturer and student (Healy, Bell, et al., 2021).

The fifth aim, an underlying motivation for my entire doctoral project, was to advocate for career development as a field of scholarship and, by extension, my professional community of career development practitioners. I articulated this motivation in my successful nomination for the 2021 Career Development Association of Australia, Queensland division, award for excellence, an excerpt from which I share below.

*3.1.2 Supplementary Writing: Nomination for 2021 Career Development Association of Australia, Queensland Division, Award for Excellence*

Healy, M. (2021). *Nomination for 2021 Career Development Association of Australia, Queensland division, award for excellence.*

In recent years, universities have dedicated more resources to supporting students' employability. However, this has not necessarily translated to increased provision of quality career development support, offered by qualified professionals, and underpinned by leading career development theories and models of professional practice. In my work as a university careers and employability educator, I have often been perplexed and frustrated by the total absence of leading career development theories in employability research and education. I have also been troubled by the way in which universities have diminished or sidelined their careers services. This frustration motivated me to undertake my PhD study, in which I have sought to articulate a vision of an integrative pedagogy of careers and employability learning, which honours the shared objectives of both career development and graduate employability for student agency and success, draws on the conceptual and practical strengths of each, and integrates key pedagogical theories and methods.

In doing so, I have been a strong advocate for career development as a field of research and as a profession. I have argued that the broader higher education community has a lot to gain from being more attentive to theory and evidence from career development research, and that career development practitioners have a leadership role to play in the design and delivery of quality careers and employability learning programs. Although my PhD research is focused on higher education, I have also observed a similar lack of attention to career development in other sectors. I intend for my research to be flexible enough to inform quality careers and

employability learning support in a number of different contexts. [...] The impact of this activity is that it positions me as a credible, expert voice in a field that does not always recognise or value career development as a field of research or as a profession. At every opportunity I highlight the richness of career development, criticise those who overlook or sideline it, and argue passionately that it should be considered to be a crucial ingredient of any programs or services targeted at careers and employability success.

I took another opportunity to advocate for the career development profession in a short “provocation” published in the *Journal of Teaching and Learning for Graduate Employability* (Healy, 2021d). I expressed a concern that as universities race to offer more diverse educational products, marketing is prioritised over meaningful guidance in helping students understand the place of microcredentials in their careers and employability ambitions and development.

### ***3.1.3 Supplementary Writing: Microcredential Learners Need Quality Careers and Employability Support***

Healy, M. (2021). Microcredential learners need quality careers and employability support. *Journal of Teaching and Learning for Graduate Employability*, 12(1).  
<https://doi.org/10.21153/jtlge2021vol12no1art1071>

Providers, industry, and governments have embraced microcredentialing as a solution to the volatility and velocity of changes in labour markets, workplace competencies, and the needs of the 21st century lifelong learner (Oliver, 2019). However, microcredentials do not, in and of themselves, guarantee career or employment success. Seeking a microcredential is one adaptive career behaviour that people might enact in pursuit of their career goals (Lent & Brown, 2013).

Similarly, holding a microcredential is one form of employability capital that people might highlight when seeking employment (Tomlinson & Anderson, 2020).

As Kift (2021) has noted, microcredentials should be designed and delivered in a lifelong learning ecosystem of educational, employment, and social support systems. One crucial element of this support is ensuring that learners have the requisite career management skills and labour market literacy to make the best use of microcredentials to achieve their goals (Kift, 2021; Oliver, 2019). In this essay, I pick up this point to argue that career development practitioners (CDPs) have a crucial role to play in helping learners approach microcredentials as part of a cohesive career strategy, integrate them into their career narratives, and express their value to employers.

### **Challenges for microcredential learners**

People may employ a broad range of adaptive career behaviours as they make career decisions, pursue career goals, or face career challenges (Lent & Brown, 2013). However, many lack the information or insight needed to make good decisions, while career information and advice is not always reliable. This may be particularly true for microcredentials, which are often marketed to beginners (Oliver, 2020).

Learners are subject to several potential challenges when selecting microcredentials and subsequently using them in employment seeking. Firstly, microcredentials may not actually be necessary for the learner's particular goals. Secondly, learners may miscalculate the labour market demand for certain skills, or select microcredentials that do not meet explicit or implicit requirements for entry into their desired profession. Thirdly, reactive or anxious learners may accumulate microcredentials haphazardly, with little coherent purpose or strategic intent. Finally, learners may lack the job application skills needed to express the value of their microcredentials



to employers or integrate them into a coherent employability narrative (Tomlinson & Anderson, 2020).

### **Career development support for microcredential learners**

Microcredentials have not yet been subject to focused study in the field of career development. Nonetheless, the acts of earning credentials or learning new skills are a central concern in career development research and practice. There is ample evidence that quality career development support positively influences learners' career decision-making, problem-solving, adaptability, and identity formation; their academic commitment and achievement; and their employment outcomes and job satisfaction (Healy, et al., 2020).

Career decision-making is one of the most studied themes in the career development literature and is often the focus of conversations between CDPs and their clients (Healy et al., 2020). To support informed career decision-making, CDPs frequently encourage adaptive career behaviours such as reflection on career interests and values, career exploration, occupational research, and strategic networking. Certain microcredentials offer a dual advantage to some of these activities, as they present low-cost and low-commitment opportunities for career exploration, in addition to the skill development and credentialing they are designed for.

Recent trends in career development theory and practice have focused on the importance of future-oriented mindsets and meaningful work (Healy et al., 2020). CDPs assist their clients in adopting proactive, optimistic, and adaptable attitudes, often by helping them compose, or recompose, meaningful agentic career narratives. In disrupted labour markets, such as those affected by the COVID-19 pandemic, career narratives can be traumatic. A microcredential is unlikely, in and of itself, to transform such a career narrative without an associated process of personal reflection and reinvention.

Similarly, microcredentials are unlikely to serve as tickets to employment in their own right. Recruitment is a complex, subjective process of discerning a broad range of employability signals and capitals (Tomlinson & Anderson, 2020). For example, a given microcredential may be a signal of technical competence, of a proactive attitude, or a certain set of values. CDPs use their knowledge of hiring practices to help learners understand explicit and implicit selection criteria and integrate their microcredentials into a persuasive employability narrative in response.

### **Conclusion**

Microcredentials are promised to support lifelong learning and careers and employability success, but will not meet this potential in the absence of intentionally designed ecosystems of educational, vocational, and social support (Kift, 2021; Oliver, 2020). Education providers have a responsibility to ensure that career information and support is actively offered to microcredential learners, just as it is for students in degree programs. Governments should ensure that quality career information and advice is available to all who need it, particularly when they enact policies that encourage people toward study and upskilling. Both should recognise that CDPs have a crucial role to play in the design and delivery of educational ecosystems that enable true lifelong learning for all members of society.

This motivation to advocate for career development is why all my publications have been submitted to and published in higher education research journals, rather than career development journals, in an effort to speak primarily to a graduate employability audience. However, I have also taken many opportunities to encourage the career development community to reciprocate, by recognising the validity of graduate employability as a field of research and an emerging proto-jurisdictional professional ecology (Healy, Brown, and Ho, 2021). I have advocated for

career development practitioners in higher education to exercise their expertise in collaborative efforts with the broader graduate employability community, rather than focusing only on defending their territory. Part of this effort has been encouraging leaders in my various professional associations to adopt more contemporary paradigms of careers and employability learning. In the following excerpt from an email to an executive member of a professional association that I am active in, I provided forthright feedback on a planned position paper which repeated 20-year-old frameworks but did not refer to any recent trends in career development research or practice:

I'm sceptical that DOTS is the best way to convince the broader higher education community of the true relevance of career development to employability, especially when the references are all 10 to 25 years old. DOTS has been part of the employability discourse for decades, but graduate employability [researchers] have rarely gone any further than that in their exceedingly narrow understanding of career development learning.

In fact, my opinion is that career development learning as a concept or paradigm might no longer be fit for purpose, if we are to argue that our contribution is integral to employability rather than simply adjacent or contributing to it. Career development learning as a concept could better represent contemporary theory evidence, but it doesn't in the ways it is predominantly conceptualised and referenced in graduate employability discourse.

I think the broader higher education audience would be much more enthused by the leading edge of career theory and evidence, such as career orientations: "how people envision their future working selves, including career adaptability, proactive

attitudes and behaviours, protean and boundaryless careers, career optimism and hope, and work as a calling” (Healy et al., 2020, p. 8). See Hirschi and Koen (2021) and Byington et al. (2019) for more detail.

The tone of the email excerpted above reveals a degree of forthrightness and provocation that I have felt, at times, necessary. In fact, at times I have approached this thesis as a manifesto for change as much as an account of current practice (Biesta & Säfström, 2011; Latour, 2010). Following the example of Biesta and Säfström (2011) this manifesto “speaks with a high ambition” but recognises that a manifesto is often “nothing more than an attempt to speak and, through this, create an opening, a moment of interruption” (p. 542). A manifesto as an interruption proclaims the fact that current paradigms are not inevitable or irreversible and that alternative approaches require only the will to consider them (Latour, 2010). The title of this thesis acknowledges this intent in the use of the word *toward*, indicating that it is setting a direction for further work rather than attempting to describe a conclusion to it.

In working towards these research aims, I adopted several distinct research methods, which I will discuss in more detail below. However, before discussing my research methods it is important to acknowledge the broader research paradigms that guided my methodological and analytical decisions.

### **3.2 Research Paradigms**

A research paradigm is a set of philosophical positions or assumptions about the world and how it should be understood (O’Donoghue, 2006; Punch, 2014). Paradigms describe certain ontological, epistemological, and methodological orientations adopted by scholarly communities, which inform how the researcher approaches their work (O’Donoghue, 2006; Punch, 2014). In

my pursuit of the research described in this thesis, I have approached my work with two main research and practice paradigms in mind: interpretivism and pragmatism.

### *3.2.1 Interpretivism*

Interpretivism is a post-positivist paradigm which represents a move from the pursuit of singular objective truths toward recognising the subjectivity of human experience and meaning (O'Donoghue, 2006; Schwandt, 1994). For the interpretivist researcher, the individual and the society they live in are inseparable and one cannot be understood independently of the other. A core principle of interpretivism is that understanding the meanings that humans ascribe to their experience is a fundamental ingredient for understanding society (O'Donoghue, 2006; Schwandt, 1994). Interpretivism favours teleological over mechanistic explanation: "social agents are considered autonomous, intentional, active, goal-directed; they construe, construct, and interpret their own behaviour and that of their fellow agents" (Schwandt, 1994, p. 225). However, interpretivism stops short of the postmodern, constructivist position that reality itself is subjectively constructed and objectively indeterminable, attempting instead to strike a balance between phenomenological subjectivity and scientific objectivity (O'Donoghue, 2006; Schwandt, 1994).

At the end of the 20th century, Savickas (1993, 1995) noted that vocational psychology was evolving from a positivist science, exemplified by the rationality of the trait and factor approach, toward a more interpretive discipline which seeks to help individuals interpret their career stories as "expression[s] of a career pattern or central life theme" (Savickas, 1993, p. 213). This evolution has been characterised as a "narrative turn" to more postmodern understandings of career development (Rossier et al., 2021), which have tended to be more aligned with constructivist than interpretivist paradigms (McIlveen & Schultheiss, 2012; McMahon, 2016).

Constructivist career development has been critiqued by some for decontextualising individuals from the socioeconomic and cultural realities that constrain them and focusing too much on narrative self-authorship, “as if the ability to tell oneself stories about one’s place in the world is enough to narrativise oneself out of structurally imposed constraints such as poverty, lack of opportunity, systemically induced inequality, and such” (Hooley, 2020; Hooley et al., 2017, p. 15).

I have adopted interpretivism, rather than constructivism, because I prefer to maintain the balance noted earlier between subjective experience and scientific objectivity. I value greatly the postmodern methods and theories that I believe are most appropriate for helping people understand and evolve their career orientations. But I do not reject the positivist foundations of the science of career development, which have been proven to be remarkably persistent in their validity and reliability (Hoff et al., 2020; Nye et al., 2020). Instead, I believe that both paradigms are valuable, as I explained in an early draft of my contribution to a chapter on career assessment (McIlveen et al., 2021) which illustrates my interpretivist orientation.

#### **3.2.1.1 Supplementary Writing: Early Draft of Contribution to Career Assessment Chapter.**

Early draft of my contribution to McIlveen, P., Perera, H. N., Brown, J. L., Healy, M., & Hammer, S. (2021). Career assessment. In P. J. Robertson, T. Hooley, & P. McCash (Eds.), *The Oxford handbook of career development* (pp. 313–324). Oxford University Press.

<https://doi.org/10.1093/oxfordhb/9780190069704.013.23>

Stepping onto scales is an important starting point of a fitness regime, as it provides a measure which can inform you as you set a goal, select an appropriate course of action, and assess your progress. However, in and of itself, standing on scales has no impact on your

physical strength or endurance. To have any such impact, it must be followed by a process, in this case a program of exercise and diet. Similarly, although a quantitative career assessment can provide a valuable starting point for someone to gain insight into their vocational interests, values, and behaviours, without a subsequent qualitative process of reflection, meaning-making, and learning, it remains a diagnosis more than a developmental experience. Integrative approaches to career development work (Borgen & Betz, 2011; Rottinghaus & Eshelman, 2015) seek to extend the diagnostic moment of assessment into a process of career learning (Meijers & Lengelle, 2015) by helping the client draw out, revise, and enrich their life narratives.

Life narratives are the means by which people understand and represent themselves, weaving together “the reconstructed past, the perceived present, and the imagined future” (Adler et al., 2017, p. 519). In their life narratives, people express the ideographic meaning of their traits and characteristic adaptations in the context of their own life and culture (McAdams & McLean, 2013; McAdams & Pals, 2006). Life narratives are not only expressive of identity, but also constitutive, reflecting a person’s efforts at meaning-making and potentially exposing challenging boundary experiences (Hermans, Konopka, Oosterwegel, & Zomer, 2017; Meijers & Lengelle, 2012) that are causing them anxiety.

If the stories we tell about ourselves to others reveal our narrative identity (McAdams, 1995), the stories we tell ourselves construct it (Hermans & Hermans-Konopka, 2010). Dialogical approaches to careers and employability learning (Healy, McIlveen, & Hammer, 2018; Meijers & Lengelle, 2015) seek to support clients through the internal and interpersonal learning processes of creating, testing, and revising their career narratives, particularly through expressive, reflective, and creative career writing (Lengelle, Meijers, & Hughes, 2016; Lengelle, Meijers, Poell, & Post, 2014). Dialogical careers and employability learning is endowed with

many of the empirically-derived critical ingredients of career interventions: written exercises, individualised feedback and support from counsellors or educators, social learning and support, values clarification, and psycho-education (Brown et al., 2003; Milot-Lapointe, Savard, & Corff, 2018; Whiston, Li, Goodrich Mitts, & Wright, 2017).

Assessments of career-related traits, interests, values, and characteristic adaptations make ideal prompts for dialogical career and employability learning experiences. “Good scores make good stories” (Borgen & Betz, 2011, p. 141): quantitative assessments provide a stimuli for reflection and an outline into which a person can begin to craft their story, expressing their own uniquely meaningful phenomenology (Brott, 2015; Rottinghaus & Eshelman, 2015). Counsellors and educators must give careful consideration to how they use assessments to initiate narrative responses, as empirical research into the dimensions of narrative identity has highlighted how prompts may influence the resulting narratives (McLean et al., 2019).

The assessment-as-prompt can serve as the first step of a process that extends the individual assessment moment into a learning experience shared with others: co-constructing, or uncovering the key elements of the story; de-constructing, or opening up the story with exceptions or alternative points of view; re-constructing, or developing schemas with which to make meaning from the story; and constructing, or extending the story into the future by setting goals or making predictions (Brott, 2015). These steps guide the client through an exploration of the internal dialogues that constitute the emerging narrative (Meijers & Hermans, 2018), supporting the learning processes of reflection, decision-making, identity exploration, and positioning that underpin contemporary theories of career development and employability.

The narrative learning process can then be extended and enriched through external dialogues with a counsellor, educator, mentor, or other confidante in which the perspectives of



the client can be tested against and refined by those of others (Healy et al., 2018). There is evidence to show that how narratives are shared, and who with, affects the meaning making process. Attentive listeners or people of importance elicit more meaningful and lasting narratives (McAdams & McLean, 2013) and the quality of the working alliance between the counsellor and client influences career intervention outcomes, particularly those involving writing and feedback (Milot-Lapointe et al., 2018; Whiston, Rossier, & Baron, 2016).

### 3.2.2 Pragmatism

Founded in the philosophy of Charles Peirce, William James and John Dewey, pragmatism contends that philosophical inquiry and research should always be approached for the purposes of practical value, rather than as an intellectual exercise alone. The focus of pragmatic inquiry is on the practical consequences and meanings of an action or event, including those actions or events in which the researcher or philosopher comes to know or believe truths (Garrison & Neiman, 2003; Morgan, 2015). The foundational principle of pragmatic inquiry is that the researcher considers the consequences of their hypotheses and beliefs, using those consequences to evaluate the validity of their beliefs and the veracity of their claims of fact and truth (Garrison & Neiman, 2003). Pragmatism therefore connects beliefs to actions, in a process of inquiry which is experiential and social as much as it is an abstract analytical method: “beliefs must be interpreted to generate action, and actions must be interpreted to generate beliefs” (Morgan, 2015, p. 1046). Pragmatic inquiry is never quite complete, with questions never answered so much as a new iteration of inquiry-in-action initiated.

Dewey’s (1908) descriptions of ideas, objects, and truths in pragmatic inquiry guided my conceptualisation and analysis of the various data of my research projects. My first article, Healy et al. (2020), considered the themes observed in research literature as *ideas*, which Dewey (1908)

characterised as instruments for future action, “a draft drawn on existing things, an intention to act” (p. 88). The ideas about careers and employability learning I summarised in Healy et al. (2020) are instruments for the action of understanding and supporting students’ success. My second article, Healy, Brown, and Ho (2021), described job descriptions as *objects*. Dewey (1908) argued that the meaning of objects is found in the effects those objects produce. The effects of job descriptions as pragmatic objects are seen in the ways that they influence how careers and employability learning work is understood, organised, and resourced.

My third article, Healy (2021b), considers the *truths* about the relationship between graduate employability and career development scholarship and practice that can be ascertained from the ideas of Healy et al. (2020) and the objects of Healy, Brown, and Ho (2021), and asks what the consequences of those truths are for the provision of careers and employability learning. My pragmatic purpose in describing the gap between graduate employability and career development was concerned with the negative consequences of that gap; the pragmatic purpose of proposing an alternative is, in the words of William James (James, 1907), “less as a solution [...] than as a program for more work, and more particularly as an indication of the ways in which existing realities may be changed” (p. 21). Pragmatism asks, “what difference would it practically make to any one if this notion rather than that notion were true?” (James, 1907, p. 18). One of the realities that I wish to change is the tendency in graduate employability to propose “new” graduate employability frameworks which do not persuasively demonstrate that they are any more true than others like it and offer little practical consequence for the students who would ostensibly benefit from it.

Pragmatism has also underpinned my pursuit of this PhD by publication as a scholar-practitioner (McIlveen, 2008, 2007). Dewey (1908), quoting Charles Peirce, described

pragmatism as a “laboratory habit of mind” (p. 86), an intellectual attitude that conceived inquiry as experience, and research as simply a particularly intentional form of inquiry. As demonstrated in the autoethnographic accounts of the conception and completion of each discrete project in this PhD by publication, my experience as a practitioner has informed my research and my research has informed my practice. Furthermore, my orientation toward interpretivism and pragmatism is evident in the way that the pedagogical element of this thesis reflects a “phenomenological pedagogy” (van Manen 1982): an ethic of critical reflection on the part of the educator, rather than simply a collection of learning outcomes or instructional methods.

To illustrate this scholar-practitioner orientation, I offer an extract from a collaborative autoethnographic paper I am in the process of writing with a paramedic lecturer and paramedic student, in which we reflect on our individual and collective experience of trialling a career writing activity for health science students.

### **3.2.2.1 Supplementary Writing: Constructing a Life Narrative for Student Paramedic Careers and Employability Learning: A Collaborative Study**

Healy, M., Bell, A., and Ryan, G. (2021). *Constructing a life narrative for student paramedic careers and employability learning: a collaborative study*. Manuscript in preparation.

I have been a university careers and employability learning educator for close to ten years. Soon after entering the field, after a previous career in language and academic skills teaching, I felt a sense of calling that I had not experienced before. I discovered that a person’s career—their decisions, concerns, goals, challenges, and achievements—can be the context for truly transformational, though sometimes very challenging, learning. I became particularly passionate about working with students in values-oriented professions which, despite their

importance to society, make no-one rich but which some people are called to: nursing, teaching, human services, and allied health, including paramedicine. I am motivated by a feeling that if I can help someone succeed in their ambition to become a paramedic, or a nurse, or a teacher, then I have played a small part in the good things that person goes on to do.

During my career as careers and employability learning educator, I have spoken to thousands of health science students about their career goals and job seeking strategies, often reviewing their resumes and providing interview coaching. I noticed two common gaps in how they expressed their employability narratives. First, they seldom articulated their sense of purpose, values, or motivating factors that influenced their career decisions. Second, they seldom expressed their education and career journey as a narrative, rather they recounted lists of educational and professional milestones or competencies. Together, these gaps resulted in underwhelming employability narratives that, in the tightly controlled curriculum of nursing and paramedicine, did little to differentiate each student from their peers.

When I was able to ask questions of students, I was able to draw out a diversity of rich stories that communicated numerous valuable forms of employability capital: motivation, resilience, adaptability, curiosity, maturity, and cultural knowledge, among many others. Students' employability narratives became more engaging and more unique when these elements were integrated into them, both of which are qualities that graduate recruiters appreciate when assessing applications. I designed this career writing intervention as a way to support students through this process of reflecting on and expressing their sense of purpose en masse. I hoped that my prompts might prompt dialogues: both an internal dialogue within the students' own societies of mind, but also external dialogues among their peers and with their educators.

### **3.3 Research Methods**

The specific methods used in each project of this PhD by publication are described in detail in their respective articles, so I will not describe them again in detail here but provide a summary of the methods used.

Healy et al. (2020a) used bibliometric methods, specifically direct citation network analysis (van Eck & Waltman, 2014, 2017), which traces the intellectual structure of a body of literature by illustrating which articles cite and are cited by one another (Aria & Cuccurullo, 2017). The data for this study were 4068 articles collected from a broadly defined search of the Web of Science database. The primary means of analysis was the clustering algorithm of CitNet Explorer, which assigns articles to clusters of related literature, based on how closely they are related to others through citation networks (van Eck & Waltman, 2014, 2017)

Healy, Brown, and Ho (2021) used document analysis methods, an umbrella term for a diverse range of methods for the collection and analysis of various kinds of documents (Tight, 2019). In this study, the documents were 376 job advertisements, which we collected from the Burning Glass database, an archive of online job advertisements. We applied a template analysis to the documents, in which a priori themes are used to develop an initial coding template, which is then tested on a subset of the data and refined for further coding (Brooks et al., 2015).

Healy (2021b) is a conceptual paper, and therefore does not employ a particular research method.

#### ***3.3.1 Autoethnography of the Author as a Scholar-Practitioner***

In addition to the methods applied in the articles of this PhD by publication, I have also applied analytic autoethnography (Anderson, 2006) as a method of research and reflective practice, following the ethic of the practitioner-scholar described by McIlveen (2008, 2007).

Autoethnography sees the researcher subject themselves—their experience and identity—to analysis, interpretation, and critique (Anderson, 2006; Chang et al., 2013). Although it is predicated on researchers writing about themselves, autoethnography is distinct from autobiography and “transcends a mere narration of personal history” (Chang et al., 2013, p. 18) through interpretation and analysis of the narrative as data. The data for my autoethnographic reflections are diverse, including my journals and notebooks, email communications, drafts and outlines, applications, and submissions—essentially every word I have written for, in, and about my PhD by publication.

I adopted an analytical autoethnographic approach (Anderson, 2006), rather than other forms of critical or evocative autoethnographic methods (Ellis et al., 2011; Holman Jones et al., 2013), because it not only documents and illustrates personal experience but also seeks to use autoethnographic reflections as empirical data to pursue theoretical understandings of social phenomena. In this case, the social phenomena is that of the part-time PhD student and scholar-practitioner working in a higher education professional, non-academic role. In 2019, I wrote a blog post sharing some of my autoethnographic reflections, which again exhibit my intentional adoption of the scholar-practitioner mindset.

### 3.3.1.1 Supplementary Writing: Me, Myself and I

Healy, M. (2019). Me, Myself and I [Blog post]. Retrieved from <https://thesiswhisperer.com/2019/10/16/13768/>

*Do you ever find yourself in conflict WITH yourself? The part of you that wants to watch Netflix might war with the part of you that wants to finish your PhD, as just one example. How do we better manage these multiple, internal voices?*

*This post is by Michael Healy, a careers and employability educator and PhD candidate at the University of Southern Queensland, Australia. In his practice and research, he is focused on exploring the pedagogy of careers and employability learning in higher education. In particular he is evaluating how reflective writing tasks focused on values clarification can improve the career optimism and self-efficacy of nursing students.*

It is well known that the doctoral education experience is a serious challenge to mental health and wellbeing (Mackie & Bates, 2018). As a “part-time” PhD candidate with a full-time job and a family, I know the challenge of maintaining the balance of wellbeing, relationships, and productivity. I do my best, but the weight of my responsibilities and concerns is often overwhelming. Fortunately, my PhD research into reflection and self-management, as it relates to career development, provides me with some useful reflective tools that I can use myself.

In particular, I am interested in the ways we ‘narrate’ our lives inside our head. Although we call this our internal monologue, most would admit to hearing more than one voice. For this reason, my research is based largely on Hubert Hermans’s dialogical self theory (Hermans & Hermans-Konopka, 2010). According to Hermans’s theory, the self is not a single entity, but rather a “society of mind” made up of numerous *I-positions*, in constant chattering dialogue with each other.

Hermans has described I-positions as actors on a stage, each playing their part, but I’m not sure this is the best metaphor. The cast of a play is organised and rehearsed, for a start. For most of us, the dialogical self is more like a fractious political forum, characterised by debate and dissension between I-positions. In difficult times, our I-positions judge, berate, and disparage one another. In turn, these dialogues evoke anxiety, depression, and despair.

The good news is that the dialogical self's society of mind doesn't need to be a fractured, adversarial dystopia. There are several kinds of supportive I-positions which can act as mediators, leaders, and healers:

Meta-positions take a global view, from some distance above the fray, to analyse I-positions and evaluate the credence of their claims. Third-positions reconcile conflicting I-positions into new positions, accommodating the core values of both rather than privileging one over the other. Promoter positions integrate, mediate, and inspire innovation in communities of I-positions. I will share a little of my own dialogical self, to illustrate how some of my I-positions influence me and how I enlist supportive I-positions to help keep my PhD work in balance with my other responsibilities. All you need to know is that I am married with one young child, I work full time, I study a part-time PhD, and I enjoy riding my bike when I get a chance to. Imagine it is a beautiful Sunday morning.

I-the-cyclist notes that it's a beautiful day for a bike ride. I-the-health-kicker concurs, noting that I'm overdue for some exercise while I-the-nature-lover gets excited about checking out a nearby state forest.

I-the-PhD-candidate interrupts to suggest that the day would be much better spent at my desk, writing. I-the-professional agrees that I should be at my desk, but notes that there are work deadlines looming and notes that this work, not the PhD, pays the bills. I-the-writer notes that whether I study or work, I should maintain my daily writing habit, with a pointed stare at I-the-procrastinator, who desperately wants to mow the lawns and do the laundry before tackling any real work.

I-the-daddy, in the sweet voice of my five-year-old son, reminds me that I've been promising to teach him to ride his bike. I-the-hubby, in the sweet voice of my lovely wife,



suggests that Poppa look after the boy so we can see a movie. I-the-family-man guiltily notes that both wife and child need my time, and accuses I-the-cyclist, I-the-PhD, and I-the-professional of misplaced priorities. Meanwhile, I-the-introvert sulks, muttering about needing time to himself.

The tension in these dialogues is clear, although my vignette is a relatively peaceful one. When I'm under stress, these dialogues can spiral out of control into unrestrained internal conflict which leaves me stressed and exhausted. One way to mitigate these downward spirals into chaos is to identify and amplify helpful meta-, third-, and promoter-positions.

I-the-analyst is a meta-position which reflects my natural ability to reflect on challenges and apply rational thought to them. I-the-analyst has the credibility required to temper the more negative contributions of I-the-procrastinator and I-the-introvert. Another meta-position is I-the-strategist, which uses my professional skills and knowledge to manage my career and my studies effectively. I-the-analyst and I-the-strategist make a good team.

I-the-scientist-practitioner is a third position that integrates my professional work with my PhD study. It mediates the tension between the different activities, in large part because it works with I-the-strategist to make decisions that allow me to maintain balance.

I-the-life-coach is a promoter-position which establishes and monitors health, productivity, and relationship habits. He understands that they work together: a bike ride is good exercise and valuable time to myself in nature, allowing me to re-energise for family activities and refresh my mind for writing. When I-the-coach consults with I-the-strategist, my career ambitions become more action-oriented and I am more proactive about implementing my ideas.

Another promoter-position emerges when I-the-family-man shrugs off his guilt complex and instead focuses on what he can do to be present as a husband and father. I-the-family-man

plans activities like family bush walks and picnics. He recognises that I-the-PhD and I-the-professional are both working for the good of the family and that they model positive qualities such as life-long learning and the pursuit of meaningful work.

The doctoral education experience can evoke and amplify unhelpful I-positions until the dialogical self is a cacophony of competing voices. As I have described with my own example, it is useful to take some reflective time to identify the voices adding to the noise and allow meta-, third-, and promoter- positions to make themselves known. You can then give these helpful positions the authority to organise, challenge, and quieten the less helpful positions. It is an ongoing challenge as the dialogue ebbs and flows, recedes and explodes, but the effort is worth it if it allows you to make some small steps toward recognising your strengths, mediating your anxieties, and living a healthier PhD life.

I have included various autoethnographic elements in this thesis as a record of my experience as a scholar-practitioner undertaking a part-time PhD. Autoethnographies of the doctoral research experience are common but are more often focused on challenges arising from elements of the students' identities than on their career aspirations or employability. I intend to write an article, based on my own experience, promoting autoethnographic reflection in the form of career writing (Lengelle et al., 2014; Lengelle & Meijers, 2014) as a pedagogical approach to support the careers and employability learning of doctoral students.

In the following chapters I present the three articles that present the substantive original research of this thesis:

1. Healy, M., Hammer, S., & McIlveen, P. (2020). Mapping graduate employability and career development in higher education research: A citation network analysis. *Studies in*

*Higher Education*. <https://doi.org/10.1080/03075079.2020.1804851> [Chapter four of this thesis]

2. Healy, M., Brown, J. L., & Ho, C. (2021). Graduate employability as a professional proto-jurisdiction in higher education. *Higher Education*. <https://doi.org/0.1007/s10734-021-00733-4> [Chapter five of this thesis]
3. Healy, M. (2021). Careers and employability learning: Pedagogical principles for higher education. Manuscript under review. [Chapter six of this thesis]

## **CHAPTER 4: MAPPING GRADUATE EMPLOYABILITY AND CAREER DEVELOPMENT IN HIGHER EDUCATION RESEARCH: A CITATION NETWORK ANALYSIS**

### **4.1 Rationale**

The purpose of this article was to try to make sense of both graduate employability and career development scholarship as a single body of related, but only loosely connected, literature. Graduate employability literature has often been acknowledged as being so diverse that it is difficult to synthesise meaningfully (Artess et al., 2017; Cheng et al., 2021; Clarke, 2018; Römgens et al., 2020). Career development is a more cohesive field of scholarship than graduate employability, but nonetheless incorporates several distinct subfields with differences in research paradigms, methods, and reporting practices between them (Fouad & Kozlowski, 2019). When trying to consider graduate employability and career development together, the conceptual, empirical, and disciplinary diversity makes it impossible to understand them as a single field of research.

In my initial PhD proposal and confirmation, I intended to conduct a systematic literature review (Bearman et al., 2012; Pickering & Byrne, 2014) of careers and employability learning interventions in higher education. However, I was soon overwhelmed by the challenge of conducting a systematic review of such a diffuse body of literature. I experienced similar challenges noted in Daigneault et al.'s (2014) account of a systematic review abandoned by a doctoral student, particularly the challenge of establishing a scope that was broad enough to be meaningful yet narrow enough to be manageable. I was also challenged by defining what careers and employability learning interventions are and how to recognise them in the literature for the purposes of inclusion in and exclusion from my systematic review.

Viewed through the lens of social cognitive theory (Bandura, 2001), what degree of self-efficacy I had for the task was diminished by my initial challenging experiences of excluding

studies from my review, without confidence that the resulting set of studies would be meaningful or empirically defensible. My motivation to continue the systematic review declined as my outcome expectations were whittled away with each attempt to proceed. Through the lens of social cognitive career theory (Lent, 2021; Lent & Brown, 2013), this challenge in the first stage of my doctoral degree challenged my scholarly and professional ambitions, given what I recognised to be a naive approach to understanding the literature and designing a manageable research project, both of which I knew to be foundational tasks for a doctoral student.

In my research journal, after a few days at work on exclusions, I wrote: “Having a bit of a crisis of confidence with the employability side of this project, as identifying intervention studies can be challenging. Defining my scope is key”. This entry was followed a few days later with a conundrum about how to refine the scope of my review: “Having further doubts about this. If I exclude professional identity (which seems to be abundant in teaching and nursing literature), how do I then define how employability is different?” Professional identity in higher education research is often connected to employability but is also used to describe orientations toward reflective professional competence in fields such as nursing and teaching (Healy, et al., 2020). Like Daigneault et al, (2014), I decided to cut my losses and abandon my systematic review but was left wondering how I might fill the hole it left in my proposed PhD research.

The solution came to me in a moment of happenstance (Krumboltz, 2009), in the form of a Twitter post describing CitNet Explorer (van Eck & Waltman, 2014), a software application for analysing, clustering, and visualising citation networks among collections of research publications. I had encountered bibliometric research before, but after downloading and tinkering with CitNet Explorer, this was the first time it occurred to me that I could use those methods myself.

McCulloch (2021) has noted the role of serendipity in doctoral research, describing it as chance opportunities seized by a prepared mind, in a description that evokes, but does not actually reference, the planned happenstance theory of Krumboltz (2009) and the chaos theory of careers of Pryor and Bright (2011). In this case, the chance event was a tweet sent in a moment that coincided with my viewing of Twitter, with my mind prepared at that time by my struggle with the challenges of a manual systematic review, so I was able to immediately understand the value of a bibliometric approach such as that afforded by CitNet Explorer.

Bibliometric methods, which apply computational analyses to bibliographic metadata such as citations, co-authorship networks, or textual characteristics of keywords and abstracts, lend themselves to large scale science mapping. They can be used to distinguish themes within and between fields of research (Fellnhofer, 2019), discern the differences between closely related fields (Youtie et al., 2017), trace the emergence of new fields (Batagelj et al., 2017), or sketch communities of collaboration among scholars in a field (Vlegels & Huisman, 2020). Bibliometric methods can be particularly useful when working with large volumes of literature which make manual systematic literature review methods impractical (Aria & Cuccurullo, 2017; Linnenluecke et al., 2020; Marrone & Linnenluecke, 2020). For example, a recent higher education research bibliometric study analysed a data set of almost 17,000 articles, an impossible task to conduct manually (Daenekindt & Huisman, 2020).

I do not have any background in computer science and have always been more confident with qualitative methods than quantitative, so I had a lot of work to do to understand the data formats, data management processes, and analytical functions of CitNet explorer. However, in contrast to my experience in attempting a manual systematic review, my self-efficacy and outcome expectations for this approach grew rapidly as I tinkered with the app, consulting help

guides, internet forums, and “the universities of Google and YouTube” for guidance and troubleshooting. I was motivated to apply the effort necessary to understand the complex clustering algorithms at the heart of CitNet Explorer (Klavans & Boyack, 2017; van Eck & Waltman, 2017), at least to the point that I could confidently explain them to my supervisors and defend them to my article reviewers. My excitement in discovering bibliometric methods in general, and CitNet Explorer in general, is evident in this excerpt from the email I sent to my supervisors after first seeing the results of the app’s analysis:

I’ve discovered a cool little tool that can visualise citation patterns. This image shows how the top cited papers on ((career development OR employability) AND higher education) are related to each other. It’s a stark illustration that graduate employability does not draw from the career development evidence base. I’m feeling very energised by this.

However, the computational analysis of CitNet Explorer was not itself enough to justify the resulting journal article. Bibliometric analyses are the starting point for analytical discussions about fields of research, but they are not necessarily useful in and of themselves (Linnenluecke et al., 2020; Zupic & Čater, 2015). The meaning and value of bibliometric research comes from purposeful analysis addressed at specific research questions (Zupic & Čater, 2015). This means that I had to critically conceptualise my data, considering the social and cultural meanings of citation practices, as they are far from neutral markers of intellectual exchange, cannot represent the full intellectual constitution of any scholarly discourse, and do not necessarily reveal the socio-cultural characteristics of academic disciplines (Becher & Trowler, 2001; Bourdieu, 1990; Clegg, 2012; MacRoberts & MacRoberts, 2018). For example, in the writing of this article, I excised numerous citations that had informed my research in the interests of concision, and made

sure that I was citing research from my target journal, common advice for academic authors (Belcher, 2019; Thomson & Kamler, 2012).

My progress in writing this article was slowed, after completing my data collection and analysis, when I encountered a challenge in my theoretical approach. I could not confidently describe graduate employability as a research discipline, as it is far too diffuse and loosely bounded. My solution came from two “eureka moments” in my background reading. The first was Trowler’s (2014) notion of moderate essentialism in relation to academic disciplines. Moderate essentialism accommodates nuance and ambiguity and is more “permissive of complexity” (Trowler, 2014, p. 1725) in disciplinary characteristics, compared to strong essentialism, which is characterised by strong coherence and permanence among, and clear distinctions between, academic disciplines. Moderate essentialism aligns with various other descriptions of higher education research as an “open access discipline” (Harland, 2012), loosely bounded (Clegg, 2012), and weakly theorised (Ashwin, 2012; Tight, 2004). While I certainly could not describe graduate employability as a discipline from a strong essentialist point of view, describing it as moderate essentialist discipline provided a suitable conceptual foundation from which to present my bibliometric analyses.

The second eureka moment came when I recognised that several strands of relevant literature had used geographic metaphors to describe academic disciplines as territories, fields, or islands, with borders and bridges between them. As I note in the “Academic literatures as landscapes” section of this article, geographic metaphors are common in descriptions of higher education research (Becher & Trowler, 2001; Clegg, 2012; Macfarlane, 2012) and bibliometric research (Batagelj et al., 2017; Calma & Davies, 2017; Marrone & Linnenluecke, 2020; Tight, 2008; Vlegels & Huisman, 2020; Youtie et al., 2017). When I discovered that Savickas (2001)



had used a similar metaphor to describe vocational psychology and industrial/organisational psychology as islands, I knew I had a strong conceptual thread with which to tie the article together.

The results of my analysis also suggested some actual geographic differences in the broader graduate employability and career development literature, not only metaphorical ones. We noted in our article that most of the career development cluster is American, except for the contemporary trend of career orientations also being conducted by scholars from Asia and Europe. Graduate employability is, for the most part, a European and Australian field of research, with only one article from an American-based journal appearing in that cluster. Undoubtedly, our data from this article could support further analysis of the actual geographical and demographic composition of the careers and employability scholarly community, but this was beyond the scope of the article we published.

The research and writing of this article has continued to boost my interest and self-efficacy in bibliometric methods. I have built on my experience with the user-friendly CitNet Explorer to learn to use more complex bibliographic tools based in the R and Python coding languages, although I remain an enthusiastic novice. I have two further bibliometric studies in process, the first an account of the long tail of graduate employability research (Healy & Hammer, 2021), and the second a description of the multi-disciplinarity of employability research (Healy et al., 2021a).

I would also like to write a methodological paper for a journal such as *the International Journal of Doctoral Studies*, describing the merits, challenges, and risks of systematic bibliometric literature reviews as a methodology for doctoral students' literature reviews, like those published by Pickering and her colleagues on the value of systematic reviews for doctoral

students (Pickering & Byrne, 2014; Pickering et al., 2015). As noted, my discovery of bibliometric methods solved a significant challenge in the early stages of my doctoral research and made this first publication possible. I agree that the increasing pace of academic publishing in the digital age, combined with the vast reach of search engines such as Google Scholar, create significant challenges for novice scholars who are attempting to develop their command over a body of literature, and that computational bibliometric methods and tools may offer a solution (Aria & Cuccurullo, 2017; Linnenluecke et al., 2020; Marrone & Linnenluecke, 2020). However, no researchers, especially not students, should approach bibliometric methods as a replacement for wide and careful reading (Linnenluecke et al., 2020; Zupic & Čater, 2015). In fact, I believe that having a well-developed understanding of key themes and trends in the literature is a prerequisite for proper scholarly use of these methods and that using them too early in a doctoral project could undermine the authentic scholarly development of the candidate.

This article was submitted to the journal *Studies in Higher Education* on 16 May, 2020. Reviews recommending major revisions were received on 26 June and a revised manuscript re-submitted soon after. The article was accepted for publication on 16 July and published online on 4 August, 2020. I count this publication as a significant achievement, as my first peer reviewed journal article as lead author, and because it was published in one of higher education research's leading journals.

#### **4.2 Version of Record**

The version of record of this article will be presented on the following pages.



## Mapping graduate employability and career development in higher education research: a citation network analysis

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### ABSTRACT

Greater attention than ever is being placed on how universities enable their graduates to achieve their career goals as a key return on significant private and public investment. Scholars in two distinct fields of research have explored the characteristics and conditions that promote or constrain graduates' career success: graduate employability and career development. In this article, we present visualisations of direct citation networks among 4068 journal articles focused on graduate employability and career development and consider the disciplinary landscapes that they reveal. Our findings show that despite a clear alignment of research concerns and educational goals, there has been limited theoretical or practical exchange between the two fields. We argue that purposeful exchange between the two fields will enrich both and, when applied to practice, could inform an evidence-based, integrative pedagogy of careers and employability learning in higher education.

### KEYWORDS

Graduates; employability; career development; higher education research; citation analysis

### Introduction

Increasing costs of higher education and uncertain graduate labour markets have led to increased scrutiny on how well universities enable graduates to achieve their employment and career goals. These outcomes are central to debates among policy-makers, industry bodies, and educators about personal and social returns on private and public investment in higher education (Sin, Tavares, and Amaral 2019). As a result, graduate employment rates are now a prominent feature in university rankings, government funding, sector quality frameworks, and university marketing campaigns. However, graduate employment rates, divined from surveys of graduates at a sample point in time, are by themselves an inadequate measure of how well university graduates are equipped to thrive in their working lives (Bridgstock and Jackson 2019; Donald, Baruch, and Ashleigh 2019a). Instead, it is important to distinguish *employment* as an outcome and *employability* as an antecedent, the later referring to a range of personal qualities and situational factors that promote or constrain graduates' ability to achieve their employment and career goals (Clarke 2018; Donald, Baruch, and Ashleigh 2019b; Monteiro et al. 2020).

Scholars in two distinct fields of research have explored how university graduates develop employability and achieve career success: graduate employability (GE) and career development (CD). GE is a subfield of higher education research, focused on the individual, institutional, and socio-economic factors that influence graduates' immediate employment and long-term career

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outcomes (Clarke 2018; Holmes 2013). CD draws on the applied psychology subdisciplines of *vocational psychology*, focused on understanding how individuals make career decisions and pursue career goals, and *industrial and organisational (I/O) psychology*, focused on management and workplace practices that enhance employee recruitment, engagement, and productivity (Akkermans and Kubasch 2017; Fouad and Kozlowski 2019).

A lack of dialogue between GE and CD research has been noted before (Artes, Hooley, and Mellors-Bourne 2017; Clarke 2018; Smith et al. 2018). The gap between GE and CD research represents missed opportunities for scholars and practitioners in each field to incorporate insights and evidence from the other into their work, disseminate their research to wider audiences with shared interests in students' career success, and influence the policy and practice of careers and employability learning in higher education. The present research is the first focused analysis of the boundaries between the GE and CD research fields.

In this article, we demonstrate the lack of interdisciplinary exchange between GE and CD by illustrating the citation networks between their respective bodies of literature and considering where they lie in the disciplinary landscapes of higher education research. We also describe clusters of research interests in the GE and CD citation networks, highlight congruent areas of interest, and discuss how the two fields may benefit from greater integration. Our objective is to advocate for greater exchange between GE and CD researchers by highlighting their common interests and respective strengths and, in doing so, argue for the value of an integrative pedagogy of careers and employability learning for higher education.

### ***Academic literatures as landscapes***

Researchers have adopted several socio-spatial metaphors – fields, regions, territories, borders, domains, and communities – to help make sense of how academic disciplines are constituted and organised (Clegg 2012). The most explicitly geographic of these metaphors is Becher and Trowler's (2001) *academic tribes and territories*, which was used to argue that distinct epistemologies within academic disciplines (territories) create equally distinct disciplinary cultures among the researchers who inhabit them (tribes). Trowler (2014) later described this as a *strong essentialist* approach to academic disciplines, characterised by strong coherence and permanence among tribes and clear distinctions between them. He argued that a *moderate essentialist* approach, which recognises nuance, variability and change in disciplinary characteristics, is a more suitable approach to understanding disciplines in contemporary academia.

Researchers considering higher education research as a discipline tend to favour moderate essentialist descriptions, characterising the field as theoretically and methodologically diverse (Tight 2019), weakly bounded (Clegg 2012), open to scholars from many disciplines (Harland 2012), or scattered and disintegrated (Daenekindt and Huisman 2020). Macfarlane (2012) depicted higher education as an archipelago of diverse and distinct research themes in a cartographic metaphor that has subsequently been empirically reproduced (Calma and Davies 2015; Tight 2008). GE as a research field in its own right does not appear in discussions of the disciplinary characteristics of higher education research. Macfarlane (2012) alludes to GE on his map through a graduate attributes and an employment and careers region, though it is not clear if the latter refers to students and graduates or those working in higher education.

Compared to higher education research, CD scholars have been less introspective about their field's disciplinary status. Nonetheless, CD scholars have characterised the field as insular and provincial (Fouad and Kozlowski 2019; Savickas 2001). In fact, Savickas (Savickas 2001) prefigured Macfarlane's (2012) cartographic imagery when he described CD as two islands, vocational psychology and I/O psychology, whose inhabitants rarely visit each other or the 'mainland' of applied psychology, their parent discipline. CD scholars have also noted a gap between vocational psychology research and CD practice, expressing concern that communication between theorists, researchers, and practitioners is limited (Fouad and Kozlowski 2019).

### ***Graduate employability research***

GE is a sub-field of higher education research, conducted by researchers from various disciplinary backgrounds. GE researchers tend to focus their attention at three levels of analysis: social and educational systems and policies, institutional strategies, and individual GE (Donald, Baruch, and Ashleigh 2019a; Holmes 2013). The disciplinary diversity of GE researchers has led to a proliferation of definitions, conceptualisations and frameworks (Römgens, Scoupe, and Beusaert 2019; Small, Shacklock, and Marchant 2017), but there remains no commonly agreed understanding of or approach to GE. Often, GE research has focused on enumerating lists of crucial employability skills in particular fields (Clarke 2018), but increasingly GE is considered as a psycho-social learning process (Fugate, Kinicki, and Ashforth 2004; Holmes 2013; Okay-Somerville and Scholarios 2017) rather than simply employability skills and work readiness.

Researchers at the systems and policy level tend to come from sociology-informed disciplines such as labour studies, higher education policy, or social economics. These researchers focus on the role that social structures, social and educational policies, and labour market conditions play in GE. Researchers at this level tend to be the most vigorous critics of the GE agenda, arguing that it is a symptom of the neo-liberalisation of higher education (Sin, Tavares, and Amaral 2019).

Researchers at the institutional and individual levels tend to be academics in professionally oriented disciplines or learning and teaching specialists. Institutionally focused researchers investigate pedagogical and curricular strategies to support GE (Bridgstock and Jackson 2019; Minocha, Hristov, and Reynolds 2017; Rees 2019), with a strong focus on experiential approaches such as work-integrated learning. However, empirical research evaluating specific GE interventions is rare. At the individual level of GE, a significant stream of research has explored the role of various kinds of human capitals – particularly generic skills and social, cultural, and psychological capital – in GE (Clarke 2018; Donald, Baruch, and Ashleigh 2019b). Recent empirical research at the individual level has explored how students and graduates perceive their employability (Donald, Baruch, and Ashleigh 2019b; Monteiro et al. 2020), develop professional identities (Tomlinson and Jackson 2019), and enact proactive and adaptive attitudes and behaviours (Jackson and Tomlinson 2020; Okay-Somerville and Scholarios 2017).

While researchers in academic disciplines or teaching and learning roles conduct most GE research, GE also provides the warrant and purpose for a range of academic and professional roles, typically in areas such as work-integrated learning, student engagement, volunteering and extracurricular activities, student leadership, and alumni relations. These academic and professional roles share a common goal of supporting student GE, but do not represent a cohesive profession with common theoretical foundations or principles of practice.

### ***Career development research***

CD research is focused on how people make career decisions, navigate career paths, and approach career problems (Byington, Felps, and Baruch 2018; Fouad and Kozlowski 2019). Contemporary CD theories are principally founded in lifespan development, person-environment fit, and social cognitive paradigms (Byington, Felps, and Baruch 2018). The focus of most CD is on the psychological, cognitive, and behavioural characteristics of individuals in the context of their working lives. Researchers have investigated the effect of a wide range of social, cultural, and organisational contexts on individuals' careers. Because of this primary focus on the individual, CD has been subject to criticism as a vehicle of neoliberalism, through the 'responsibilisation' of the individual for their career achievements or failures (Hooley, Sultana, and Thomsen 2017).

Career education and guidance, informed by CD theory and evidence and provided by qualified practitioners, has been found to have positive effects on clients' career decision-making, self-efficacy, adaptability, and vocational identity (Whiston et al. 2017), with flow-on positive effects on academic retention and success (Clayton et al. 2018), and job search self-efficacy, networking behaviour, and

employment outcomes (Liu, Huang, and Wang 2014). Certain *critical ingredients* have been shown to have positive impacts on students' learning when employed in career education: written exercises, individualised interpretations and feedback, labour market information, modelling from experts, support from social networks, counsellor support, values clarification, and psychoeducation (Whiston et al. 2017).

University careers services, usually staffed by qualified CD practitioners, support students in making career decisions and goals, responding to challenges, and seeking and securing employment and work experience opportunities (Brown et al. 2019; Donald, Baruch, and Ashleigh 2019b). In an effort to reach more students, many CD services endeavour to work with academics to embed careers and employability learning in the curriculum (Bridgstock, Grant-Iramu, and McAlpine 2019; Brown et al. 2019). However, doing so can be challenging, because most careers service staff are designated as professional rather than academic staff, often struggle to have their expertise recognised, and can be insular regarding their professional domain (Brown et al. 2019).

### **Career development in graduate employability**

GE scholars have frequently noted the importance of career management skills or career development learning to GE (Donald, Baruch, and Ashleigh 2019b; Römgens, Scoupe, and Beusaert 2019; Small, Shacklock, and Marchant 2017). In institutional GE research in particular, career development learning is often recognised as an important element of GE employabilities, yet not often considered in depth. On the other hand, several researchers who investigate individual GE as a psycho-social learning process have engaged to a greater extent with contemporary CD research (Donald, Baruch, and Ashleigh 2019a; 2019b; Jackson and Tomlinson 2020; Monteiro et al. 2020; Okay-Somerville and Scholarios 2017; Tomlinson and Jackson 2019). Nonetheless, substantive exchange between GE and CD research remains limited. To demonstrate and interrogate this lack of exchange we examine the following questions: what are the boundaries of GE and CD research as represented by citation networks within and between each field, and where are the current and potential points of exchange?

### **Methods**

We conducted a direct citation network analysis of GE and CD journal articles. For analysis, we used CitNetExplorer (<https://www.citnetexplorer.nl/>), an application that visualises direct citation networks and identifies topic clusters within them (van Eck and Waltman 2014; 2017). Direct citation analysis has been proposed to provide more accurate and coherent topic clusters than other citation network analysis methods such as co-citation or bibliographic coupling (van Eck and Waltman 2017). Although citation analysis for evaluative purposes has been vigorously challenged (MacRoberts and MacRoberts 2018), citation network analysis has been used to good effect to explore landscapes and boundaries of research in many disciplines, including higher education and CD. Scholars have applied geographic metaphors to citation networks to map research themes, intellectual traditions, scholarly networks, and transnational differences in both higher education (Calma and Davies 2015, 2017; Pan and An 2020; Tight 2008, 2014) and vocational psychology (Byington, Felps, and Baruch 2018).

### **Data collection**

We searched the Web of Science (WoS) database for terms related to higher education careers and employability. We limited our search to WoS because other comparable databases, such as Scopus and Google Scholar, do not allow for the export of full bibliographic records, including cited works, of all search results. Furthermore, CitNetExplorer is optimised to accept WoS bibliographic export files directly, whereas Scopus export files are not structured with sufficient precision to work in CitNetExplorer without further processing (van Eck and Waltman 2014). Although there



are differences in the coverage of scholarly publications between WoS and other databases, we are satisfied that for the purposes of this citation network analysis, WoS provided an accurate representation of the GE and CD literatures.

We derived our search terms from our knowledge of common terms used in the GE and CD literatures, informed by literature reviews and surveys (Akkermans and Kubasch 2017; Artess, Hooley, and Mellors-Bourne 2017; Byington, Felps, and Baruch 2018). We sought to conduct a broad and inclusive search: “career development” OR “career decision” OR “career self-efficacy” OR “career exploration” OR “career adaptability” OR “career maturity” OR “career planning” OR “career management” OR employability OR “professional identity” OR “vocational identity” OR “graduate identity” OR “graduate attributes” OR “graduate outcomes”. We limited the search with the terms ‘university OR “higher education” OR college’, to prevent the inclusion of articles from the broader CD literature, and to peer-reviewed journal articles published in English. We excluded pre-prints and early access articles. We removed one false-positive result and added two articles (Fugate and Kinicki 2008; Fugate, Kinicki, and Ashforth 2004) which did not appear in the search results, but are highly cited and influential in the GE literature.

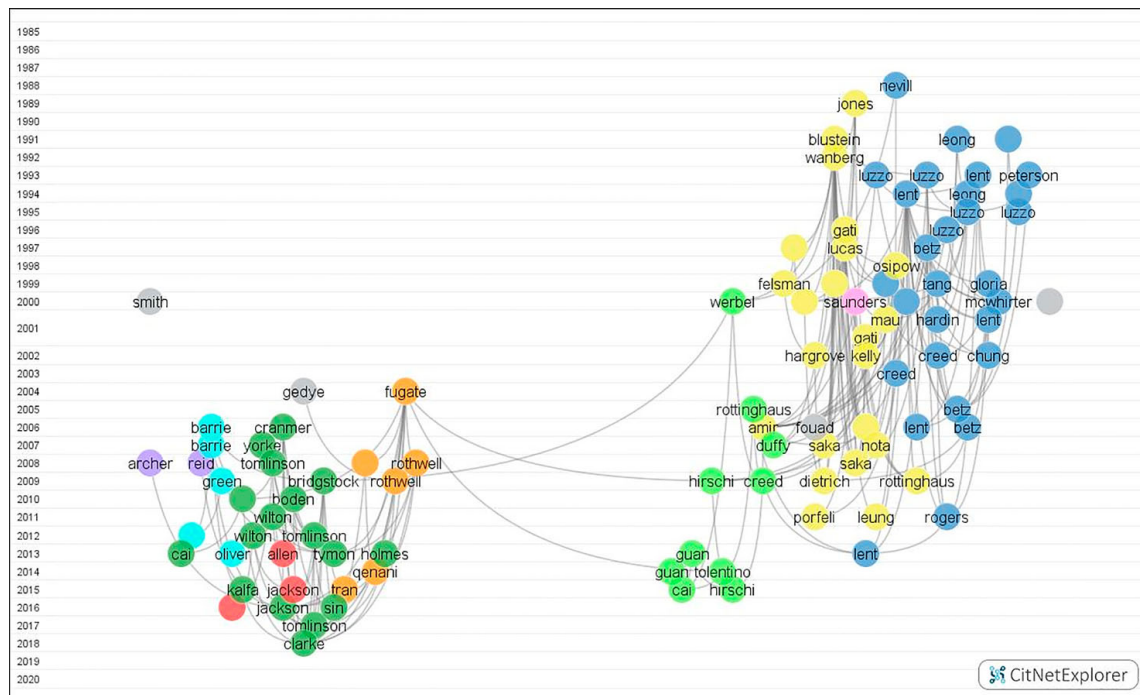
### **Data analysis**

We imported the WoS bibliographic data into CitNetExplorer and applied the clustering algorithm – for which a full technical explanation can be found in van Eck and Waltman (2017) – to the citation network. CitNetExplorer’s clustering algorithm assigns articles to clusters according to how closely they are related to others in the network. The sensitivity of the clustering algorithm can be adjusted by defining a resolution parameter and a minimum cluster size. The resolution parameter governs the number of clusters that the algorithm will yield. The minimum cluster size takes articles that are assigned to smaller clusters and either reassigns them to an appropriately related larger cluster or excludes them from clustering altogether. There are no optimal values for the resolution parameter or minimum cluster size, rather they are best used in an exploratory fashion (van Eck and Waltman 2017). We set the clustering algorithm’s resolution parameter to 0.7 and the minimum cluster size to 60, which we found resulted in the most distinct and coherent clusters.

We applied CitNetExplorer’s clustering algorithm in two iterations. The first was applied to the full network and resulted in four clusters: two large GE and CD networks, and two smaller professional identity and biomedical CD clusters. In order to observe clusters in the GE and CD citation networks more precisely, we drilled down into each and applied the clustering algorithm again to just the publications in those networks, in turn. Finally, we drilled down further into individual clusters in order to observe and characterise specific themes in the research and explore the citation links at the boundaries between clusters.

### **Results**

Our search of WoS resulted in 4068 articles that share 7,368 citation links between them. CitNetExplorer assigned 1,850 articles to a cluster, with the remaining 2,218 articles not sufficiently connected to any cluster larger than the minimum cluster size and therefore effectively excluded from further analysis. A visualisation of the full citation network is presented in Figure 1. For legibility, only the 100 articles with the most internal citation links are displayed, but it is important to note that this visualisation, and all other results described in this article, are derived from the entire citation network. A full list of the publications in the GE and CD networks and in each cluster is available for download: [[link to supplementary file ‘Full GE and CD network and cluster data.xlsx’](#)]. When we refer to internal citation links, we mean articles within the network that cite or are cited by that article. Our analysis does not refer in any way to the number of citations that the article has in WoS or any other database. In Figure 1, each circle represents one article and is labelled with the surname of the first author. The position of articles on the vertical axis



**Figure 1.** Full citation network: graduate employability (green), professional identities (purple), graduate attributes (light blue), perceived employability (orange), workplace learning (red), career decision-making (blue), career decision-making difficulties (yellow), career orientations (light green), career development barriers (pink), biomedical career development (not displayed).

are determined by the year of publication and on the horizontal axis by the proximity of that article to others in the citation network. Although the visualisation only displays the 100 articles with the most internal citation links, the positions of the articles are governed by their position in the full citation network map.

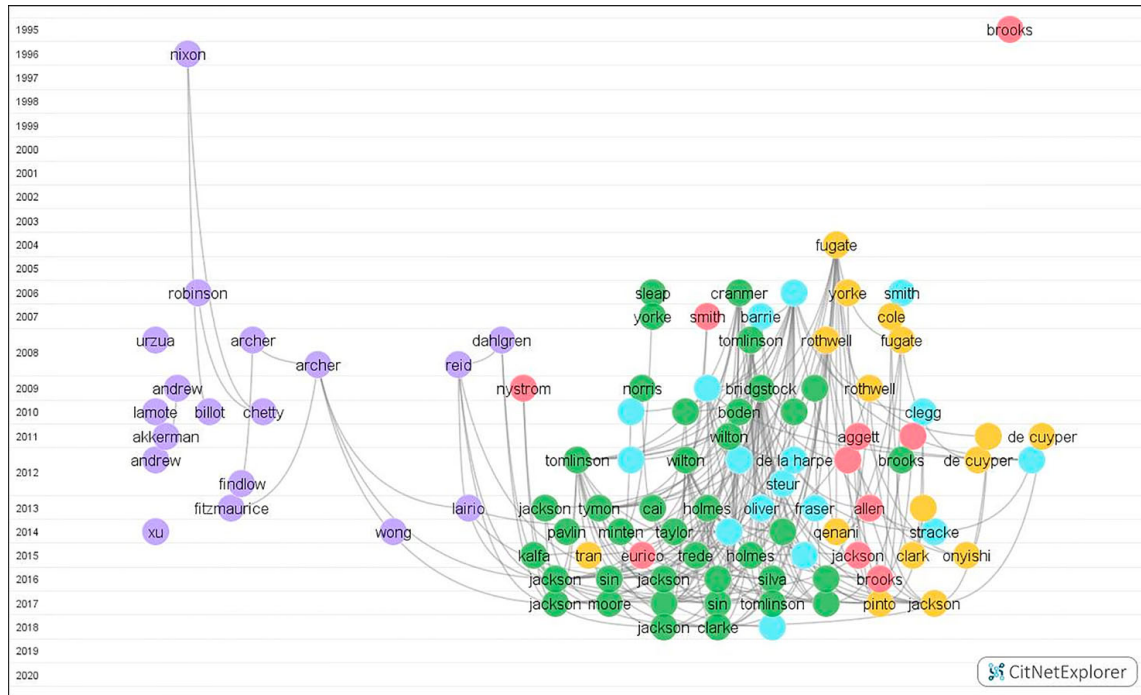
Figure 1 illustrates two distinct research networks of five clusters each. The GE network consists of a general GE cluster alongside clusters focused on professional identities, graduate attributes, perceived employability, and workplace learning. The CD network consists of clusters focused on career exploration, decision-making, and self-management; career decision-making difficulties; career orientations; CD barriers; and biomedical CD. It is beyond the scope of this article to attempt a full account of the epistemological or methodological foundations of GE, CD, or specific clusters of research within them. However, we can make some broad observations about the nature of the research in each network and cluster.

### **Graduate employability network**

The GE network consists of 868 publications with 2,235 internal citation links between them. Figure 2 illustrates the GE network and Table 1 contains descriptions of each cluster within it. The most represented journals in this network are *Studies in Higher Education*, *Higher Education Research & Development*, *Education + Training*, and *Higher Education*. American higher education journals are almost entirely absent from this network. In general, the articles in the GE network reflect the tendency toward qualitative methods in non-American higher education research (Tight 2014).

The perceived employability cluster is included in the GE network by CitNetExplorer's clustering algorithm, but this research is in fact mostly published in CD and management rather than higher education journals. The professional identity cluster is relatively loosely connected to the GE network, in part because it is frequently focused on specific professions and published in discipline-specific education journals.





**Figure 2.** Graduate employability citation network: graduate employability (green), professional identities (purple), graduate attributes (light blue), perceived employability (orange), workplace learning (red).

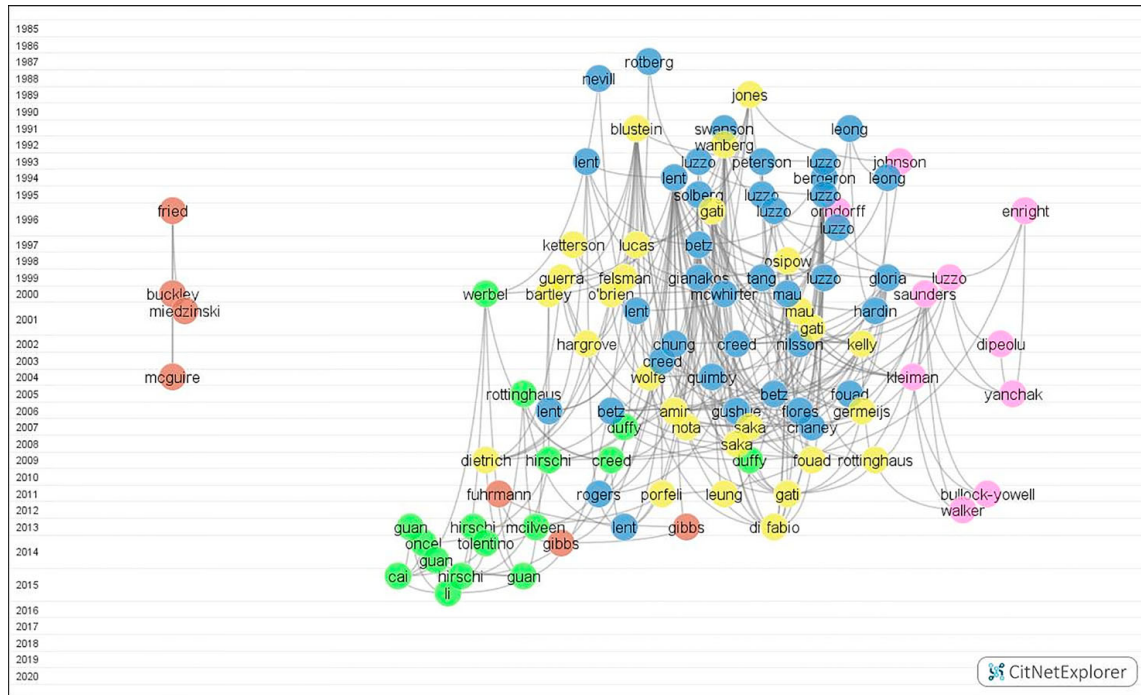
**Career development network**

The CD network consists of 982 publications with 3,975 internal citation links between them. Figure 3 illustrates the CD network and Table 2 contains descriptions of each cluster within it. The most represented journals in this network are *the Journal of Vocational Behavior*, *the Journal of Career Assessment*, *Career Development Quarterly*, *the Journal of Career Development*, and *the Journal of Counseling Psychology*. Most research in this network uses quantitative methods, consistent with the methodological conventions of the broader CD field (Fouad and Kozlowski 2019), though a trend of increasing use of qualitative methods is reflected in the career orientations and career barriers clusters.

The career orientations cluster is on the periphery of the CD network because it is a relatively recent trend in CD research, pursued by scholars in the adjacent field of I/O psychology and some vocational psychologists who have previously published articles in the career exploration, decision-making, and self-management and career decision-making difficulties clusters. The biomedical CD cluster is largely independent from the rest of the CD network, connected by just one citation link, and is mostly published in medical education rather than CD journals.

**Table 1.** Research clusters in the graduate employability network.

Cluster	Number of articles	Description
Graduate employability	336	Factors that promote or constrain GE, including human, social, and cultural capital; perceived employability; and pre-professional identities. Pedagogical or strategic efforts to promote students' GE.
Professional identities	157	Development and expression of professional identities, frequently focused on teachers, nurses, or academics.
Graduate attributes	148	Disciplinary skills and knowledge, generic skills, critical literacies, and social awareness afforded by higher education.
Perceived employability	139	How individuals and particular groups subjectively perceive their own employability.
Workplace learning	88	GE or academic benefits of placements, internships, and volunteering. Equity and accessibility of internships.



**Figure 3.** Career development citation network: career decision-making (blue), career decision-making difficulties (yellow), career orientations (light green), career development barriers (pink), biomedical career development (brown).

**Citation links between graduate employability and career development**

Figure 1 demonstrates the clear distinction between the GE and CD research literature, with only three citation links between them visible in this view of the 100 articles with the most internal citation links. When we drilled down further to view the underlying citation networks, we found that research on individual GE contains a small pocket of convergence between the two networks. As noted, perceived employability research is connected to the GE network by CitNetExplorer, but in fact many perceived employability articles were republished in CD and I/O psychology journals. Almost all citation links between the networks are from GE articles citing CD articles. If we do not consider the CD articles that are assigned by CitNet Explorer to the GE network, only two CD articles cite research from the GE network.

**Table 2.** Research clusters in the career development network.

Cluster	Number of publications	Description
Career exploration, decision-making, and self-management	386	Factors related to career exploration, decision-making, and self-management, particularly Lent and Brown’s social-cognitive career theory (SCCT; 2013), including career decision-making self-efficacy, adaptive career behaviours, career maturity, career self-management, career learning experiences, and career exploration.
Career decision-making difficulties	275	Taxonomies of impediments to career decision-making and research into specific challenges, such as family influences or negative emotional states.
Career orientations	155	How people envision their future working selves, including career adaptability, proactive attitudes and behaviours, protean and boundaryless careers, career optimism and hope, and work as a calling.
Career development barriers	98	Personal and social barriers to career success, particularly disability, mental illness, and marginalisation.
Biomedical career development	68	CD needs and influences of biomedical students and professionals, including evaluations of professional development and gender equity interventions.

Fugate and colleagues, assigned to the perceived employability cluster, are the most recognised authors across boundaries, with 79 internal citation links to the GE network and 10 to CD. Several authors in the GE cluster – Baruch, Donald, Jackson, Monteiro, Okay-Somerville, and Tomlinson and their colleagues – cite articles in the CD network or the perceived employability cluster. These authors have also published articles in both higher education and CD journals, although CitNetExplorer assigned most of their articles to the GE cluster. A number of articles from CD journals such as *Career Development International* and *the Australian Journal of Career Development* were assigned to the GE cluster, but only one article from a higher education journal was assigned to the CD cluster.

## Discussion

Our analysis of direct citation networks empirically supports our claim of the separateness of GE and CD literature. It also affirms the descriptive potential of certain geographical metaphors used in prior higher education and CD research, with our analysis highlighting GE and CD network ‘mainlands’, dotted with smaller clusters as ‘regions’, ‘peninsulas’ and ‘islands’. However, our analysis also recognises the analytical limits of geographical metaphors, particularly when adopting a moderate essentialist view of academic disciplines (Clegg 2012; Trowler 2014).

The GE network illustrated by our analysis is difficult to recognise as a distinct discipline according to Becher and Trowler’s (2001) original strong essentialist approach of territories and tribes. However, GE may be recognised as having some qualities of Trowler’s (2014) later, less categorical, moderate essentialist approach. The GE network consists of several loosely bounded and weakly connected research clusters, drawing on various disciplinary and professional fields and displaying a small degree of conceptual cohesion. Our analysis shows that GE is a field of study open to researchers from many disciplinary backgrounds and requires no particular theoretical, methodological, or professional warrant for entry into it, like higher education research in general (Harland 2012). For these reasons, it is difficult to locate GE as a single distinct region on Macfarlane’s (2012) map. GE research occurs in various locations on both main islands of the higher education archipelago – policy and teaching and learning – and on smaller isles such as those related to identity or institutional research.

In comparison to GE, the CD network is more bounded and cohesive. Most clusters share common theoretical foundations and methodological approaches. The CD network does resemble the two islands of vocational psychology and I/O psychology noted by Savickas (2001), though their separation seems to have diminished to the point that I/O psychology is now more peninsula than island and the authors from each field do now cite each other. In fact, we can discern the migration of some vocational psychology researchers from the career decision-making cluster to the frontier of the career orientations cluster. On Macfarlane’s (2012) map, Savickas’s (2001) CD islands are beyond the horizon of the higher education research archipelago. Our analysis suggests that CD’s wealth of theory and evidence goes largely unnoticed outside its borders, with the exception of a small community of perceived employability and career orientation envoys.

In addition to mapping the geography of the GE and CD networks, we can also discern certain differences in the ‘dialects’ of the inhabitants of each. Even the central term *employability* varies in meaning and connotation between GE and CD: I/O psychology researchers exploring employability as a psychological construct may not recognise certain labour market or curricular-oriented GE research as being of the same field, and vice versa. In another example, *adaptability* is often referred to in GE simply as a desirable attribute, whereas in CD it refers to a specific theory, elaborated and empirically tested over more than 30 years (Byington, Felps, and Baruch 2018; Fouad and Kozlowski 2019).

In addition to our metaphorical description of the landscapes of GE and CD research, we can observe actual geographic differences between networks and certain sub-clusters. Much of the GE network is published in British or Australian based higher education journals, with American journals notably absent. In contrast, the CD network is primarily published in American journals, with relatively

few publications from British, European or Australian journals. Consistent with I/O psychology's bridging position between the GE and CD networks, the I/O psychology informed sub-clusters of perceived employability and career orientations are more diverse and made up of European, Asian, and Australian researchers.

### ***Implications for research and practice***

What concerns us about the lack of exchange between GE and CD researchers is the missed potential for theory and evidence from one field to enrich the other, which ultimately means that their collective efforts to understand and support students' careers and employability learning is less cohesive than it could be. We also note the risk for the 'jingle-jangle' fallacy to take hold, where-in scholars in their disciplinary silos apply the same label to different concepts or different labels to the same concept (Block 1995). Jingle jangle errors confound clarity on one hand and create redundancy on the other, and together impede the recognition of aligned research that could contribute to shared theoretical and practical insights.

A lack of dialogue between GE and CD scholars is not surprising, given that they operate in the systems and cultures of different disciplines, nor is our noting it a criticism of scholars in either field. Our intention in drawing attention to this gap is to argue for the value to be gained from closing it by pursuing an integrative approach to careers and employability learning in higher education.

GE researchers have much to gain from CD theory and evidence in their efforts to understand and assist their students' employability and career success. First and foremost is SCCT, on which the bulk of the research in the CD network research is founded. SCCT provides a richly theorised and extensively tested account of how people make career decisions, learn from career-related experiences, develop confidence, and adopt proactive career behaviours (Lent and Brown 2013). In addition, the body of research into CD barriers, particularly marginalisation due to race, gender, social class, sexuality, and disability (Byington, Felps, and Baruch 2018; Fouad and Kozlowski 2019), could inform the work of scholars and practitioners concerned with equity of access to and success in higher education for students from marginalised groups. Finally, research from the career orientation cluster offers several theories that can inform how students adapt to change, adopt proactive and optimistic mindsets and behaviours, and find meaning in their work. It is in this cluster that we already see some integration of CD theory and evidence into GE research focused on students' and graduates' identities, perceptions, and dispositions (Donald, Baruch, and Ashleigh 2019b; Jackson and Tomlinson 2020, 2019; Monteiro et al. 2020).

CD researchers also stand to gain from greater exchange and integration with GE research, primarily by opening up their disciplinary and professional boundaries and contextualising their findings with broader research into university graduates' employment and career success. In particular, CD researchers could draw on critical social GE research as they respond to calls for more intersectional and phenomenographic research into how social identities affect people's lived experience of higher education, work and careers (Fouad and Kozlowski 2019). In addition, the insularity of the CD field has limited its ability to influence public policy, university strategies, and the professional practice of careers and employability education (Fouad and Kozlowski 2019). CD researchers and practitioners are concerned that those outside the field, particularly senior managers who make resourcing decisions, do not value the foundations of theory and evidence that underpin their profession, (Brown et al. 2019). CD scholars stand to learn from their GE peers about how to contextualise their research in higher education policy and pedagogy, particularly with regard to implications for practice and policy.

### ***Limitations and future research***

A direct citation analysis such as we have conducted here has some inherent limitations. Firstly, citations are not neutral or objective data. Citation practices are complex cultural behaviours that differ

between disciplines, serve diverse rhetorical, strategic, and ideological purposes, and by no means represent the entire intellectual constitution of a scholarly discourse (MacRoberts and MacRoberts 2018). Most importantly, citation metrics should not be used uncritically as proxies for scholarly influence or merit. Secondly, our data for this study was limited to journal articles indexed by WoS and therefore excluded other forms of academic and professional publishing, such as books, chapters, conference proceedings, and reports. Nor can our study account for informal or unpublished communications among research networks. Finally, citation analyses have an inherent time lag, because publications accumulate citations over many years, and more accurately capture historical rather than current research trends.

The present research is the first time that the disciplinary boundaries between GE and CD research have been analysed. Further research may explore GE and CD as higher education communities of practice (Tight 2008) using other forms of bibliometric analysis such as co-citation or co-authorship. Further research could also employ large scale content analysis (Daenekindt and Huisman 2020), or critical and qualitative analytical lenses recommended for higher education research more broadly (Clegg 2012; Trowler 2014). In addition, this analysis of the scholarly literatures of GE and CD could be complemented by a similar study comparing how GE and CD practice is approached in terms of institutional strategy and professional practice. Finally, although we have briefly described some current and potential intersections of GE and CD research, there is a need for a more comprehensive account of the affordances of CD theory and evidence in GE research and practice.

## Conclusion

Our visualisations and analysis of the direct citation networks between GE and CD journal articles show that researchers in the two fields have indeed been working in parallel to answer similar questions university graduates' employability and career success. We have contributed a new bibliometric survey of GE literature, complimenting previous narrative and systematic reviews, which accommodates GE research's full thematic and disciplinary diversity. Similarly, we have provided a survey of key themes in CD research as it relates to university students.

In addition, we have provided an empirically-derived map of the main themes in GE and CD research and highlighted existing and potential areas of alignment between them. For GE scholars and practitioners, we point the way to research into the psycho-social processes that drive people's careers and employability success. For CD scholars and practitioners, we point to research into the socio-economic contexts, institutional systems, and curricular strategies within which university students' career and employability development happens. Further purposeful exchange between GE and CD researchers will enrich both fields of scholarship and, when applied to practice, inform an evidence-based, integrative pedagogy of careers and employability learning in higher education.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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### **4.3 Publication Records**

#### ***4.3.1 Submission Cover Letters***

The submission cover letter for this article will be presented on the following pages.



Michael Healy  
University of Southern Queensland  
West St, Toowoomba, QLD 4350, Australia  
michael.healy@usq.edu.au

16/05/2020

Dear Professor Goedegebuure,

We wish to submit an original research article entitled “Mapping graduate employability and career development in higher education research: A citation network analysis” for consideration by *Studies in Higher Education*. We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We have no conflicts of interest to disclose.

In this paper, we present visualisations of citation networks within 4068 journal articles focused on graduate employability and career development. We describe clusters of research on particular themes within them and consider the disciplinary landscapes that they reveal. We show that, despite their shared interest in the career success of university graduates, there is limited exchange between researchers in the fields of graduate employability and career development. We consider the disciplinary differences that may explain this gap between the fields and highlight areas where research interests in each may align.

We note that some articles which draw on both graduate employability and career development have been published recently in *Studies in Higher Education* (Monteiro et al. 2020; Tomlinson and Jackson 2019). We argue that this promising trend should continue, because greater exchange between the two fields will enrich both and inform an integrative pedagogy of careers and employability learning in higher education.

We believe that this manuscript is appropriate for publication by *Studies in Higher Education* for several reasons. First, it is focused on an increasingly important element of higher education strategy and policy: how well universities enable their graduates to achieve their employment and career goals. It contributes a new survey of the graduate employability literature, in which *Studies in Higher Education* is a leading journal. It builds on theoretical considerations of the disciplinarity of higher education research (Trowler 2014) and employs bibliometric methods that have been used to explore networks and themes in higher education research (Calma and Davies 2015; Kim, Horta, and Jung 2017; Pan and An 2020) published in *Studies in Higher Education*.

Thank you for your consideration of this manuscript. Please address all correspondence concerning this manuscript to me at michael.healy@usq.edu.au

Sincerely,

Michael Healy

***4.3.2 Response to Reviewers***

The response to reviewers of this article will be presented on the following pages.

Michael Healy  
University of Southern Queensland  
West St, Toowoomba, QLD 4350, Australia  
michael.healy@usq.edu.au

16/05/2020

Dear Dr Schneijderberg,

Thank you for forwarding us the reviewer comments for our article “Mapping graduate employability and career development in higher education research: A citation network analysis”, submitted to Studies in Higher Education on May 16th, 2020.

We appreciate this opportunity to receive feedback on our article and improve it accordingly. We are pleased to read that both reviewers accept the premise and main arguments of the article and recognise the contribution that it makes to the graduate employability literature. We also appreciate both reviewers’ comments on the quality of our writing.

We have read both reviewers’ comments carefully and see that their questions are focused on two main points: the research method and supporting literature. Indeed, the reviewers’ comments have exposed some lack of clarity in our description of how we collected and analysed our data. In response, we have elaborated on our methods of data collection and analysis to answer the reviewers’ questions and clarify areas of confusion. We have also sought to incorporate some more current and diverse literature throughout the manuscript as suggested by reviewer one. In addition, we have conducted a further copy edit to correct the error noted by reviewer two (comment 5) and make further minor corrections and stylistic revisions.

We have summarised reviewer comments and described our responses to them in detail in the attached file "response to reviews, Mapping graduate employability and career development in higher education research".

Please pass this account of our revisions, along with our sincere thanks for the kind and constructive feedback on our article, to each of the reviewers. We look forward to receiving further feedback on our article.

Yours sincerely,  
Michael Healy

**Comments regarding research method**

<b>Comments</b>	<b>Our response</b>	<b>Location in revised manuscript</b>
Reviewer 1, comment 1; Reviewer 2, comment 1	<p>“provide a brief justification for the choice to use Web of Science”;  “Why did the author(s) rely exclusively on WoS for collecting data?”</p>	<p>The reason for using only WoS is primarily technical in nature, as other comparable databases, such as Scopus and Google Scholar do not allow for export of full bibliographic data, including cited works, of all search results. Furthermore, CitNetExplorer is optimised to accept WoS bibliographic export files directly, whereas Scopus export files are not structured with sufficient precision to work in CitNetExplorer without further processing (van Eck &amp; Waltman, 2014). Although we recognise that there are differences in the coverage of scholarly publications between WoS and other databases, we are satisfied that for the purposes of this citation network analysis, WoS provides an accurate representation of the GE and CD literatures.</p> <p>We have made these reasons explicit in the data collection section.</p>
Reviewer 1, comment 1; reviewer 2, comment 4	<p>“provide [...] some further justification for choosing the specific search terms”;  “Please discuss the approach used for selecting the search terms”</p>	<p>Our selection of search terms was informed by our existing knowledge of common terminology in the GE and CD literature, as can be seen in several key literature reviews (Artes et al., 2017; Byington et al., 2018; Whiston et al., 2017). We also made an effort toward an inclusive search by including terms not directly synonymous with GE, but often closely connected, such as “professional identity” and “graduate attributes”.</p> <p>In the data collection section, we have been more explicit about how we derived our search terms and</p>

		included the citations stated above to illustrate their precedent in extant literature reviews.	
Reviewer 1, comment 2	“were there any differences in the results or clusters between the top 100 articles and those not in the top 100?”	<p>The visualisations display only 100 articles at a time for the purpose of legibility, but the full citation network of 4068 articles forms their position and relationships on the map. All networks and clusters were derived from analysis of all 4068 articles.</p> <p>We have stated this more explicitly in the first paragraph of the results section.</p>	Page 6, lines 36-50
Reviewer 1, comment 2	“could a further limitation of the study be that total citation counts for papers are skewed based on whether the papers referencing them are in the Web of Science directory?”	<p>When we refer to an article’s citation count in the results section, we are referring to the number of citation links that article shares with other articles in the analysis, not that it has in WoS itself or any other database.</p> <p>We have stated this more explicitly in the first paragraph of the results section, added an explanation to the supplementary file, and described citation scores and links as “internal”.</p>	<p>Page 6, lines 42-43</p> <p>Supplementary file “Full GE and CD network and cluster data.xlsx”</p>
Reviewer 2, comment 2	“What were the inclusion and exclusion criteria used? The search generated 4068 articles. Of these 868 publications were included in the GE network and 982 in the CD network. What about the remaining publications?”	Not all articles are assigned to a cluster, as we set a minimum cluster size of 60 articles to reduce noise in our analysis. This function of CitNetExplorer takes articles that are assigned to a cluster smaller than 60 articles and either assigns them to an appropriately related larger cluster, or excludes them from clustering altogether. The 2,218 remaining articles were not sufficiently connected to the GE and CD networks and component	

		<p>clusters. Some of these articles can be seen in fig. 1, in grey.</p> <p>We have described the technical process of clustering in greater detail, specifically the effect of the minimum cluster size, in the data analysis section. We have also made a more explicit reference to van Eck and Waltman (2017), in which the clustering algorithm is explained and demonstrated in detail. We have also explicitly reported the numbers of articles included and excluded from clusters in the first paragraph of the results section.</p>	<p>Page 6, lines 6-19 and 34-35</p>
<p>Reviewer 2, comment 3</p>	<p>“What criteria were used to group articles into GE and CD networks? It is clear from Table 1 and Table 2, the criteria that were used to identify the clusters within these two networks. This means that the author(s) first grouped the articles into GE and CD networks and in the second step, identified the clusters. The details in step 1 are missing.”</p>	<p>Reviewer 2 is correct that the clustering algorithm was applied in two iterations. The first resulted in four clusters: a large CD cluster, a large GE cluster, a professional identity cluster attached to GE, and a biomedical CD cluster attached to CD. In order to gain greater precision in the clustering, we drilled down to the larger GE and CD clusters and applied the algorithm again in turn, resulting in four additional clusters within each.</p> <p>We have more clearly stated the steps that we took to arrive at the two networks of 10 total clusters in the data analysis section.</p>	<p>Page 6, lines 21 - 28</p>

**Comments regarding supporting literature:**

<b>Comments</b>	<b>Our response</b>	<b>Location in revised manuscript</b>
<p>Reviewer 1, comment 3</p>	<p>“There are quite a few papers published since 2016 written by career theory scholars looking at career orientations (which I am assuming, although perhaps incorrectly, includes protean and boundaryless or bounded careers). Are these papers still a minority of the overall? Or should this say largely pursued by scholars in the adjacent field of I/O psychology "and by career theory scholars?"”</p>	<p>Reviewer 1 is correct to note that career orientations is a relatively recent trend in CD research and that is conducted by both I/O scholars and vocational psychologists. Career orientations research is still in the minority compared to the career exploration and decision-making and career decision-making clusters (155 articles, compared to 386 and 275, respectively). However, as noted by Fouad and Kozlowski (2019) and Byington et al., (2018), and in our article in the Results section, career orientations is a growing research interest in the field. In the discussion section, we also note that the career orientation research is where there is the greatest existing integration between GE and CD research.</p> <p>Some articles about protean and boundaryless careers do indeed appear in this data set, in the career decision-making difficulty, perceived employability and career orientation clusters. We also recognise the influence of these theories in GE research in general. However, protean and boundaryless careers do not feature in this study because the seminal works of Arthur and Rousseau (1996) and Hall (2002) are books, and therefore not included in this study, and because not many (approximately 10) related journal articles were captured by our search.</p>

		We have revised the sentence in the results describing the career orientation cluster to include vocational psychology researchers as well as I/O researchers as people investigating career orientations. We have also cited protean and boundaryless careers in our description of the career orientation cluster in table 2.	Page 7, lines 47-51 Page 17, lines 26-28
Reviewer 1, comment 4	"At the individual level, much GE research has emphasised human capital, enumerating lists of crucial employability skills or graduate attributes". Would it be possible to add a couple of references here? For example, there is an empirical quantitative paper published online in 2017 and in printed form in 2019 in Studies in HE that covers all of these aspects looking at the undergraduate self-perception of graduate employability."	We recognise that this section required some elaboration. We have revised the "GE literature" section to better describe and cite support for our characterisation of GE literature. We believe that the article reviewer 1 is referring to here is Donald et al. (2019) and have incorporated it here and in other sections. If we are incorrect about which article reviewer 1 was referring to, we will appreciate correction.	Page 3, lines 45-52
Reviewer 1, comment 5	"Just over a third (16 of 46) of the references come from 4 authors (Jackson 5, Tomlinson 4, Tight 4, Bridgstock 3). These references are valid in terms of supporting what is claimed. However, in the majority of these cases there are papers published in 2017, 2018, 2019, or 2020 that would also support the same claim."	We appreciate reviewer 1's recommendation to include more diverse and current literature in our article. We have included a number of new references from the sources suggested by reviewer 1, and others. We have also removed or updated some other references, in an effort to reduce the number of references. In doing so, we have reduced the bias toward Jackson, Tomlinson, Tight, and Bridgstock, and recognise that our revision is stronger for it.  Specifically, we have: <ul style="list-style-type: none"> <li>Revised the references in our introductory paragraph</li> </ul>	Page 1, lines 39-53



		<ul style="list-style-type: none"> <li>• Revised our references for general overviews of GE research</li> <li>• Added references to accounts of pedagogical approaches to GE</li> <li>• Revised the paragraph in which we describe research into individual GE, with additional references as suggested by reviewer 1</li> <li>• Revised the “Career development in Graduate Employability” section to better describe the extent of exchange between GE and CD scholars, supported with additional references</li> <li>• Removed a reference from our methods section describing other citation network analyses, to be more illustrative than comprehensive and to reduce the number of references</li> <li>• Removed a reference in the results section to Tight (2012) with Tight (2014), to reduce total number of references.</li> <li>• Removed a specific reference to Jackson (2016) to more accurately describe the relationship between the professional identities and graduate employability clusters, and reduce the total number of references.</li> </ul>	<p>Page 1, line 52-53</p> <p>Page 3, lines 42-44</p> <p>Page 3, lines 20-30</p> <p>Page 4, lines 48-56; page 5, lines 3-7</p> <p>Page 5, line 24</p> <p>Page 7, lines 20-21</p> <p>Page 7, lines 25-28</p>
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		<ul style="list-style-type: none"> <li>• Revised the “Citation links between GE and CD” section to more accurately describe the exchange between GE and CD research.</li> <li>• In the discussion section, replaced new reference to Johnston (2018), referring to career adaptability research, with existing references Byington et al. (2018) and Fouad and Kowzłowski (2019) to reduce the number of references</li> <li>• In the implications for practice section, replaced new reference to Blustein et al. (2016), referring to the CD of marginalised groups, with existing references Byington et al. (2018) and Fouad and Kowzłowski (2019) to reduce the number of references</li> <li>• In the limitations and further research section, removed a redundant reference to Tight (2004), leaving Tight (2008) to support the same point.</li> </ul>	<p>Page 8, lines 10-30</p> <p>Page 9, lines 23-24</p> <p>Page 10, line 10</p> <p>Page 10, line 55</p>
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## **CHAPTER 5: GRADUATE EMPLOYABILITY AS A PROFESSIONAL PROTO-JURISDICTION IN HIGHER EDUCATION**

### **5.1 Rationale**

After demonstrating the gap between graduate employability and career development scholarship in Healy et al. (2020), in my second article I turned my attention to the professional practice of higher education careers and employability. The aim of this article was to investigate the same gap that I knew to exist between the well-defined career development profession and the more diverse varieties of work in support of graduate employability in higher education.

This article follows a previous article on the higher education career development profession that I contributed to (Brown, J. L., Healy, M., McCredie, et al., 2019). In that article, we compared a small set of university career development practitioner job descriptions with the stated learning outcomes of Australian career development qualifications and the Career Industry Council of Australia professional standards (Career Industry Council of Australia, 2019) that those qualifications are based on. We noted that although the qualifications represent adequate entry-level qualifications, the contemporary professional practice of higher education career development practitioners requires several advanced, specialised skills., such as curriculum design or employer liaison (Brown, J. L., Healy, M., McCredie, et al., 2019). We took a position, previously stated by others in the career development community (Hiebert, 2009; Thambar et al., 2020), that contemporary career development practice needs to do more to recognise specialised expertise and encourage the development of that expertise through professional development and further study (Brown, J. L., Healy, M., McCredie, et al., 2019).

As with my first article in this PhD by publication, this research was born from a moment of happenstance. In 2019, I and some colleagues travelled to Vietnam to attend the annual Asia-Pacific Career Development Conference. One afternoon, after the day's proceedings, I and my

colleagues boarded a bus from the conference venue to our accommodation and, in doing so, struck up a conversation with two delegates from Canada, Candy Ho and her husband John Grant, who then joined us for dinner and drinks. Candy's recently completed doctorate focused on higher education professionals who are not themselves career development professionals, but nonetheless act as "career influencers" (Ho, 2019). After reading Candy's thesis, I realised that her notion of career influencers elegantly described certain characteristics of the broader higher education professional community with direct or indirect responsibility for student careers and employability success. I was especially taken by her concluding paragraph:

When student career development becomes every professional's responsibility, the *entire institution* becomes the career centre. The notion of student career success permeates and transcends beyond the physical career centre offices, becoming a mission shared by every professional because they see it as critical to the success of their institutions. Consequently, career centres become stewards of this important mission through the activation of career influencers: empowering professionals within their institutions to guide students towards their own career success (Ho, 2019, p. 138).

Candy's approach to the collective, collaborative sharing of responsibility for student career and employability success is a generous and collegial one, rather than the often cautious and defensive attitude that I had seen exhibited by many in the higher education career development community, and that I had often adopted myself.

Later that year, when Jason Brown and I were offered access to the Burning Glass labour market database (*Burning Glass FAQ*, n.d.) to investigate the job requirements of this professional community in Australian higher education and took the opportunity to initiate this

project. I invited Candy to join us, knowing that her notion of career influencers would provide an important conceptual foundation to our argument. Candy's involvement also inspired us to compare the North American model of Higher Education Student Affairs, an overarching profession which encompasses a range of specific services in support of university students (Fernandez et al., 2017; NASPA, 2020), with the diffuse nature of Australian student support services in general and employability in particular.

The writing of this article was an exercise in balance and diplomacy. We were, in effect, criticising our professional communities for being too tribal and not collaborative. Career development practitioners in Australia and around the world have long been struggling to be recognised as members of an expert profession (Gough & Neary, 2021; McIlveen & Alchin, 2017; O'Reilly, 2020; Patton, 2019; Yoon & Hutchinson, 2018) and we were careful not to undermine these efforts. However, as much as we set out to advocate for the role of the qualified career development practitioners as potential leaders in the higher education careers and employability learning community, we could not do so without noting that for some, their professional boundedness—often expressed as defensiveness against what they perceived as encroachment into their professional territory—impedes the extent to which they can effectively do so (Brown, J. L., Healy, M., McCredie, et al., 2019; Hobson et al., 2018; Thambar, 2018). While we were comfortable critiquing how senior leaders have conceptualised and resourced employability, we were more cautious about how we discussed the professional identities and attitudes of those doing the work with students. We picked up arguments by some scholars that career development practitioners need to better orient themselves toward collaborative, boundary crossing work (Bridgstock & Tippett, 2019; Dey & Cruzpvergara, 2014; Thambar, 2018). Our main critical focus was on how those who resource careers and employability learning work

understand graduate employability as professional practice, and how these conceptualisations might influence who does the work, and how.

Similar to the difficulty I had conceptualising graduate employability as a field of research until discovering the notion of moderate essentialism (Healy et al., 2020; Trowler, 2014), a key challenge in this article was how I conceptualised graduate employability as a non-academic profession in higher education. Higher education professional staff are more often defined as “non-academic” rather than as skilled professionals, working in a range of support, administrative, or management functions. Higher education professional staff often experience challenges in having their credibility recognised (Little & Green, 2021) and exerting influence in their professional domain (Kallenberg, 2020), in the higher education professional environment where social capital economies are based so strongly on academic credentials and positions.

I was aware of existing conceptualisations of higher education professional staff, notably Whitchurch’s (2009, 2012) notion of third space professionals and Schneijderberg and Merkator’s (2013) notion of “overlap” between administrative and academic roles. Whitchurch’s (2009; 2012) work provides the conceptual basis of much research into higher education professional staff, noted for its description of the emergence of a “third space” between traditional academic and professional domains, where work is conducted around “bundles of activity” (p. 27) focused on specific projects and strategic concerns, such as graduate employability. For those doing that work, Whitchurch (2009, 2012) outlined certain dispositions that describe how the third space is inhabited and experienced: bounded, boundary crossing, unbounded, and blended. As noted, career development professionals are often noted as having more bounded dispositions and struggling with boundary crossing, unbounded, or blended work (Hobson et al., 2018). The various graduate employability professional roles in higher education

tend not to be as bounded and therefore more oriented toward boundary crossing, unbounded, or blended ways of working.

However, I was not satisfied that the conceptualisations described above were adequate for how I was starting to understand the broader professional domain of careers and employability. Firstly, I recognised that the work of Whitchurch (2009, 2012) was founded in relatively narrow empirical evidence, on data drawn from small samples of higher education professional staff who I did not consider representative of those under investigation in my research. Secondly, I was troubled by the loose and varied definition of higher education professionals, which complicated our reading of the literature. Between articles, the professional jurisdictions under investigation are often so different—including administrative staff, managerial staff, enterprise services staff in areas such as finance and human resources, and specialised professionals such as educational technologists and research coordinators—so as to make the broader descriptor “professional staff” meaningless for the purpose of comparison and synthesis.

The theoretical conceptualisation of this article required some further reading in a new field, the sociology of professions, where I found the notions of professional ecologies (Abbott, 1995, 2005) and proto-jurisdictions (Blok, 2020; Blok et al., 2019; Liu, 2018) upon which our analysis rested. This body of literature provided us with a more nuanced conceptual account of how diverse communities of professionals interact over fields of common concern, than we found in the higher education professional staff literature. How these fields of common concern can, sometimes, coalesce into proto-jurisdictions allowed us to conceptualise careers and employability learning professionals as collectively inhabiting a professional ecology, without attempting to draw hard boundaries around or between them.

In writing this article, it was important for me to theorise our data, job advertisements, as socio-cultural *boundary objects*, particularly as they relate to how boundaries between jurisdictions are demarcated (Abbott, 1995; Akkerman & Bakker, 2011; Bechky, 2003; Blok et al., 2019; Meilvang, 2019). Accordingly, I and my co-authors analysed the job advertisements as boundary objects with which we could observe jurisdictional boundaries between graduate employability specialty areas and the ways in which people are recognised as members of those professional communities, or not. Job advertisements are sometimes recognised implicitly as boundary objects in public discourses and debates, such as when representatives of the Career Industry Council of Australia publicly critique job advertisements for careers and employability learning roles which make no mention of relevant qualifications or professional standards.

The publication of this article coincided with the release of a framework for professional pathways from the British Association of Graduate Careers Advisory Services (*Professional Pathways*, 2021), a project lead by Nalayini Thambar, whose work was an important foundation of our research (Thambar, 2018; Thambar et al., 2020). This framework is designed to complement the association's membership standards and code of ethics, describing twelve specialised facets of higher education careers and employability work and "mapping out the professional knowledge, distinguishing professional skills, professional attributes and indicative professional qualifications and training that should be reasonably expected at an Entrant, Established or Experienced level of practice" (*Professional Pathways*, 2021, p. 2). We hope that our article might inspire the development of a similar framework in Australia, which recognises the increasing diversity and specialisation of contemporary careers and employability learning work (Brown, J. L., Healy, M., McCredie, et al., 2019; Thambar et al., 2020), while maintaining certain fundamental standards of professional expertise and quality.



This article was initially submitted to the journal *Higher Education Research and Development* on 13 December, 2020, for the reasons stated in the covering letter included below. We received notice of that journal's rejection of our manuscript on 17 January, 2021, on the basis that the journal has an international audience and our article was too focused on Australian higher education. Of course, rejection always stings and we were frustrated by the position of the editor, given the frequent publication of country specific articles in the journal (Small et al., 2021). Nonetheless, we revised the article based on that feedback and resubmitted it to *Higher Education* on 15 February, 2021. We were invited to complete minor revisions on 10 June and our revised manuscript was accepted on 21 June and published online on 8 July, 2021.

I was gratified by this publication, written with two valued colleagues and published in a leading international higher education research journal. It is important to me as it is the most explicit example of my advocacy for my professional community, to whom I consider this article an act of service.

## **5.2 Version of Record**

The version of record of this article will be presented on the following pages.



## Graduate employability as a professional proto-jurisdiction in higher education

Michael Healy<sup>1</sup>  · Jason L. Brown<sup>2</sup> · Candy Ho<sup>3</sup>

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### Abstract

Much research into how universities seek to support their students' graduate employability has focused on academic strategies such as graduate attributes and work-integrated learning, or the employability benefits of part-time work, volunteering, and extracurricular activities. However, the work of the professional staff who support these strategies is seldom addressed. In this article, we report findings from our documentary analysis of 376 Australian university job advertisements for professional roles directly responsible for graduate employability programs and services. We characterise employability as a proto-jurisdiction: an ecology of distinct forms of professional expertise and responsibility with ambiguous, elastic, and porous boundaries. We argue that despite the importance of graduate employability to institutions' strategic and students' individual goals, it is as yet an inchoate field of professional practice, consisting of a diverse range of work tasks, functions, and projects. We discuss implications in relation to quality, coherence, and the strategic resourcing of employability support in higher education.

**Keywords** Graduate employability · Career development · Higher education professionals · Higher education student affairs

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## Introduction

In the competitive higher education market of the twenty-first century, graduate employability has become a core element of universities' educative, social, and economic missions. Policy-makers in countries around the world have put employability at the heart of educational reforms, although frequently viewed through the narrow lens of graduate employment outcomes rather than more holistic, lifelong conceptions of careers and employability success (Divan et al., 2019; Sin & Amaral, 2017). In Australia, the federal government has recently introduced several policies into their *Job Ready Graduates* higher education funding and oversight frameworks which attempt to influence students into particular pathways and incentivise universities to support student retention and success (Department of Education, Skills, and Employment, 2021). In addition to policy pressures, employability also drives market pressures, as universities compete to attract students with assurances about future returns on their investments into their education (Divan et al., 2019). In response to these political, economic, and market pressures, universities have adopted a variety of pedagogical and strategic approaches in their efforts to support students' careers and employability learning (Healy et al., 2020) and employability capital development (Nghia et al., 2020).

Much research in higher education has focused on academic strategies which contextualise and embed employability within the curriculum of particular disciplines, such as graduate attributes (Hammer et al., 2020) and work-integrated learning (WIL; Jackson, 2017). Some have recognised career management skills, career identity, and proactive career behaviours as fundamental drivers of employability (Bridgstock et al., 2019; Healy et al., 2020). Most of this literature implicitly characterises the work of supporting students' employability as a primarily academic responsibility, through the design and delivery of academic curricula aligned with the skills and knowledge required for professional work, although the degree to which academics accept this responsibility varies (Sin & Amaral, 2017).

Although researchers often investigate the impact of employability strategies inside and outside the curriculum (Healy et al., 2020), the work of the professional staff who manage or support those strategies is seldom considered in detail. Professional staff tend to be defined first by what they are not, as "non-academic", rather than by what they are: skilled, experienced, and qualified professionals working in universities' support, administrative, or management structures (Schneijderberg & Merkator, 2013; Whitchurch, 2012). Some employability researchers have recognised the contribution that career development practitioners (CDPs) make to employability strategies, particularly through the integration of career development learning into the curriculum (Bridgstock et al., 2019). Careers and employability support has also been cited as an example of a strategic project that crosses institutional and professional boundaries of higher education professional staff (Schneijderberg & Merkator, 2013; Whitchurch, 2012). However, only a few researchers, for the most part themselves CDPs, have explored the identities and experiences of careers and employability professional staff (Brown et al., 2019; Christie & Burke, 2018; Hobson et al., 2018).

Consider an undergraduate student about to embark on an internship through an elective work-integrated learning course. Her interest piqued by a video promoting work-integrated learning posted to the university's social media, she visits a student life advisor to learn more. Referred to the university's work-integrated learning website, she finds an advertisement for an internship, secured by an employer liaison officer. After receiving feedback on her resume from a careers advisor, she successfully applies for the internship. She enrolls in the relevant course and submits the internship contract with the assistance of a work-integrated learning

administrator, and is now completing an online pre-internship professional code of conduct module developed by an educational designer. Our student's journey through this crucial employability-building experience has been supported by the work of several professional staff, working largely independently of each other, even before she encounters the academic staff member responsible for teaching her work-integrated learning course.

As illustrated by our vignette above, employability-focused professional roles involve a diverse range of work tasks, functions, and projects. Typical responsibilities include supporting curricular activities such as work-integrated learning or careers and employability learning, providing student advisory services such as career centres or student information hubs, and supporting students in extra-curricular activities such as leadership development programs or volunteering. Such roles may be located in a range of different organisational units or divisions, each with their own strategic priorities, operational structures, and professional cultures. As much as different groups of professionals make important contributions with their particular expertise, it should not be taken for granted that they understand or approach employability in the same way.

In this article, we report findings from a documentary analysis of 376 Australian university job advertisements for professional roles directly responsible for graduate employability programs and services. We consider the work of supporting graduate employability as a professional "proto-jurisdiction": an ecology of related but loosely linked professional tasks, roles, and responsibilities (Abbott, 2005; Blok et al., 2019; Liu, 2018). In doing so, we seek to answer the following research questions:

1. What are the characteristics of the professional ecology of employability in Australian higher education, and its component specialty areas?
2. How are jurisdictional boundaries expressed in the job advertisements of this professional ecology?
3. What are the implications of this professional ecology's jurisdictional composition for the cohesion, quality, and sustainability of institutional strategies in support of employability?

We also contrast Australia's proto-jurisdictional professional ecology with the more cohesive North American professional model of Higher Education Student Affairs (HESA). We argue that although the distribution of responsibility for supporting students' employability is broadly positive, there should be some caution regarding the coherence and quality of how employability is understood professionally and resourced strategically in contemporary universities.

### **Professional staff in support of graduate employability**

Higher education researchers have described several conceptualisations of contemporary professional staff. Common among them is an emphasis on the blurred boundaries between professional jurisdictions and consequent blurring of professional identities (Ryttberg & Geschwind, 2019; Schneijderberg & Merkator, 2013; Whitchurch, 2012). Whitchurch (2012) described the emergence of a "third space" between academic and professional domains, where work coalesces around "bundles of activity" (p. 27) focused on particular institutional projects. She outlined four dispositions that describe how professionals might inhabit the third space: bounded, boundary crossing, unbounded, and blended. Similarly, Schneijderberg and Merkator (2013) positioned higher education professionals in multilateral "overlap" areas between administrative and academic functions.

Third space presents both opportunities and challenges for higher education professional staff. The opening up of the binary distinction between academic and non-academic roles has enabled skilled professionals to engage more effectively in cross-institutional collaboration, respond with agility to change and opportunity, and cope with ambiguity (Whitchurch, 2012). New forms of non-academic professional careers have emerged, which allow some professional staff to exercise greater adaptability, agency, and autonomy in their work, as expert professionals in their own right (Ryttberg & Geschwind, 2019; Smith et al., 2021; Whitchurch, 2012). However, higher education remains a professional environment in which credibility (Little & Green, 2021) and influence (Kallenberg, 2020) are subject to complex economies of social capital. The third space can take on different qualities, presenting different challenges for those who work within it, depending on how an institution structures, supports, and recognises boundary crossing projects (Smith et al., 2021; Whitchurch, 2012).

The professional boundaries of the third space are not discrete lines to be crossed, they are multi-faceted and shifting spaces to be inhabited. In this article, we extend these descriptions of professional work in higher education with the notion of proto-jurisdictions: ecologies of distinct forms of professional expertise and responsibility with ambiguous, elastic, and porous boundaries (Abbott, 2005; Blok et al., 2019; Liu, 2018). In Abbott's (2005) ecological approach to the sociology of professions, boundaries between professions do not simply appear where professions, as stable social entities, intersect. Rather, boundaries precede professions, in the sites of difference between ways of approaching or understanding common concerns. When a number of such sites of difference appear to coalesce, they can be "yoked" together by professional, academic, or political agents, potentially resulting in the birth of a new profession (Abbott, 2005; Liu, 2018). These germinal spaces of professionalisation have been described as proto-jurisdictions: "elastic and ambiguous arenas" (Blok et al., 2019, p. 589) where various professional groups lay claim to novel professional expertise and, in doing so establish, maintain, extend, or contest jurisdictional boundaries (Liu, 2018).

Both Whitchurch (2012) and Schneijderberg and Merkator (2013) have cited careers and employability support roles as examples of their respective models of professional work. Where CDPs have traditionally occupied a central position in this professional ecology, an increasing range of professional roles outside of career development are warranted to support students' employability. Although career development is a relatively distinct profession in higher education, the broader professional community clustered around employability lacks common foundations of theory and evidence and is too diverse in its professional practice to be considered a single coherent professional jurisdiction. Therefore, we propose that the work of professional staff in support of graduate employability is best understood as a proto-jurisdiction performed in often ambiguous and inchoate fields of higher education professional work (Blok et al., 2019; Liu, 2018).

### Career development professionals

Over the last two decades, CDPs around the world have worked toward the professionalisation of career development practice, largely through the establishment of professional associations, codification of standards, and recognition of credentials (Gough & Neary, 2021; Yoon & Hutchinson, 2018). In Australia, the peak body Career Industry Council of Australia (CICA, 2019) has provided guidance over professional standards and qualifications. Graduate certificates in career development, requiring the completion of one-quarter of the units of study required for a Master's degree, are broadly accepted as entry-level qualifications for university

CDPs (Brown et al., 2019). The National Association of Graduate Careers Advisory Services provides professional development, networking, and benchmarking for Australian university careers services leadership and staff.

Contemporary higher education CDP work is shifting from its traditional focus on individual or small group career counselling and job seeking support, toward contributing to larger scale institutional strategies, such as embedding CDL into the university curricula, developing employability award programs, or connecting students with employers in mentoring programs (Bridgstock et al., 2019; Brown et al., 2019; Dey & Cruzvergara, 2014; Thambar, 2018). CDPs employ a range of educational technologies to enable greater reach and access and reduce the labour cost of delivering such programs (Knight et al., *in press*). In their study of Australian careers service staff, Brown et al. (2019) identified five main functional roles in Australian careers services—career counselling, employer liaison, careers and employability education, leadership, and administration and project management—and noted that generalist roles are more common than specialised roles.

CDPs tend to show strong commitment to their profession and confidence in the nature and value of their expertise (Gough & Neary, 2021; Thambar, 2018). However, this strength of CDPs' professionalisation has caused unintended consequences which can impede their alignment with institutional employability strategies. Research focused on university CDPs has frequently noted constraints and challenges related to their professional designation, institutional influence, and bounded professional identities (Brown et al., 2019; Hobson et al., 2018; Thambar, 2018). Explaining these tensions, Thambar (2018) suggested that CDPs experience tension in reconciling their professional with their organisational identities, the former shaped by external qualifications and associations, the latter by institutional positions and strategic priorities.

Recently, there have been arguments for better orienting CDPs to the cultures and systems of higher education (Brown et al., 2019; Dey & Cruzvergara, 2014; Thambar, 2018), which requires, to some degree, loosening the boundaries of the profession. A common theme is that CDPs should take their place in “connected communities” (Bridgstock & Tippet, 2019; Dey & Cruzvergara, 2014; Peck, 2017), formed across institutions' jurisdictional boundaries, and share responsibility for supporting students' careers and employability development with academics, educational designers and technologists, and other partners. This diversification of tasks requires CDPs in higher education to develop additional forms of specialised expertise, such as curriculum development (Brown et al., 2019) and research and evaluation (Winter, 2018), and to learn how to navigate the complex academic cultures of credibility and influence.

### Employability professionals

In contrast to the career development profession, there is no distinct employability profession in higher education. In addition to being a focus of some academic roles, employability provides the warrant for a range of professional roles in different areas: student life, engagement, and extracurricular activities; work-integrated learning; volunteering, study abroad, and leadership programs; alumni, industry, and community engagement; and learning support and skills development, among others.

In Australia, there has been some effort to coalesce employability as a professional and scholarly community of practice through dedicated networks, conferences, and journals. However, professional accreditation, cohesion, and connection are more likely to happen at the level of the specific focus area of the role than in any overarching community. Relevant professional associations or networks include the Australia New Zealand Student Services



Association; the Association for Tertiary Education Management; the Australian Collaborative Education Network; the Students, Transitions, Achievement, Retention, and Success network; and the Australian Association of Graduate Employers. Although these groups may offer professional development activities, in Australia there are no dedicated university qualifications for the employability proto-jurisdiction as there are for career development (Ludeman et al., 2020). Similarly, although some professional communities may be guided by a code of professional standards offered by their respective associations, many are not, and there is no overarching model of professional practice for the employability professional community in general.

### Higher education student affairs professionals as career influencers

The diffuse nature of Australian employability work is in contrast to the North American professional model of HESA, an umbrella term which encompasses a range of services supporting the whole student throughout the course of their studies, including admission, enrolment, and financial aid; counselling, health, and wellness; career development and employment; diversity and inclusion; residence and campus life; sports, recreation, and extracurricular activities; student conduct, safety, governance, and advocacy; student media; and alumni engagement (Fernandez et al., 2017; NASPA, 2020). Although HESA professionals develop specialist expertise in their respective areas, they also share certain theoretical foundations and principles of practice, by way of dedicated HESA graduate qualifications and professional standards frameworks. HESA graduate qualifications typically combine core courses in student development, educational leadership, and higher education policy with electives and professional experience courses in the students' chosen specialty. Similarly, professional competency frameworks in Canada (Fernandez et al., 2017) and the USA (NASPA, 2020) recognise the importance of specialist expertise, while recognising certain competencies that underpin HESA as a professional practice in its own right.

Career development is a well-established specialisation within HESA, but the broader HESA community is also recognised as supporting students' career development and success (Ho, 2019; Peck, 2017), although the term employability is not commonly used in North American higher education (Healy et al., 2020). When students seek career support, rather than turning first to their university's career services, they may be more likely to approach professionals with whom they regularly interact (Dey & Cruzvergara, 2014; Ho, 2019). In her study of Canadian HESA professionals, Ho (2019) recognised as "career influencers" those who, serving in their own professional capacity, fulfil seven primary functions that enhance student career development: advising, guiding, counselling, teaching, advocating, liaising, and leading. Yet, due to the informal nature of their career development support, the contribution of career influencers often goes unrecognised and they may not be fully equipped with appropriate professional skills or knowledge. This leaves much untapped potential for CDPs to support and collaborate with career influencers from the broader employability proto-jurisdiction, establishing connected communities (Dey & Cruzvergara, 2014) or ecosystems of holistic student support (Peck, 2017), in order to best help students enhance their employability and achieve career success.

### Methods

We conducted a documentary analysis (Tight, 2019) of job advertisements for Australian university positions substantively responsible for supporting student career development and

employability. Job advertisements have frequently been used as data for research into professions, most often to explore the skills deemed valuable in particular fields (Harper, 2012). Documents should not be taken for granted as neutral textual records, but understood as social instruments created by actors with particular interests, for particular purposes, and for particular audiences (Tight, 2019). Accordingly, job advertisements can be viewed as “boundary objects” which inscribe jurisdictional boundaries by indicating who will be recognised by the recruiting professional community, and who will not (Blok et al., 2019).

In Australia, employment in higher education is governed by collectively bargained employment agreements. Although there are some differences between each university’s employment agreement, there is enough uniformity to allow us to code and analyse job advertisements across universities. Most importantly, the Higher Education Worker (HEW) level of professional roles, which range from HEW3 (student or trainee) to HEW10 (executive director), is a reliable indicator of the seniority and expected degree of independent professional expertise for roles, across universities.

### Data collection

We gathered job descriptions from the database of Burning Glass Technologies, a labour market analytics company which scrapes, parses, and archives job advertisements from approximately 40,000 job boards and company websites. We searched the Burning Glass database for advertisements from Australian universities including the keywords “employability” or “career development”. The search results initially included 2,211 job advertisements, from which we excluded academic positions, advertisements in which employability featured only in branding statements or descriptions of the broader remit of divisions and units, and senior leadership positions for which employability was only one of several high-level strategic responsibilities. We also excluded advertisements that did not contain sufficient information for a full analysis. After exclusion, our data set included 376 professional job advertisements, from 2013 to 2019 and from all universities in Australia except one, for which no relevant job advertisements were found in the Burning Glass database.

### Data analysis

We imported the job descriptions into NVivo 12 data analysis software for coding and applied a deductive template analysis to the data. In template analysis, a priori themes inform an initial coding template which is tested on a subset of the data, then revised and refined for further coding (Brooks et al., 2015). Our coding template, shown in Table 1, was based on common features of higher education job advertisements and a list of specialised roles based on findings from Brown et al. (2019). The first two authors tested the initial coding template and agreed on refinements, compared and discussed coding decisions throughout the process, and moderated the coding of job advertisements together. The third author assisted in further coding moderation. After coding, we exported the data for further analysis and visualisation using R Studio statistical computing and graphics software.

Some elements of job advertisements, such as HEW levels and contract terms, were unambiguous and so were coded and analysed in a quantitative fashion. Other elements, such as specialisations and selection criteria, were more ambiguous and required some inference in coding and therefore coded and analysed qualitatively. Each role was coded qualitatively to a single specialisation according to the primary focus of the role, as described in Table 1. Each



**Table 1** Coding template and specialisation definitions.

Coding template	Specialisations
<b>1. Role level</b>	<i>Career development</i> roles provide a combination of careers and employability learning, counselling, and information services, as described in Brown et al. (2019).
1.1 Professional HEW3 to HEW10	
<b>2. Contract terms</b>	<i>Communications</i> roles promote student engagement with programs and services, employment and WIL opportunities, or information resources.
2.1 Full-time	
2.1.1 Full-time continuing	<i>Curriculum</i> roles develop careers and employability learning in the curriculum, usually in collaboration with academics.
2.1.2 Full-time fixed	
2.2 Part-time	<i>Employment and enterprise</i> roles directly assist students into employment or enterprise through placement services and entrepreneurship hubs.
2.2.1 Part-time continuing	
2.2.2 Part-time fixed	<i>Industry liaison</i> roles develop relationships with employers and industry bodies in order to source employment and WIL opportunities and promote employer involvement in careers and employability learning activities.
2.3 Casual	
<b>3. Organisational location</b>	<i>Research and evaluation</i> roles research the employability of students and graduates or evaluate careers and employability learning programs and services.
3.1 Careers service	
3.2 Other organisational unit	<i>Student development</i> roles provide services that support students' employability as part of a broader mission to promote positive academic and social qualities, including student leadership, volunteering, extracurricular activities, study abroad, orientation, and student engagement.
<b>4. Role type</b>	
4.1 Administrative	<i>Work-integrated learning</i> roles support WIL and service learning with course design and delivery, administration of systems and process, quality assurance, student advising, and employer liaison.
4.2 General	
4.3 Leadership	
<b>5. Specialisation (see other column)</b>	
5.1 Career development	
5.2 Communications	
5.3 Curriculum	
5.4 Employment and enterprise	
5.5 Industry liaison	
5.6 Research and evaluation	
5.7 Student development	
5.8 Work-integrated learning	
<b>6. Selection criteria</b>	
6.1 Experience	
6.1.1 General experience	
6.1.2 Specific experience	
6.2 Qualifications	
6.2.1 General qualifications	
6.2.2 Specific qualifications	
6.3 Career development expertise	

role was coded qualitatively according to how specifically the required or preferred experience and qualifications were stated. Career development expertise was coded if the advertisement explicitly called for career development qualifications or experience.

## Findings

Table 2 shows the organisational location, contract terms, and role type for advertised roles in each specialisation. Full-time continuing roles accounted for 40% of all roles advertised. Roles in

Higher Education

**Table 2** Organisational unit, contract term, and role type of advertised roles, by specialisation.

	Career development (n = 132)	Communications (n = 14)	Curriculum (n = 14)	Employment and enterprise (n = 15)	Industry liaison (n = 37)	Research and evaluation (n = 7)	Student development (n = 92)	Work-integrated learning (n = 65)	Total (n = 376)
Organisational unit									
Careers services	93	7	6	8	20	1	21	8	164
Other units	39	7	8	7	17	6	71	57	212
Contract term									
Casual	7	1	0	0	0	1	0	0	9
Full-time continuing	49	5	5	4	20	1	43	23	150
Full-time fixed	59	7	7	10	15	2	39	26	166
Part-time continuing	3	0	0	0	1	0	1	6	11
Part-time fixed	14	1	2	1	1	3	9	10	41
Proportion of continuing roles	39%	38%	36%	33%	57%	14%	48%	45%	43%
Role type									
Admin	13	0	0	2	2	0	14	18	49
General	93	14	12	9	29	7	60	26	250
Leadership	26	0	2	4	6	0	18	21	77

careers services were less likely to be continuing, at 35% of advertised roles, than those in other organisational units, at 49%. The faceted bar plot in Figure 1 shows the frequency of roles at each HEW level in each specialisation; the definition of each specialisation is provided in Table 1.

Figure 2 illustrates the specificity of the experience and qualifications required for roles in each specialisation and at each HEW level. We assigned numeric values of -1 to each instance of general qualifications and experience, and 1 to each instance of specific qualifications and experience, before plotting each label according to the mean values of that group of roles. The dotted line on Figure 2 indicates zero on each axis. The position of each label indicates the degree to which qualification and experience requirements of each group of roles were stated in general or specific terms, as indicated on the axis labels. The size of each label indicates the number of jobs in that category, as shown in Fig. 1. For legibility, the exact location of each box on the scatter plot is approximate, as we applied a repel function to minimise boxes being plotted over top of each other. No roles in our data set required doctoral qualifications.

Our analysis of experience and qualifications as jurisdictional boundary markers (Blok et al., 2019) recalls the boundedness that others have noted in the career development

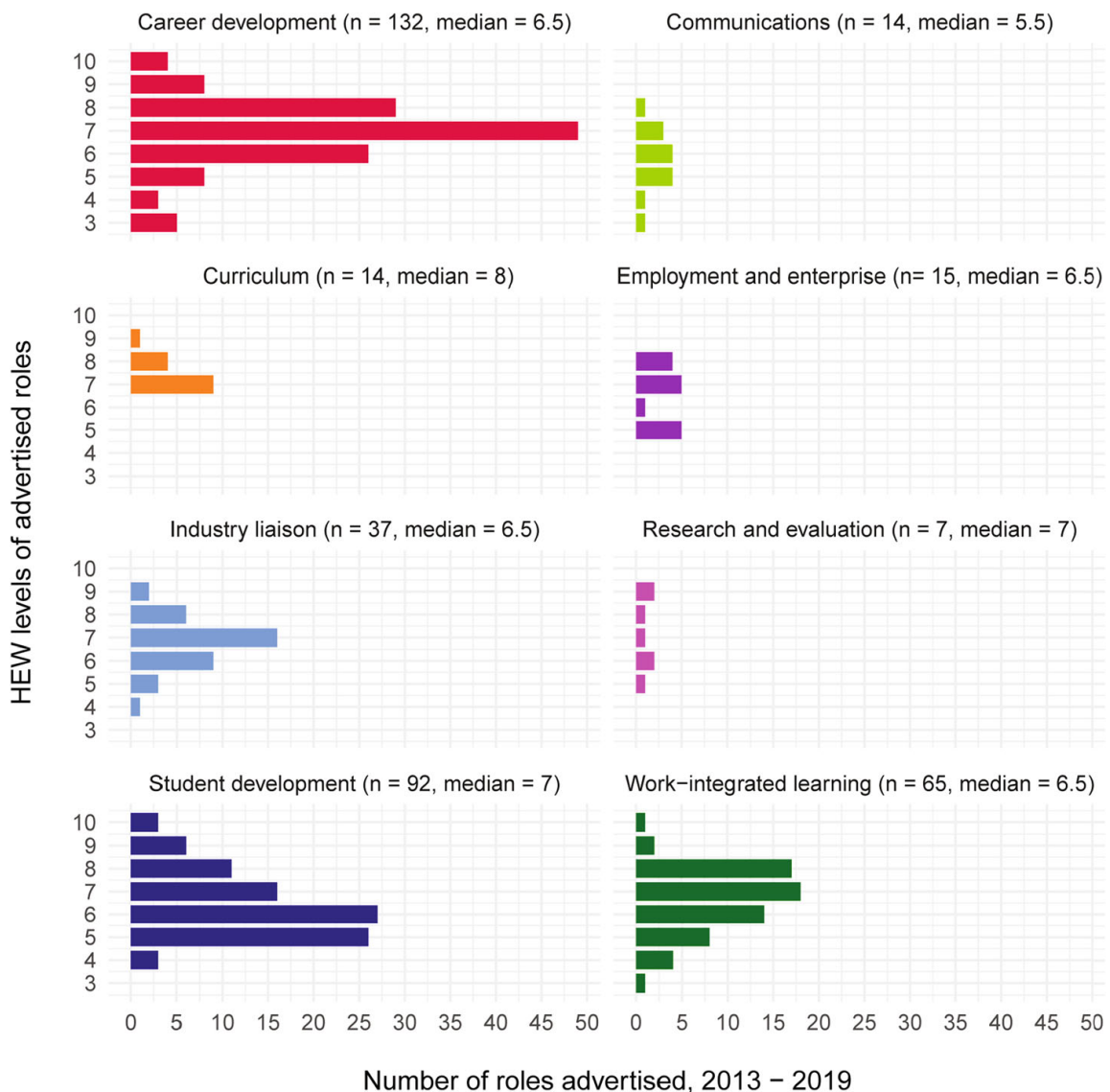
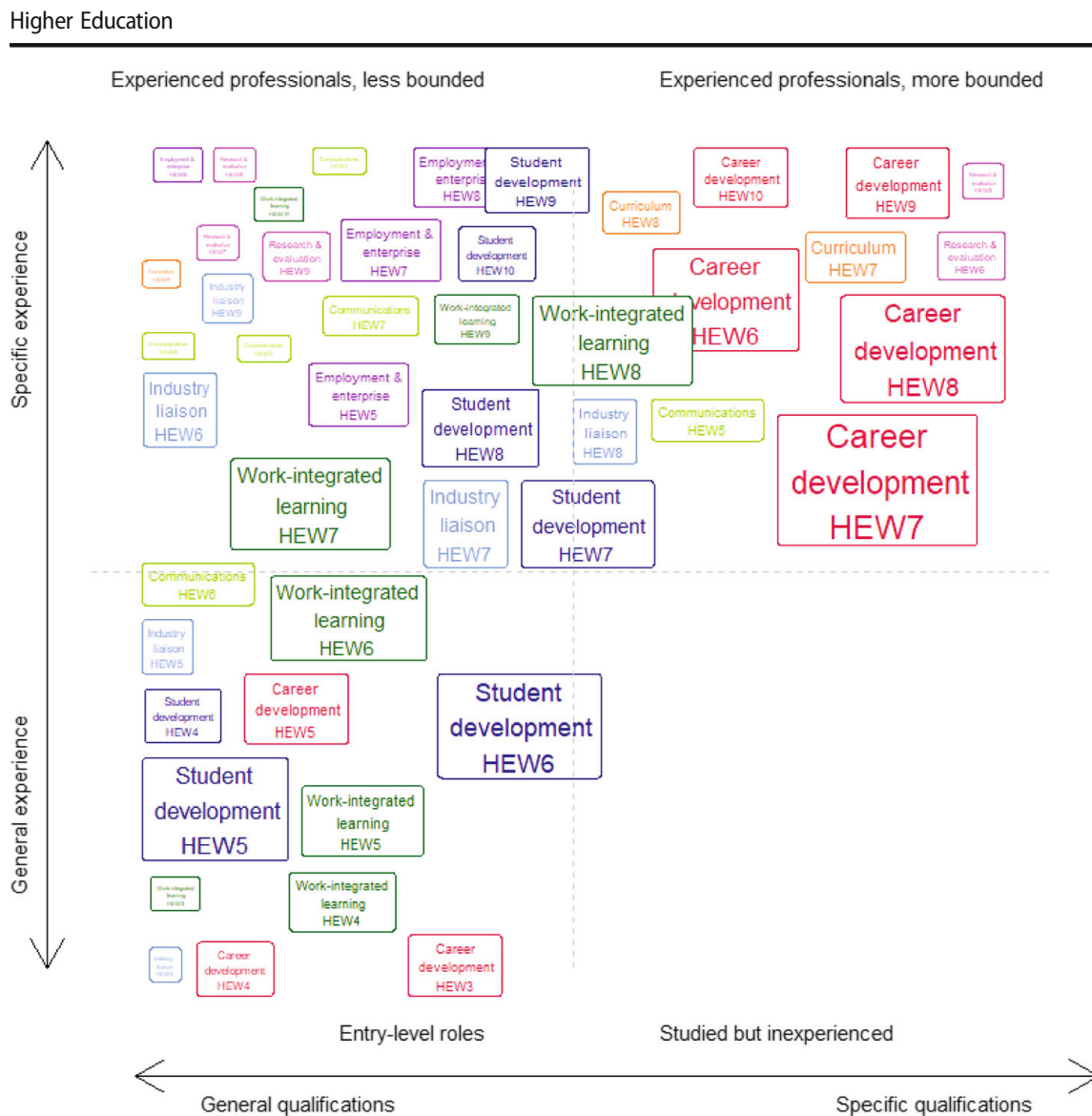


Figure 1 Frequency of advertised roles at each HEW level, by specialisation.



**Figure 2** Specificity of required or preferred experience and qualifications.

profession (Brown et al., 2019; Hobson et al., 2018; Thambar, 2018). Conversely, our analysis shows that for specialisations other than career development and curriculum, requirements for particular credentials are less frequent and more diverse than those seen in career development and curriculum roles. Below, we describe the jurisdictional and organisational characteristics of the various specialty areas in the graduate employability proto-jurisdiction.

**Career development**

Career development expertise was a requirement for appointment in the majority of career development roles at levels HEW6 and above, as illustrated in Figure 2. Although careers services hire professionals from specialty areas other than career development, those roles nonetheless operate under the leadership of and within a community of CDPs. Careers services contained a higher proportion of senior career development roles, from HEW8 to 10, than in other organisational units, at 36% and 21% respectively. Eighty-one percent of career development leadership roles required career development expertise, often defined as a graduate degree in career development.

## Curriculum

Curriculum roles were the only other specialty area where career development expertise was prioritised in job advertisements, with ten roles, five inside and five outside careers services, requiring career development expertise. All curriculum roles also required high levels of specific experience in university teaching or educational design.

## Student development

Student development was the most diverse specialty area, encompassing the broadest range of tasks and functions. It was also one of the most open, with most roles requiring lower levels of specific experience and qualifications, making it an accessible entry point into the professional ecology of employability. When situated in careers services, student development was a subordinate specialisation to career development, with 67% of roles at HEW6 or below, compared to 30% of career development roles.

## Work-integrated learning

Work-integrated learning roles included two kinds of practice: administration at lower levels and general or leadership at higher levels. Work-integrated learning had the highest proportion of both leadership (32%) and administrative positions (28%) of all specialisations. It is important to note that our analysis does not include academic work-integrated learning roles and so focuses more on supporting tasks and functions than on teaching.

## Employment and enterprise, industry liaison, communications, and research and evaluation

Employment and enterprise, industry liaison, communications, and research and evaluation professionals tended to be qualified from their broader professions rather than in higher education employability in particular. As such, these specialities allow lateral entry into the professional ecology of employability at higher levels, after jurisdictional expertise has been earned in other sectors. For the most part, industry liaison roles required experience in business development or stakeholder management; employment and enterprise roles required experience in recruitment or employment services; communications roles required experience in digital media. Research and evaluation roles were all focused on research for operational purposes, rather than scholarship. Only roles situated in careers services required career development expertise.

It is important to note that the curriculum and research and evaluation specialities are the smallest in our study, in part because such roles are sometimes designated as academic rather than professional roles. Therefore, these specialities are less representative of how the respective specialty jurisdictions are organised and resourced more broadly in higher education.

## Discussion

Our analysis of job advertisements for roles supporting graduate employability in Australian higher education provides an account of the field as an ecology of professional roles and expertise. We have described eight distinct areas of specialised professional jurisdiction and

described differences in how jurisdictional claims are expressed in their associated job descriptions. Our findings support the argument that graduate employability, collectively, is an inchoate proto-jurisdiction consisting of several specialised areas of professional practice, anchored around a common institutional project.

Our findings support suggestions by Whitchurch (2009) and Schneiderberg and Merkator (2013) that the careers and employability proto-jurisdiction is a third space in the higher education workplace. Our findings also reflect a professional community composition that evokes a loosely connected ecology of roles, rather than any one distinct profession. Within the broader employability proto-jurisdiction, CDPs represent a relatively distinct and bounded profession, although one which is becoming more open as it adapts to institutional and societal expectations for greater accessibility of services, integration with academic and professional disciplines, and demonstrable impact. On the other hand, other employability specialisations are more diverse and more open professional communities. As a whole, the employability proto-jurisdiction in Australian higher education lacks a mature collective model of theoretical and professional principles, which may undermine universities' efforts to provide quality employability support to their students.

CDPs' professional cohesion affords several crucial strengths for the cultivation of career learning environments and provision of quality careers and employability learning: clarity of purpose, commitment to standards of professional practice, and currency in leading career development theory and evidence (Brown et al., 2019; CICA, 2019; Healy et al., 2020). CDPs also tend to be adaptive and resilient professionals, who have gone through several evolutions of their professional practice yet remain dedicated to excellence in their service to students (Bridgstock et al., 2019; Dey & Cruzvergara, 2014). However, if cohesion crystallises into boundedness, some of these same qualities can become an impediment to CDPs contributing their full potential to collaborative, cross-institutional employability strategies. Boundedness may limit their willingness to share jurisdictional claims over certain tasks, functions, and expertise (Brown et al., 2019; Hobson et al., 2018; Thambar, 2018). Furthermore, career development leaders may find themselves stuck between bounded staff and less-bounded institutional mandates: struggling to exert influence among collaborators and stakeholders if they do not adapt to broader institutional priorities, but experiencing the challenge of managing the bounded identities of their teams if they do (Thambar, 2018). Even if CDPs are oriented toward less bounded ways of working, they may still face challenges in navigating the complex cultures of higher education (Hobson et al., 2018; Thambar, 2018).

Employability professionals from outside career development no doubt introduce a diverse range of expertise that enriches the provision of quality careers and employability learning support to students. The less bounded professional territories that we have described may allow those working in them to more easily traverse intra-institutional third spaces and overlap areas, allowing them to occupy positions of greater influence or enter collaborative relationships more effectively (Schneiderberg & Merkator, 2013; Whitchurch, 2012). Being more diverse and less bounded than CDPs, they may promote a greater breadth of careers and employability learning across the institution, compared to the relatively narrow reach of the typical careers service. However, given the lack of conceptual cohesion in employability research (Healy et al., 2020), the lack of dedicated credentials and formalised professional networks, and the diversity of roles described in this study, it is difficult to argue that the employability proto-jurisdiction is supported by a mature base of evidence and theory, or by a cohesive model of professional practice. In addition to undermining the cohesion of



institutional employability strategies, this gap could also undermine employability professionals' credibility when attempting to collaborate with or influence academics (Little & Green, 2021).

Our analysis of employability job advertisements also suggests that, despite much rhetoric about the importance of employability to universities' missions and strategies, universities are not yet adequately resourcing the development of ambitious, integrated careers and employability strategies. We found a very small number of curriculum development and research and evaluation roles, which calls into question universities' claims of comprehensive, evidence-based employability strategies. Employability professionals with research expertise and mindsets, for evaluative and reporting purposes rather than scholarship, are essential for the provision of evidence-based practice, particularly in the age of big data and in response to increasing demands for measurable impact (Winter, 2018). Also of concern is the predominance of fixed-term contracts, which calls into question the sustainability of the strategies that staff in those roles are hired to design, implement, and evaluate. Increasingly, graduate employability features as a receipt for service to funding bodies and a billboard promise from universities to prospective students, but our study does not provide convincing evidence that employability support is resourced as enthusiastically as it is sold.

### **Toward career learning environments**

For their best chances of career success, university students need to develop a range of human, social, cultural, identity, and psychological capitals (Nghia et al., 2020). Few of these forms of capital are developed in a career development consultation or workshop, though that may be where students best learn to recognise and articulate them. Rather, employability is the product of fertile career learning environments (Draaisma et al., 2017; Peck, 2017), seeded with abundant opportunities for careers and employability learning, work experience, and professional development, within the curriculum and alongside it. Achieving a career learning environment requires universities to empower and equip their staff—professional and academic—to contribute to an institutional mandate of elevating quality careers and employability learning support throughout a student's entire educational journey.

In cultivating career learning environments, CDPs have a role to play in leading institution-wide communities of practice engaged in the design, delivery, and evaluation of careers and employability strategies, programs, and services, underpinned by contemporary theory and evidence (Healy et al., 2020). CDPs aiming to maximise their impact ought to continue articulating their value proposition to their institution's connected communities (Dey & Cruzvergara, 2014; Peck, 2017) and identifying opportunities to collaborate with colleagues across the broader employability proto-jurisdiction. To fully realise this role, CDPs need to consider how and to what degree they maintain the boundaries of their profession and recognise the contribution that those from other professional specialisations can make to the broader employability project.

Similarly, each of the professional specialisations described in our analysis has its own knowledge and insight to contribute to career learning environments. Many of the professionals among them will have high degrees of the kinds of institutional knowledge and influence that are so crucial for success in third space environments. Employability professionals from all specialisations have their own leadership roles to play in the employability proto-jurisdiction, but should also recognise that in higher education, influence and credibility tends to be built on foundations of evidence, theory, pedagogy, and professional practice.

Given the constraints on influence often experienced by higher education professionals, it is essential that university leadership provide the kinds of systems and promote the kinds of cultures that will allow the employability professional ecology to mature in this way.

We are not arguing for professionalisation or occupational closure of the employability proto-jurisdiction, with the establishment of stricter boundaries around the professional community. Nor are we suggesting that all employability professionals should be educated and enculturated as CDPs. In ambiguous and ever-changing professional ecologies, such as higher education third spaces, “openness provides strength” (Abbott, 2005, p. 878). Graduate employability is a multifaceted psycho-social process of learning and development (Healy et al., 2020), and it requires a multifaceted ecology of professional and academic work to support it.

We have pointed toward the North American HESA model as an example how a proto-jurisdictional professional ecology may be yoked together to better serve a common cause. The HESA model simultaneously recognises differences between professional roles while uniting them under guiding principles that emphasise coordinated service to the whole student, from application through to graduation. Consequently, roles and functions are conceived and organised to support students’ growth and success throughout their higher education journey (Fernandez et al., 2017; NASPA, 2020). In addition to providing specialised services, HESA professionals serve as career influencers (Ho, 2019) across a broad spectrum, from student recruitment coordinators helping prospective students with program selection to align with their career goals and curiosities, to alumni engagement officers facilitating workshops on career success for graduates (Peck, 2017). If the Australian higher education employability community is to evolve beyond its current inchoate and incohesive state, the HESA professional model may provide some inspiration and a blueprint for strategic efforts toward greater professional cohesion.

## Conclusion

This article contributes the first detailed account of the professional practice of employability in higher education. We have provided an inclusive sketch of the ecology of the employability proto-jurisdiction in Australian higher education and described the constituent professional specialties at work among it. This study describes a replicable method of data collection and analysis which may present an opportunity for comparative studies on employability professional ecologies in other higher education systems around the world. We have also identified HESA as a potentially useful model for greater organisation and cohesion for the employability proto-jurisdiction in Australia.

In addition, we have extended Whitchurch’s (2012) and Schneijderberg and Merkator’s (2013) influential descriptions of higher education professional work with the analogous notions of ecologies of professions (Abbott, 2005) and proto-jurisdictions (Blok et al., 2019; Liu, 2018). These theories may serve as appropriate models for research into other emerging third space professions in higher education, such as those clustered around educational technology, widening participation, or community engagement, for example.

Our document analysis of job advertisements has several inherent limitations. Firstly, we have focused only on the Australian context, so further comparative research is needed to consider professional ecologies in other countries. Secondly, we have necessarily taken the advertisements at face value as expressions of jurisdictional expertise. We recognise that actual hiring decisions may not have been based entirely on stated criteria and will be influenced by



the available pool of candidates, and that the actual priorities of roles may be different to those stated in the advertisements. Further phenomenographic research is necessary to investigate the actual professional identities and experiences of those who occupy the employability third space. Finally, our study is focused only on professional staff, and therefore does not account for academic staff directly responsible for employability, or indeed the role of all staff at institutions where employability is considered “everybody’s business”, or for the nature of collaborative relationships that cross the boundaries between professional and academic work.

There should be no doubt that the experienced and dedicated professionals at work in the employability proto-jurisdiction make enormous contributions to students’ personal and professional development. As policy and market pressures continue to coalesce around employability, universities will need to devote more resources to offering cohesive, evidence-based, and impactful careers and employability strategies as part of their value proposition to future students, policy and funding bodies, and society in general. Students’ employability development will be more effectively, efficiently, and sustainably supported if the diverse range of professionals in the employability proto-jurisdiction can come closer together in a more intentionally collaborative community, cultivating rich career learning environments across the university and throughout the students’ educational journeys.

**Acknowledgements** The authors gratefully acknowledge the support of Burning Glass Technologies, who provided us access to their database of job advertisements and therefore made this study possible.

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### **5.3 Publication Records**

#### ***5.3.1 Submission Cover Letters***

The submission cover letters for this article will be presented on the following pages.

Michael Healy  
University of Southern Queensland  
West St, Toowoomba, QLD 4350, Australia  
michael.healy@usq.edu.au

13/12/2020

Dear editorial board, *Higher Education Research and Development*,

We wish to submit an original research article entitled “Who does employability in Australian higher education? Graduate employability as a professional proto-jurisdiction” for consideration for publications in *Higher Education Research and Development*. We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We have no conflicts of interest to disclose.

In this article we report findings from our documentary analysis of 376 Australian university job advertisements for professional roles directly responsible for graduate employability programs and services. We characterise employability as a proto-jurisdiction: an ecology of distinct forms of professional expertise and responsibility with ambiguous, elastic, and porous boundaries. We show that despite the importance of graduate employability to institutions’ strategic and students’ individual goals, it is as yet an inchoate field of professional practice in Australian higher education. Our primary argument is that there should be some caution regarding the coherence and quality of how support for employability is resourced strategically and understood professionally. Although our article is primarily a case study of Australian higher education, we compare Australian professional practice with the North American model of higher education student affairs, which we suggest provide a useful model of professional training and practice for student success support in Australian higher education.

We believe that this manuscript is appropriate for publication by *Higher Education Research and Development* for several reasons. First, it is focused on an increasingly important element of higher education strategy and policy: how well universities enable their graduates to achieve their employment and career goals. It contributes a sketch of the work of supporting employability in higher education as an ecology of professional roles and expertise. In doing so, we draw on several important recent discussions related to graduate employability published in *Higher Education Research and Development*.

Thank you for your consideration of this manuscript. Please address all correspondence concerning this manuscript to me at michael.healy@usq.edu.au

Sincerely,

Michael Healy

Michael Healy  
University of Southern Queensland  
West St, Toowoomba, QLD 4350, Australia  
michael.healy@usq.edu.au

12/01/2021

Dear editorial board, *Higher Education*,

We wish to submit an original research article entitled “Who does employability in Australian higher education? Graduate employability as a professional proto-jurisdiction” for consideration for publications in *Higher Education*. We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We have no conflicts of interest to disclose.

In this article we report findings from our documentary analysis of 376 Australian university job advertisements for professional roles directly responsible for graduate employability programs and services. We characterise employability as a proto-jurisdiction: an ecology of distinct forms of professional expertise and responsibility with ambiguous, elastic, and porous boundaries. We show that despite the importance of graduate employability to institutions’ strategic and students’ individual goals, it is as yet an inchoate field of professional practice in Australian higher education. Our primary argument is that there should be some caution regarding the coherence and quality of how support for employability is resourced strategically and understood professionally.

We believe that this manuscript is appropriate for publication by *Higher Education* for several reasons. First, it is focused on an increasingly important element of higher education strategy and policy: how well universities enable their graduates to achieve their employment and career goals. Secondly, it builds on research into higher education professional staff, particularly that of Celia Whitchurch’s concept of the *third space* professional. We contribute a sketch of the work of supporting employability in higher education as an ecology of professional roles and expertise. In doing so, we draw on several important recent discussions related to graduate employability published in *Higher Education*.

Thank you for your consideration of this manuscript. Please address all correspondence concerning this manuscript to me at michael.healy@usq.edu.au

Sincerely,

Michael Healy

**5.3.2 *Response to Reviewers***

The response to reviewers of this article will be presented on the following pages.

14/06/2021

Dear Associate Professor Shen Wenqin,

On behalf of my co-authors, thank you for forwarding us the reviewer comments for our article “Graduate employability as a professional proto-jurisdiction in higher education”, originally submitted to *Higher Education* on February 15th, 2021.

We appreciate this opportunity to receive feedback on our article and improve it accordingly. We are pleased to read that both reviewers accept the premise and main arguments of the article and recognise the contribution it makes to the graduate employability literature. We also appreciate both reviewers’ comments on the quality of our writing.

We have read both reviewers’ comments carefully and see that much of their comments are focused on a similar point: the need for us to elaborate on and better articulate the key theoretical foundations, findings, and contributions of our research. We have revised our article accordingly, elaborating and extending our theoretical discussion and making an effort to more clearly articulate our arguments.

In addition, we did not mean to imply that the employability proto-jurisdiction should be professionalised to the point of occupational closure. We recognise that the flexibility and collaboration inherent in less bounded professional work is a fundamental ingredient for success in contemporary higher education. We have revised parts of our manuscript to provide a balanced view of the opportunities and risks presented by the third space of higher education professional work.

We have summarised reviewer comments and described our responses to them in detail in the table below. Please pass this account of our revisions, along with our sincere thanks for the thorough and constructive feedback on our article, to each of the reviewers. We look forward to receiving further feedback on our article.

Yours sincerely,



Comment	Our response	Location in revised manuscript
<p><b>I recommend a more consistent and well structured theoretical discussion and the potential contribution to higher education research.</b></p> <p><b>I also lack a further discussion of the consequences and implications, both theoretically and empirically. The concept "proto-jurisdiction" may capture that this is a new, yet to be established "jurisdiction". However, no further discussion is provided regarding these two, as it seems evolutionary" concepts.</b></p>	<p>We have revised the discussion and conclusion of our article to be more structured and precise in how we have applied the relevant theories of higher education professional work. We more clearly articulate how the proto-jurisdiction of employability may mature and coalesce, but also moderate any suggestion that we are arguing for it to become a closed jurisdiction.</p> <p>We have also elaborated on the contribution how article makes to the field, with a specific point about the contribution our theoretical perspective may make to higher education research more generally.</p>	<p>Pages 22-27</p> <p>Page 27, paragraph 1 and 2.</p>
<p><b>More discussion about the policy related changes and external pressure, affecting the organisation of professional support staff, would be enlightening.</b></p>	<p>Policy related pressures that drive the employability agenda are indeed an important ingredient to understanding how universities implement employability strategies. We have included a brief reference to this matter in our introduction. However, a detailed account of how policy influences graduate employability this is out of the scope of this article.</p>	<p>Page 1, paragraph 1.</p>
<p><b>Andreas Stage's work on changes over time regarding job titles of professional support staff might be interesting as well.</b></p>	<p>Stage's work, particularly Stage and Aagaard (2019), does indeed have some relevance to our article, in that it describes the growth of the "degree-holding professional" in Danish higher education, which reflects broader international trends of increased recognition and responsibility for non-academic professional staff. However, the relevance to this research is not central enough to warrant citation or inclusion in our reference list.</p>	

<p><b>In the conclusion, it is stated that the boundedness of this group may impede their work and contributions to the institutions. Why is that? Furthermore, is this group bounded or unbounded? Please clarify and develop the bounded-unbounded discussion.</b></p>	<p>We have elaborated, in both the introduction and discussion, on why CDPs can be characterised as bounded and how this can impede their efforts to contribute to institutional strategies.</p>	<p>Page 9, paragraph 2 and 3.  Page 23, paragraph 1.</p>
<p><b>At least the S &amp; M paper does not discuss employability professionals as third space as far as know.</b></p>	<p>Schneijderberg and Merkator (2013) cite employability as an “overlap” area on page 80 of their chapter: “In German universities at least, higher education professionals teach classes for general skills to enhance the employability of graduates.</p>	
<p><b>Again, whether it is a problem that HE professionals are unbounded and "blurred" is less evident and should be discussed. Some research also seem (like Ryttberg and Geschwind) to suggest that this unboundedness, and fluidity is regarded a less of an evil and that flexibility and a more limited professionalization in terms of closure (or professional cohesion) is preferred. Cross-professional collaboration and merging of new competencies to respond to internal and external demands, is arguably what HEIs need, to mention another perspective.</b></p>	<p>It was not our intention to imply that unboundedness is a problem, nor was it to argue for occupational closure for the employability proto-jurisdiction. If reviewer one was left with this impression, it is the result of some imprecision on our part.</p> <p>To ameliorate this, in our introduction, we have elaborated on the nature of blurred boundaries in higher education professional work, to describe both the opportunities and risks that come with them.</p> <p>In our discussion, we have made an effort to present a balanced interpretation of the implications of both the boundedness of the CDPs and the unboundedness of the other employability professional specialisations.</p> <p>We have also included a paragraph explaining that we are going so far to argue for the occupational closure of the employability proto-jurisdiction, and moderated any language that suggests we are.</p>	<p>Pages 6 and 7.  Pages 23 and 24.  Page 26, paragraph 1.</p>

<p><b>In the introduction, it is mentioned that earlier research "implicitly" have referred to academics, when discussing this issue. What does that mean, please develop further.</b></p>	<p>We have elaborated on how most employability research is focused primarily on curriculum or pedagogy, which are reflective of academic, rather than professional, work.</p>	<p>Page 3, paragraph 2.</p>
<p><b>I would suggest the inclusion of a third research question of a less descriptive nature. Perhaps 'What do these jurisdictional boundaries suggest about the implementation of institutional employability strategies' or some other formulation that goes beyond the descriptive part of the article.</b></p>	<p>We have added a third research question: What are the implications of professional ecology's jurisdictional composition for the cohesion, quality, and sustainability of institutional strategies in support of employability?</p>	<p>Page 6.</p>
<p><b>perhaps it could become clearer here that all of these professionals belong to the employability proto-jurisdiction as all deal with different aspects of it (while maintaining the differences in terms of professionalization between CDP's and other professionals).</b></p>	<p>We recognise that some imprecision in our writing has made it unclear at times that we describe CDPs as part of the employability proto-jurisdiction. We have elaborated and clarified the relevant sections in our discussion section to ensure that this is clearer.</p>	<p>Page 22, paragraph 2.</p>
<p><b>I suppose that the exclusion of only one university in Australia from the sample results derives from the fact that there were no job advertisements from that institution containing all the necessary information? Perhaps this could be very briefly explained.</b></p>	<p>Reviewer two is correct that the one university was absent because there were no relevant job advertisements captured in our search of the Burning Glass database. We have made this clear in the methods section.</p>	<p>Page 13, paragraph 1.</p>
<p><b>The findings section is rather descriptive but by design since the discussion of the findings is presented afterwards.</b></p>	<p>Although reviewed two recognises that the findings section is descriptive by design, we have streamlined this section and removed some extraneous findings.</p>	<p>Pages 15 to 21.</p>

## CHAPTER 6: CAREERS AND EMPLOYABILITY LEARNING: PEDAGOGICAL PRINCIPLES FOR HIGHER EDUCATION

### 6.1 Rationale

My final article was conceived of late in my doctoral journey but is perhaps the most important to me of the three articles of this PhD by publication. I had initially proposed an evaluation of a careers and employability learning intervention, based on *career writing*, which uses creative, reflective, or expressive writing exercises to help students compose career narratives to understand and express their professional identities and work through challenging boundary experiences (Healy et al., 2018; Lengelle et al., 2016; Lengelle & Meijers, 2014). The focus of the intervention was to be students in health science fields such as nursing or paramedicine. Based on my professional experience providing careers and employability learning education and services to health sciences students, I came to believe that their employability rests not in their qualifications and clinical skills and experience, which are essentially the same for all graduates, but in their ability to understand, make sense of, and communicate their motivations, intentions, professional self-efficacy, values, and personal and professional identities: in short, their employability narratives. I proposed that career writing might be a suitable vehicle to help these students develop more mature expressions of their employability.

However, as my PhD research proceeded with two big-picture surveys of the gap between graduate employability and career development in scholarship (Healy et al., 2020) and professional practice (Healy, Brown, & Ho, 2021), I grew to doubt how a narrowly defined intervention study could answer the bigger questions and concerns posed in those works. Each of those articles ended by advocating for a more “evidence-based, integrative pedagogy of careers and employability learning” (Healy et al., 2020, p. 11), delivered by “a multifaceted ecology of

professional and academic work” conducted by “a more intentionally collaborative community” of careers and employability educators and support staff (Healy, Brown, & Ho, 2021, pp. 14, 15). This article was written to provide a full account of what this integrative pedagogy of careers and employability learning that I propose looks like. As such, it is a conceptual essay rather than empirical study. In some ways, it is an attempt to emulate the influential conceptual papers of Fugate et al. (2004), Bridgstock (2009), and Holmes (2013), each of which moved the field of graduate employability forward in important ways.

This article integrates reading and writing fragments from throughout my doctoral journey. In fact, my definition of a curricular vision (Darling-Hammond et al., 2012) comes from studies done years before I had even considered undertaking a PhD. My PhD studies began with a survey of career development learning and career education, for the most consisting of practitioner guides (Bassot et al., 2013; McCowan et al., 2017; Osborn, 2016; Patton & McMahon, 2001; Sampson et al., 2004; Stanbury, 2005; Watts, 2006) or reviews and surveys of career education interventions (Bimrose et al., 2005; Folsom & Reardon, 2003; Foskett & Johnston, 2006; Hughes & Gration, 2009; Hughes et al., 2016; Reardon & Fiore, 2014). Although these are useful guides to or catalogues of career education program designs, the programs and interventions are described in broad terms and more often as content models, such as the influential DOTS model discussed earlier in this thesis (Watts, 2006). As influential as DOTS has been, it does not begin to offer a meaningful integration of career development theory. Aside from some broad recommendations toward social-constructivist theories of learning and career development, I found little substantive discussion of pedagogical principles in this literature and for this reason, began to question the degree to which career development

learning could be described as an adequate foundation of my vision of careers and employability learning.

Through writing this article, I was able to put words to something that had long troubled me about graduate employability discourses but had not yet fully understood or articulated. That is, graduate employability is almost always described as an outcome of education, rather than as a learning process. Although scholars such as Knight and Yorke (2002, 2003a, 2003b, 2003c) and Dacre Pool and Sewell (2007) used some language of process and incorporated some broad cognitive concepts in their models, they describe learning outcomes much more than they do learning processes. This contrasts with career development, which has long described the process by which people learn to manage their careers as one of learning. Once I had noted this difference between graduate employability and career development, I had one of the key arguments with which to write my article.

In June 2021, I participated in the European Doctoral Programme for Career Guidance and Counselling summer school, in which participants present their PhD work in progress and receive feedback from peers and mentors. I received consistent advice that I could not complete the argument started by my first two papers without providing a full account of what I propose as an alternative: an integrated pedagogy for careers and employability learning. At that time, I noted my intent to write such an article in my research journal:

I want to write an article to better articulate my conceptualisation of careers and employability learning and offer a kind of framework. It will be predicated on several things. It will articulate in greater detail various models of career that have value in higher education employability. It will recognise the important place of higher education in terms of the curricular, institutional, and socio-cultural context. It will

sketch out a flow of pedagogical principles for quality careers and employability learning in higher education.

What might these principles consist of? I need to start with index cards and get some ideas down. To start: careers and employability learning is discursive and interconnected through and beyond the curriculum; careers and employability learning offers principled eclecticism and refused reduction to pet pedagogies; careers and employability learning is contextual; careers and employability learning is relational; careers and employability learning is emancipatory. This last part is the main point and all the others should build toward it.

This is an unplanned article, one that has occurred to me once in a while, but this is the first time it has been more fully formed in my mind. I have that distinct feeling—an often fleeting and sometimes deceptive feeling—that the article is ready and waiting to be written in short order. I can almost *see* it. It is theoretical and I may even be bold and approach it as a polemic: splash, crash, slap my hand on the table. This is my “capstone” careers and employability learning article, which will tie a bow on my PhD and may also help close a chapter on certain themes in the careers and employability literature. I will write this one myself and write it well. Sole author, of a conceptual paper, an important achievement to close off my PhD by publication.

In addition to sketching out my idea for the article, the excerpts above illustrate my growing self-efficacy and ambition as a scholar. They record my decision to complete by PhD by

publication with an article that had not been planned in my initial proposal, but had become more significant to me, on several grounds.

First, it must be sole authored. My co-authorship experiences were positive, but I felt that my PhD could not be complete without an article resulting from my independent efforts. Doing so would conclude the trajectory of my scholarly development sketched by my co-authorship: my first article written with my supervisors, my second with my peers, and the third written independently. Second, it should be a conceptual paper. Some of most persuasive and influential articles in the graduate employability literature (Bridgstock, 2009; Clarke, 2018; Fugate et al., 2004; Holmes, 2013) are not empirical studies, but rather conceptual essays, and I wanted to write an article that could stand among them. In fact, my motivation was such that I was tempted, for a time, to take a polemical approach to the article and write the article as a manifesto for change (Biesta & Säfström, 2011). Finally, I wanted to write the article as a conclusion to my PhD research, providing a thorough and persuasive account of what careers and employability learning is, knitting together certain elements of graduate employability and career development theory and practice. For this reason, I consider this article as the capstone of my PhD by publication.

As stated, my goal was to write a conceptual paper which could stand among Fugate et al. (2004), Bridgstock (2009), and Holmes (2013) as an influential essay which influences graduate employability scholarship toward a new direction. This represented for me an instance of career construction and life design (Savickas, 2021), in that I was envisioning a future self, in a professional position of influence and impact. I had mentioned to several of my colleagues that I would like Healy (2021b) to become the default citation for a certain approach to graduate employability scholarship, in the way that Fugate et al. (2004) is cited to signal a dispositional



approach, Bridgstock (2009) is cited to signal an approach including career development learning, and Holmes (2013) is cited to distinguish position, possession, and process in graduate employability.

I had initially intended to submit this article in the first instance to *Higher Education Research and Development*, as I felt that it fit with the curricular focus of that journal. However, when reviewing the reference list, I noted that the works that were most important to my arguments, which tended to be those that adopted the most robustly theorised and critical positions, on graduate employability were published in *Studies in Higher Education*. I therefore decided that my article was a better fit for *Studies in Higher Education*, where I submitted it on 23 October 2021. Should that journal not accept it for publication, I will revise it for submission to *Higher Education Research and Development*.

## **6.2 Submitted Manuscript**

The submitted manuscript of this article will be presented on the following pages.

Running head: PEDAGOGICAL PRINCIPLES FOR CAREERS AND EMPLOYABILITY LEARNING 1

Careers and Employability Learning: Pedagogical Principles for Higher Education

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## PEDAGOGICAL PRINCIPLES FOR CAREERS AND EMPLOYABILITY LEARNING: 2

**Abstract**

Increasingly, universities prioritise employability outcomes as a primary purpose of personal and public investment into higher education and target graduate employability in their institutional teaching, learning, assessment, and student support strategies. However, despite its emergence as a central concern in higher education, graduate employability lacks coherent and robust theoretical or pedagogical foundations. In particular, limited conceptualisations of career development learning applied in most graduate employability scholarship have not kept pace with theoretical or practical developments in the field of career development. Rather than continuing to approach graduate employability and career development learning as different things, the higher education community should recognise their congruence and compatibility and instead adopt a more integrated and critical understanding of *careers and employability learning*. This article offers a curricular vision of an integrative pedagogy of careers and employability learning, based on six pedagogical principles that can inform efforts to deliver high quality, equitable, and empowering careers and employability learning for students.

*Keywords:* graduate employability; career development; careers and employability learning

*Word count:* 6384

## Careers and Employability Learning: Pedagogical Principles for Higher Education

**Introduction**

To study at university out of pure intellectual interest is a rare privilege in the marketised higher education systems of the 21st century. Increasingly, universities prioritise employability outcomes as the primary return on personal and public investment into higher education. To policy-makers and industry, universities promise to deliver skilled graduates to meet the labour demands of private enterprise and public infrastructure (Bridgstock & Jackson, 2019; Cheng et al., 2021; Tomlinson, 2017). To students, universities promise learning experiences and environments which cultivate the knowledge, skills, and attributes necessary for post-study careers and employability success (Divan et al., 2019). As a result, universities now target graduate employability, implicitly if not explicitly, in their institutional teaching, learning, assessment, and student support strategies (Bridgstock & Jackson, 2019; Sin et al., 2019). Higher education focused media outlets and university ranking agencies now report on employability outcomes—by which they primarily mean *employment* outcomes—as a marker of university quality and performance, reporting which is proudly amplified by high-ranking institutions (Christie, 2016; Divan et al., 2019). Graduate employability scholars have critiqued this reduction of employability to little more than employment at an arbitrary moment of time (Bridgstock & Jackson, 2019; Christie, 2016), but in broader discussions employability remains practically synonymous with employment.

Increasingly, employability is considered an integral part of the university curriculum, most often in the form of work-integrated learning (WIL) or career development learning (CDL, Bridgstock et al., 2019). In addition to influencing formal curricula, employability provides the mandate for a wide range of co- and extra-curricular university services and resources, expanding the professional jurisdictions of many staff beyond the career development practitioners who

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have traditionally owned responsibility for it (Healy et al., 2021). Some research has acknowledged concerns about whether it is appropriate to hold university educators responsible for the provision of employability-oriented pedagogies in the curriculum, and by extension, the employability outcomes of their students (Bridgstock & Jackson, 2019; Cheng et al., 2021; Daubney, 2021; Sin et al., 2019).

However, despite its emergence as a central concern in higher education, graduate employability lacks coherent theoretical, evidential, professional, or pedagogical foundations (Bridgstock & Jackson, 2019; Healy et al., 2020, 2021; Römogens et al., 2020; Tomlinson, 2017). Graduate employability tends to be conceptualised in ways which emphasise human capital as an outcome of higher education which enables employment (Bridgstock & Jackson, 2019; Cheng et al., 2021). Influential theories and evidence from the field of career development have had little impact in graduate employability scholarship and practice, despite the clear alignment of each fields' fundamental concern, career and employment success (Clarke, 2018; Healy et al., 2020; Römogens et al., 2020). It is telling that Knight and Yorke (2003; Yorke & Knight, 2006), among the most influential graduate employability scholars, barely ever refer to "career development" in their works, and never in reference to a field of scholarship or professional practice. The scholarly and professional fields of higher education and career development demonstrate very different conceptualisations and connotations of employability with little meaningful exchange between them (Clarke, 2018; Healy et al., 2020).

In this article, I attempt to bridge the gap between pedagogical approaches to graduate employability and career development theory in higher education. I begin by describing the parallel streams of scholarship. I then argue that despite their clear alignment of educational goals and some shared theoretical traditions, there remains limited conceptual or practical integration between them, particularly in relation to pedagogical approaches to supporting students' careers

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and employability success. I will then outline several key pedagogical principles that underpin a curricular vision for an integrative pedagogy of careers and employability learning, drawing on the conceptual, empirical, and practical strengths of both fields, in the service of students' lifelong career, employment, and personal success:

1. careers and employability learning is a psycho-social process, not an outcome;
2. careers and employability learning is contextual;
3. careers and employability learning is ubiquitous;
4. careers and employability learning is relational, dialogical, and narrative;
5. careers and employability learning can be traumatic; and,
6. careers and employability learning can be emancipatory.

**Graduate Employability as Outcomes**

Over the last three decades, many efforts have been made to organise employability into frameworks which account for various configurations of *employability capitals*, including social, cultural, and psychological capitals in addition to the ubiquitous lists of so-called “employability skills” (Monteiro & Almeida, 2021; Römogens et al., 2020; Tomlinson et al., 2021). The greater part of this scholarship offers a human capital-oriented conceptualisation of employability, as the *possession* of certain skills and qualities that enable successful employment outcomes (Holmes, 2013). A causal link between employability skills and employment outcomes is largely taken for granted, although recent research by Brown et al. (2021) has challenged the veracity of this assumed relationship.

Pedagogically oriented scholarship has focused on learning activities that best promote the development of these capitals, such as WIL and other forms of experiential learning, CDL, project-based learning and professional connectedness, graduate attributes, professionally

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contextualised assessment, and e-portfolios (Bridgstock & Jackson, 2019; Healy et al., 2020).

Some sociologically inflected research has recognised that employability outcomes are often constrained by students' *position* and status in social, educational, and labour systems (Burke et al., 2019; Holmes, 2013; Tomlinson, 2017).

Knight and Yorke's (2003; Yorke & Knight, 2006) influential work on graduate employability argued that employability is an inherent quality of learning in higher education and should therefore be explicitly recognised in curricula and assessment. Traditionally referred to as embedding employability (Yorke & Knight, 2006) or CDL (Bridgstock et al., 2019) into the curriculum, a better term is offered by Daubney (2021) in *extracting* employability, or surfacing and articulating those elements of a curriculum that offer innate employability value to students. Extracting employability might better enable students to recognise and articulate the employability capitals and graduate identities afforded by their studies (Daubney, 2021).

For the most part, graduate employability scholarship maintains a conceptual view of employability as human capital outcomes of higher education, oriented to labour markets and the skills-development agendas of policymakers (Cheng et al., 2021). Comparatively little scholarship has conceptualised employability as an inherently transformational *process* of learning, self-actualisation, and social connection (Bridgstock & Tippett, 2019; Fugate et al., 2004; Holmes, 2013).

### **Career Development as Learning**

In comparison, for more than half a century career development has been approached as a learning process: "self-development [...] occurring over time in man who is capable of anticipation, experience, evaluation, and memory" (Krumboltz et al., 1976; Law & Watts, 1977/2015; Tiedeman, 1961, p. 18). Career development learning experiences are the focus of

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several influential theories in the fields of vocational psychology, career counselling, and career education. Collectively, these theories provide the theoretical foundations for most of the career development research focused on higher education students (Healy et al., 2020).

In his social learning theory of career development, Krumboltz (1976; 2009) argued that career development is the cumulative effect of learning experiences, including direct, intentional efforts to master a certain task as well as associative, observational, and vicarious learning. The role of the career educator is not simply to match their students to a suitable occupation, but to motivate them to pursue career exploration activities, assist them to reflect on and understand their experience, and orient them to future learning experiences in an ongoing, iterative process of learning and development (Krumboltz et al., 1976; Krumboltz, 2009).

Law (1996) applied Krumboltz's social learning theory in his model of *career learning*, developed specifically to support the curricular integration of career development in secondary and tertiary education systems and focused on career sense-making as much as the provision of career management competencies. Career learning was designed as an evolution from content and outcome driven models of career development learning, drawing on contemporary social cognitive and constructivist theories of learning and career development (Law, 1996). Although career learning is not a career development theory in an empirical sense, it is the among the most explicitly *pedagogical* models of career development for education.

Learning experiences are also at the heart of Lent and Brown's (2013) social cognitive career theory (SCCT), which integrated Bandura's (2001) social cognitive theories of learning into vocational psychology. In particular, SCCT places the social cognitive constructs of self-efficacy and outcome expectations (2001) at the heart of its models of career exploration, decision-making, and self-management (Lent & Brown, 2013). Social-cognitive approaches to learning recognise four sources of self-efficacy: mastery experiences, vicarious learning, verbal



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persuasion, and emotional affect (Bandura, 2001; Lent & Brown, 2013). SCCT is the career development theory most frequently applied to university students, though it has only recently been applied in graduate employability research (Healy et al., 2020).

While it is less explicitly described as a learning theory, Savickas's career construction theory (Savickas, 2021) describes a narrative process by which individuals develop and express their personal epistemology of career development. Career construction theory was a product of the "narrative turn" in career development, which saw an evolution beyond positivist person-environment matching and life-span development theories toward more post-modern approaches informed by constructivist theories of self and society (Rossier et al., 2021). At the heart of career construction theory is *career adaptability*, a set of resources that individuals draw on as they try to understand, and exercise agency in, their careers. Career adaptability resources include *concern*, an attitude of planfulness and intention; *control*, an attitude of decisiveness and organisation; *curiosity*, an attitude of exploration and learning; and *confidence*, an attitude of self-efficacy (Savickas, 2021).

Educational interventions focused on CDL, such as those described above, have been shown to positively influence students' career decision-making, self-efficacy, adaptability, and maturity (Whiston et al., 2017). In addition to these cognitive and psychological outcomes, CDL interventions offer positive flow-on effects to academic retention and success and to job search, networking, and employment outcomes (Healy, et al., 2021). Career development learning support and interventions based on these theories offer robust, evidence-based approaches to supporting students' career journeys into, through, and beyond their university studies.

**From Career Development Learning to Careers and Employability Learning**

Career development learning is often acknowledged as a discrete ingredient of graduate employability or referenced briefly as something that university careers services offer to students. However, it is seldom elaborated on with reference to the breadth and depth of contemporary career development theory (Bridgstock et al., 2019; Healy et al., 2020; Römogens et al., 2020). Most references to CDL in graduate employability can be traced back, directly or through citation networks, to one single model: the venerable DOTS model of career development learning (Law & Watts, 1977/2015; Watts, 2006). The DOTS model organises CDL into four domains: decision-making, opportunity awareness, transitions, and self-awareness (Watts, 2006). Notwithstanding its wide and lasting popularity, the DOTS model has been critiqued, including by one of its original authors, as an outdated person-environment matching model, focused more on competencies and outcomes than career development as a process of formative learning and self-development (Law, 1996).

The limited conceptualisations of career development learning applied in most graduate employability scholarship have not kept pace with theoretical or practical developments in the career development field (Healy et al., 2020). Graduate employability scholarship and practice displays an extremely limited understanding of the breadth and depth of useful theory, evidence, and pedagogical principles that career development can contribute to efforts to understand and support students' careers and employability success. The lack of exchange and integration between the two fields creates the risk of redundancy and inefficiency in research (Healy et al., 2020) and undermines the coherence, quality, and sustainability of universities' efforts to support the career success of their students (Healy et al., 2021).

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Rather than continuing to approach graduate employability and career development learning as different things, or CDL as a discrete ingredient of employability, the higher education community should recognise the congruence and compatibility of the two fields. Higher education scholars and educators should instead adopt a more integrated understanding of *careers and employability learning*. To this end, the rest of this article describes a curricular vision of an integrative pedagogy of careers and employability learning for higher education, underpinned by six pedagogical principles.

**Pedagogical principles of Careers and Employability Learning**

Graduate employability scholarship is saturated with frameworks, many of which debate the minutiae of what to call and how to organise various skills and attributes, rather than offering substantively unique conceptualisations of employability itself (Monteiro & Almeida, 2021; Römgens et al., 2020). In this article I make no effort to add another, because I agree with Monteiro and Almeida's (2021) warning that to claim that any single model adequately explains employability is implausible. Accordingly, the pedagogical principles I propose below are not intended as a comprehensive account of either employability or career development, are not organised with any suggestion of priority or process, and are not intended to act as a curricular framework for the design or delivery of careers and employability learning activities.

Rather, these principles describe a curricular vision of an integrated pedagogy of careers and employability learning. A curricular vision describes how an educator reflexively and critically understands and supports their students' learning, encompassing the formal curriculum, or what is taught; the enacted curriculum, or how it is taught; and the hidden curriculum, or why it is taught (Darling-Hammond et al., 2012). The hidden curriculum refers to the tacit moral and ideological lessons and the production of social structures and relations that underpin education

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systems and practices. Employability is often critiqued as a (barely) hidden neoliberal curriculum, advancing the ideas that the primary role of higher education is to provide skilled labour into the workforce, that employment is the most important return on investment (Bridgstock & Jackson, 2019), and that career success is an individual achievement and the lack of it an individual failure (Forrier et al., 2018).

In this article, I attempt to reclaim the term employability from those instrumental neoliberal conceptualisations. Employability, if approached with the principles below in mind, can be redefined as a formative, empowering process of self-exploration, self-actualisation, and social connection. The following principles are an expression of several key concepts, constructs and concerns that can be drawn from graduate employability and career development research and practice, to inform efforts to design, deliver, and evaluate quality careers and employability learning for students.

**Principle one: Careers and employability learning is a psycho-social process, not an outcome**

The problem with understanding employability primarily as an outcome of education is the fact that employability is not a stable and persistent state that can be attained, because it is dependent on too many dynamic individual and contextual factors (Bridgstock & Jackson, 2019; Tomlinson, 2017). An individual's employability is improved or impaired by the strength or weakness of the labour market and by fluctuations in their personal circumstances, emotions, and agency. Employability is therefore in constant flux, as the individual reflects on their career relevant experiences and adjusts their employability self-concept accordingly.

Fugate et al.'s (2004) influential psycho-social model of employability describes it as a synergistic aggregate of career identity, personal adaptability, and social and human capitals. Career identity, in particular, describes a cognitive-affective element of employability that

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motivates or moderates individuals' proactive and adaptive behaviours. The processual nature of this approach to employability was characterised by Holmes (2013) as the development and expression of a graduate identity. Crucial in this process is the assertion of identity claims on the part of the graduate and the ascription of, or refusal to ascribe, this graduate identity by employers and other professional gatekeepers (Holmes, 2013).

This psycho-social, processual conceptualisation of employability is easily aligned with learning-oriented theories of career development. Krumboltz's (1976; 2009) social learning theory, Law's (1996) career learning theory, and Lent and Brown's (Lent & Brown, 2013) SCCT all describe career development, in their own ways, as a process of reflecting on career related experience and integrating insights from that reflection into an ever-evolving career identity. Career identity is not only formed by success; unemployment and under-employment have significant impact on individuals' career self-concept (Blustein et al., 2016; Kossen & McIlveen, 2018). SCCT, in particular, accounts for the impact of personal and contextual influences on career identity formation (Lent & Brown, 2013), which leads us to the next principle: careers and employability learning is contextual.

**Principle two: Careers and employability learning is contextual**

The development and expression of employability is dependent on amenable conditions in the many layers of social, political, economic, and cultural systems which students come from, travel through, and enter into. It is possible to be objectively employable, yet remain unemployed (Forrier et al., 2018; Tomlinson, 2017) Consider a student with all the right kinds of employability capitals: strong grades, a record of leadership in extracurricular work, and quality time work experience. They are articulate, proactive, and adaptable. But how employable are they if they choose to relocate to a rural area, if they are responsible for the care of children or an

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elderly parent, if they suffer a physical or psychological injury, if they have a criminal record from a mistake made in their youth, if a change in government reduces funding to their sector, or if a pandemic decimates their industry?

The contextual nature of employability is a focus in some graduate employability research, particularly sociologically inflected or policy focused scholarship (Burke et al., 2019; Cheng et al., 2021; Tomlinson, 2017). Other themes in the broader field of higher education research focus on contextual influences on students' experience of and success in higher education such as widening participation, equity, and marketisation, and should be more intentionally integrated into graduate employability scholarship.

In comparison, career development, a field of applied psychology, is often criticised as being too narrowly focused on the psychological, cognitive, and behavioural characteristics of individuals (Blustein et al., 2016; Forrier et al., 2018). This criticism is strongest in a tranche of socio-political career development scholarship which rejects the individualist rhetoric of much careers and employability discourse and confronts systemic inequities in education and work (Blustein et al., 2016; Hooley et al., 2017). These scholars promote an emancipatory ethic of career development that informs another principle of careers and employability learning described later in this article: careers and employability learning can be emancipatory.

**Principle three: Careers and employability learning is ubiquitous**

Careers and employability learning should not be understood only as the product of specific interventions such as online modules, assessment tasks, workshops, or career consultations. As important as purposefully designed interventions are (Whiston et al., 2017), each of them is an infinitesimally small moment in the context of several years of study and personal development.

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Much graduate employability scholarship practice attempts to design, delineate, and organise careers and employability learning, whether that be in the curriculum in the form of dedicated employability subjects, modules, or assignments, or outside of it in the form of employability award programs, career fairs, bootcamps, or mentoring programs (Bridgstock & Jackson, 2019; Healy et al., 2020). The rhetoric of embedding or employability and CDL into the curriculum (Bridgstock et al., 2019; Yorke & Knight, 2006) also conceptualises careers and employability learning as targeted moments in time in which careers and employability learning is expected to happen.

However, careers and employability learning is ubiquitous and can occur at any time, any where. Krumboltz (2009) developed a vision of his social learning theory that foregrounded *happenstance*, explicitly recognising that every moment of every day is a potential moment of careers and employability learning and therefore inherently unpredictable. Nonetheless, planned happenstance—the adoption of proactive and intentional orientations, actions, and behaviours—can increase the likelihood that favourable opportunities will emerge (Krumboltz, 2009). Similarly, Pryor and Bright (2011) applied chaos theory to career development to account for the indeterminable complexity of career influences, the constancy of change, and the profound impact of chance events. From this perspective, desire for control or predictability over career development is unrealistic. Control should be relinquished in exchange for active and adaptive participation in the complex, dynamic systems of education and work (Krumboltz, 2009; Pryor & Bright, 2011).

Although the university campus and curriculum are fertile grounds for happenstance and chaos, careers and employability learning is equally likely to happen in other contexts of the students' life. This is especially true for “non traditional” students, such as adult learners balancing their study with work and caring, for whom the boundaries between study, work, and

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home are blurred. An exclusive focus on discrete interventions, dotted through or alongside the curriculum and bounded by the physical or digital university campus, is akin to a homeopathic approach to careers and employability learning, so diluted that it becomes an article of faith that there is any lasting effect from them at all.

**Principle four: Careers and employability learning is relational, dialogical, and narrative**

If employability is contextual, it follows that employability is something that is *negotiated* between the individual and various others, such as educators, employers, and accreditors. Work is an inherently relational act (Blustein et al., 2016; Forrier et al., 2018); even the most independent of entrepreneurs still has clients and collaborators. Employability is not the result of an objective equation—of preparedness into opportunity—but rather it is formed and maintained through language, in the form of employability narratives and dialogues with educators, employers, peers, and mentors (Bridgstock & Tippett, 2019; Holmes, 2013; Tomlinson & Anderson, 2020).

Much graduate employability scholarship has investigated the degree to which employers value certain kinds of employability capital and what kinds of employability signalling they are most receptive to (Cheng et al., 2021; Tomlinson & Anderson, 2020). From a pedagogical point of view, Bridgstock's connectedness learning model (Bridgstock & Tippett, 2019) argues that engagement with professional communities is an integral ingredient of quality education for employability, not only developing practical skills for growing, maintaining, and strengthening connections, but also helping students build a connected professional identity.

Although much graduate employability literature recognises identity as a crucial element of employability, there is little that focuses on how that identity is developed and expressed. In contrast, much career development research in the last two decades has been focused on how individuals make meaning in their work, career, and lives. Career counselling and education



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scholarship has focused on how people can be supported to craft career narratives that express that meaning to themselves and others (Healy et al., 2018; Rossier et al., 2021; Savickas, 2021). Recently, career development researchers have focused on various *career orientations* that are understood and expressed dialogically and narratively: career adaptability, proactivity, optimism and hope; meaningful work; and work as a calling (Healy et al., 2020). Research into career orientations theories should underpin reflective, interpersonal, and formative approaches to careers and employability learning.

**Principle five: Careers and employability learning can be traumatic**

Among the unanticipated events described in relation to the ubiquity of careers and employability learning, career shocks are perhaps the most impactful. Career shocks are not simply challenging moments of learning and reflection, but have significant disruptive consequences to work and life (Akkermans et al., 2021). Career shocks may be personal, such as a medical crisis; organisational, such as an employer restructure or bankruptcy; or national and global, such as an economic crisis, pandemic, or conflict (Akkermans et al., 2021). Career shocks are often traumatic, resulting in failure rather than loss and evoking emotions of disappointment, rejection, disillusionment, or hopelessness. The emotional impact of career shocks can be acute when the result is unemployment, which is associated with serious negative consequences for mental, physical, and social wellbeing (Blustein et al., 2016; Kossen & McIlveen, 2018). Career shocks can also be positive, and failure can sometimes propel a person toward a future success (Krumboltz, 2009; Pryor & Bright, 2011), but this does not necessarily make them any less difficult to experience.

Even positive career shocks and career success can present challenging emotional experiences. Trauma often informs career decisions and ambitions and is therefore an inherent

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part of that person's career identity: a law student motivated by their personal experience of injustice, a human services student who has experienced childhood trauma (Bryce et al., 2021), or a nursing student inspired by care that they or a family member received. Education and career success, such as graduation or a new job, can have an element of trauma as the student undergoes a boundary experience (Healy et al., 2018), decentring their self-concept, confronting an uncertain future, and leaving a valued community of people. For some from less privileged backgrounds and communities, going to university and entering professional employment may see them alienated from their family, community, or culture.

Career counselling, the traditional model of career development practice, includes elements of trauma-informed counselling theories and therapeutic practices (Powers & Duys, 2020; Tang et al., 2021). The development of career construction theory and other examples of constructivist, narrative models of career development were informed in part by innovations from trauma counselling (Powers & Duys, 2020; Rossier et al., 2021). With careers and employability learning so proximate to potentially traumatic experiences, it is vital that universities adequately resource student wellbeing support and integrate it into careers and employability strategies. The professional competencies and qualifications of university career development practitioners are well suited to this kind of integration (Healy et al., 2021).

**Principle six: Careers and employability learning can be emancipatory**

All the preceding principles of careers and employability learning have foreshadowed this last one: careers and employability learning can be emancipatory. It is true that much rhetoric in graduate employability scholarship casts employability as a process of subjugation to socio-economic demands and the structures of privilege (Bridgstock & Jackson, 2019; Burke et al., 2019; Christie, 2016; Tomlinson, 2017). In response, some scholars and educators reject the very

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notion of employability (Daubney, 2021; Sin et al., 2019), but this is not a pragmatic response. Rather, the discourses of employability can be reclaimed and re-directed if careers and employability learning is understood and designed in ways that promotes students' agency, connects them to their personal and professional communities, and challenges the inequities that constrain them.

A concern for social justice underpins much higher education research, and graduate employability scholarship frequently highlights structures of privilege and confronts the neoliberal, instrumental hidden curriculum of employability (Burke et al., 2019; Tomlinson, 2017). For example, Bridgstock and Jackson (2019) contest the prevailing narrow focus on immediate employment outcomes in favour of broader, more holistic understandings of employability related outcomes, such as the ability to maintain meaningful work across graduates' lifespans. However, it is in the field of career development where we find the most explicitly emancipatory resistance to prevailing neoliberal and individualist discourses of careers and employability.

In their psychology of working framework, Blustein and colleagues (2016) offer rigorous critique of the dominant individualist discourses about career and work. The psychology of working framework rests on the principles that work is a central aspect of most people's lives and that *decent work* is a human right (Blustein et al., 2016; Kossen & McIlveen, 2018). Decent work is that which affords physically and emotionally safe working conditions, access to health care, adequate remuneration, work-life balance, and congruence with personal family and social values (Blustein et al., 2016). The lack of decent work puts people at risk of physical and emotional harm (Blustein et al., 2016; Kossen & McIlveen, 2018).

Other career development scholars have adopted a socially just stance in their scholarship, drawing attention to inequity and marginalisation in access to education and work (Hooley et al.,

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2017). They argue that the career development field requires a paradigm shift to better honour its philosophical roots and realise its emancipatory potential (Hooley et al., 2017). A core ethic of emancipatory career development scholarship is a rejection of the responsibilisation of employability, in which employment and other forms of career success are taken as the result of an individual's merit and a personal virtue, while unemployment and other forms of career failure are result of individual flaws and a personal moral shortcoming (Blustein, et al., 2016; Forrier et al., 2018; Hooley et al., 2017). Recent scholarship based on the psychology of working framework has characterised critical consciousness as a vital psychological resource for fostering self-determination among the marginalised (Kim & Allan, 2021).

### Conclusion

A university education requires a significant investment of money, time, effort, and emotion. It is reasonable for students and society to expect that these investments into their education should afford graduates with opportunities to secure decent, relevant work upon graduation and throughout their working life. It also reasonable to expect that university educators be attentive to how they can support their students in realising their career and employability goals. However, the scholarship and practice of graduate employability has not yet developed sufficiently beyond its traditional, narrow focus on employability as an outcome, in part because it has not made use of the full breadth of evidence and theory from career development.

Noting the gap between graduate employability and career development research is not a criticism of graduate employability researchers. The reasons for the gap are complex: differences between academic and professional disciplines, epistemologies and associated research methods, and publishing practices (Healy et al., 2020). Nonetheless, this gap should be recognised as a risk

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to the quality and cohesion of efforts to understand and support university students' career and employability success.

In this article, I have offered a set of pedagogical principles intended to close the gap between graduate employability and career development. Rather than conceiving of graduate employability and career development as related but distinct concepts, we should understand them as expressions of the same goal: to support students in their journeys of personal and professional self-actualisation. The curricular vision of careers and employability learning presented in this article draws on leading theories and approaches from both fields, applying the social-cognitive and narrative theories of learning from career development to the educational, social, and economic contexts of graduate employability.

This article is also an effort to reclaim employability from reductive discourses of neoliberal instrumentalism, which equates higher education to a training ground for the labour market and consider employability as synonymous with employment. Rather, I have proposed a more emancipatory curriculum vision of careers and employability learning, underpinned by the pedagogical principles described in this article. Careers and employability learning pragmatically acknowledges the realities of socio-economic systems, but actively helps students to confront those systems' inequities and supports them through a sustained, transformative journey of personal and professional self-actualisation, social connectedness, and careers and employability success.

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### **6.3 Publication Records**

#### ***6.3.1 Submission Cover Letter***

The submission cover letter for this article will be presented on the following page.

Michael Healy  
University of Southern Queensland  
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23/10/21

Dear *Studies in Higher Education* editorial board,

I wish to submit this original research article entitled “Careers and Employability Learning: Pedagogical Principles for Higher Education” for consideration by *Studies in Higher Education*. I confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. I have no conflicts of interest to disclose.

In my previous research, I have demonstrated how graduate employability and career development are distinct fields of research and professional practice, despite sharing the same fundamental concern for student success. In “Mapping graduate employability and career development in higher education research: A citation network analysis”, published in *Studies in Higher Education* in 2020, I demonstrated the gap between the fields of research and in “Graduate employability as a professional proto-jurisdiction in higher education”, published in *Higher Education* in 2021, I demonstrated the same gap in professional practice.

In each of those articles, and elsewhere, I have argued that rather than continuing to approach graduate employability and career development learning as different things, the higher education community should recognise the congruence and compatibility of the two fields. The article I submit here is an elaboration on the more integrated understanding of careers and employability learning that I have proposed in the conclusions of my previous articles, and elsewhere. This article describes a curricular vision of an integrative pedagogy of careers and employability learning for higher education, underpinned by six pedagogical principles which draw on theory, evidence, and principles of practice from both graduate employability and career development.

I have chosen to submit this article in the first instance to *Studies in Higher Education* for several reasons. First, it is focused on an increasingly important element of higher education strategy and policy: how well universities enable their graduates to achieve their employment and career goals. Secondly, it focuses on critical pedagogical principles for supporting students in their career and employability development but is not a narrowly focused study of a single discipline, subject, or approach. Finally, this article draws on much work published in *Studies in Higher Education*, which tends to be among the most theoretically and conceptually developed, international, and critical literature in the graduate employability field.

Thank you for your consideration of this manuscript. Please address all correspondence concerning this manuscript to me at michael.healy@usq.edu.au

Sincerely,

Michael Healy

## CHAPTER 7: CONCLUSION

In this thesis I have demonstrated how the parallel fields of graduate employability and career development are almost entirely separate in research and in professional practice. I have argued that this current state of affairs is a risk to the quality, cohesion, and practical value of efforts to understand and support students' career and employability success. I have offered an alternative approach in the form of a curricular vision for a more integrated pedagogy of careers and employability learning in higher education. I have also offered an autoethnographic account of my scholarly, professional, and personal development over the six years I have been engaged in this doctoral research.

In each article, I provide a full discussion of the research, with acknowledgement of limitations and recommendations for further research. In this concluding chapter, I will not repeat an analytical synthesis of my research, but will summarise the contributions my research has made, acknowledge some limitations of this thesis research, and point toward further research.

### **7.1 Contribution to the Field of Research**

#### ***7.1.1 Theoretical and Conceptual Contributions***

The primary contribution this thesis makes is to offer a new conceptualisation of how the higher education community approaches student and graduate career and employability success. In this thesis I argue that graduate employability and career development are parallel fields, as they share fundamentally common goals. I argue that they are so similar, in fact, that they should be considered as inherently related, as a single concept: careers and employability learning. Careers and employability learning is a fundamentally novel theoretical approach, as no previous scholarship has integrated the two fields together as thoroughly.

In addition, this thesis has contributed an account of graduate employability as a learning process, in contrast to prevailing conceptualisations that approach employability capitals as outcomes of higher education. Although efforts have been made to broaden the scope of what employability capitals are, they remain conceptually oriented to employability as a collection of competencies and attributes possessed by the student and valued by the employer. By integrating learning theories of career development, I have articulated careers and employability learning as an approach that truly reframes employability as a process of learning rather than an outcome of it.

I have offered new, nuanced, collective theorisations of careers and employability as fields of scholarship and professional practice, which acknowledge the complexity and fluidity the respective bodies of literature or communities at work. In Healy, Brown, and Ho (2021), I have advanced a long-standing theorisation of higher education professional staff as operating in a third space (Whitchurch, 2012), by introducing Abbott's (1995; 2005) ecological approach to professions and the related notion of professional proto-jurisdictions (Blok et al, 2020).

Finally, the conceptualisation of careers and employability learning offered in Healy (2021b) contributes a more empowering and emancipatory vision of graduate employability than has typically been seen. I have drawn key critical work from career development focused on an emancipatory communitarian (Blustein, 2005) ethic of scholarship and professional practice that is, for the most part, lacking in the graduate employability literature. In doing so, I have made an attempt to reclaim the discourse of employability from instrumentalist, neoliberal discourses that put higher education at the service of the labour market, reorienting it toward using careers and employability learning to promote meaningful work, critical consciousness, and personal and professional self-actualisation for students.

### *7.1.2 Methodological Contributions*

Each of my first two articles have made methodological contributions. Healy et al. (2020) demonstrated the value of bibliometric methods for making sense of a body of literature as diffuse and diverse as graduate employability. In doing so, it contributed a new empirically derived survey of the fields of graduate employability and career development, which can complement previous narrative and systematic reviews, which tend to betray the disciplinary lenses and qualities of their authors. Healy, Brown, and Ho (2021) offered job description document analysis as a method for sketching a professional ecology, rather than simply as a source of professional competencies.

In addition, this thesis has reaffirmed McIlveen's (2007, 2008) promotion of the value of autoethnographic reflection to the scholar-practitioner and doctoral student. I have demonstrated, throughout this thesis, the value of this reflective, pragmatic attitude for my scholarly and professional development, and my personal wellbeing. In doing so, I have contributed some qualitative evidence for the value of autoethnographic career writing (Lengelle et al., 2014; Lengelle & Meijers, 2014) in doctoral education.

### *7.1.3 Professional and Practical Contributions*

A key contribution of Healy et al. (2020) to the graduate employability scholarly community is a survey of career development theories and evidence directly relevant to higher education, which provides clear signposts to key theories, authors, and journals. We hope that this article will convince those in the graduate employability scholarly community to continue the positive trend of greater awareness and use of career development theories in graduate employability research.

Healy, Brown, and Ho (2021) provided an empirical account of the breadth of the professional ecology of careers and employability learning in Australian higher education. This article contributed the first survey of this professional community and in doing so, recognised careers and employability as an emerging proto-jurisdiction. A key contribution of this article was to argue for the contributions to be made to the mission to support students' careers and employability success from all members of the community. We advocated for career development practitioners to take a leadership role in this community but also noted the strengths of other specialisations. In addition, we highlighted the lack of consistent and sustainable investment in careers and employability learning in Australian higher education, noting that it is not resourced as enthusiastically as it is marketed by universities. We hope that this article will inspire more efforts to cultivate collaborative communities of careers and employability professionals, leading to more cohesive and higher quality graduate employability strategies.

Healy (2021b), as the capstone of this PhD by publication, has provided a detailed description of my curricular vision for careers and employability learning. As noted above, this contributes a fundamentally new way of approaching student career and employability success in higher education. I hope that this article influences the scholarly and professional communities to recognise careers and employability learning as a single conceptual approach, rather than continue to separate graduate employability from career development in theory and in practice.

## **7.2 Limitations of the Research**

The specific limitations of each article are acknowledged in the appropriate section of that article, and so I will not repeat them in full here. However, it is appropriate to acknowledge some broader limitations of this PhD by publication as a whole.



One limitation is the graduate employability and career development scholarship described in this research project is exclusively in the English language and predominantly from English speaking, Western countries. This limitation is most evident in Healy et al. (2020), in which our data collection was limited to articles in English. Aside from language, the data set of Healy et al. (2020) demonstrated the same scarcity of research from countries outside of North America, Europe, and Australasia, and so, as a survey of the literature, perpetuates the biases that plague higher education research and academic publishing in general (Mason et al., 2021).

Similarly, Healy, Brown, and Ho (2021) focused only on the higher education sector of Australia, a wealthy country with comparatively high levels of investment into higher education. Despite my criticism of how careers and employability learning is resourced in Australian higher education, that resourcing is significantly higher than many other countries where career development services are not provided in universities, and where the career development profession is much less developed or supported (Yoon & Hutchinson, 2018).

Therefore, this research does not accommodate or address conceptualisations of graduate employability or career development published in other languages or in non-English speaking countries and does not represent a global vision of careers and employability learning (Bui et al., 2019; Fakunle & Higson, 2021; Robeiro, 2021) This leaves much additional work to be done to contextualise this vision for careers and employability learning in non-Western regions, in languages other than English, and in diverse social and cultural contexts.

A related limitation is that this research, in focusing on higher education, further privileges an already privileged group of people. Notwithstanding the fact that university students are not necessarily wealthy and may be subject to various forms of marginalisation, higher education remains accessible only to those with the requisite levels of educational

preparedness, financial resources, and social support. Thus the emancipatory ethic of the vision of careers and employability learning presented in this thesis can extend only to those that have already escaped, or have never experienced, the degree of marginalisation and inequity that precludes access to higher education. I believe that careers and employability learning is a pedagogical paradigm that is equally relevant to other sectors of education and other demographic groups, but to truly establish this relevance requires further research.

The nature of this PhD by publication has created some challenges and compromises related to the scope of each article and therefore my ability to elaborate on certain points. In particular, my account of the six pedagogical principles described in Healy (2021b) provides only a limited account of the possible depth and breadth of each. I could have written an essay about each, but was required by the scope of a journal article to offer only a brief explanation of each.

Finally, this PhD by publication is largely abstract in nature. Healy et al. (2020) describes ideas from the research literature, Healy, Brown, and Ho (2021) describes a high-level view of an ecology of professional jurisdictions, and Healy (2021b) proposes a curricular vision of careers and employability learning based entirely on the knitting together of two streams of academic research and fields of professional practice. Phenomenographic research into the professional identities, workplace experiences, and collaborative networks would enrich the analysis of Healy, Brown, and Ho (2021). Careers and employability learning, as a pedagogical approach and paradigmatic position, now needs to be applied, tested, evaluated, and extended and specific educational interventions described and evaluated.

#### 7.4 Future Research

As noted in the limitations above, the nature of this thesis as a PhD by publication prevented me from fully elaborating on the pedagogical principles of careers and employability learning that form the heart of this thesis. Therefore, my primary scholarly goal following this thesis is to publish a more detailed elaboration of each principle. This could be a sole-authored monograph but could also be an edited collection to which I invite many of the scholars noted in this thesis to contribute. Ideally, this would result in a balance of graduate employability and career development scholars, referencing each field's work and therefore exemplifying the approach to careers and employability learning as an integrative theory careers and employability learning.

In addition to publishing a more detailed account of the integrative pedagogy of careers and employability learning described in this thesis, I will continue to promote and advocate for the ideas expressed in this thesis in the broad range of my work and scholarship. A crucial avenue for this is as a peer reviewer, which offers me an opportunity to point graduate employability scholars toward useful career development theory and evidence, and vice versa.

I will return, in the future, to the evaluation of careers and employability learning interventions that I had initially planned for this PhD by publication. In fact, I have made my first steps toward that work in the collaborative autoethnography that I am in the process of writing with colleague and student from my university's paramedicine degree (Healy, Bell, et al., 2021). In addition, I have plans to elaborate on how theories of narrative identity (McAdams & McLean, 2013; McAdams & Pals, 2006) can inform careers and employability learning, offering employability narratives as a conceptual partner to employability capitals. Ideally, this work would be pursued through the evaluation of practical educational interventions, which can stand as exemplars to the broader careers and employability learning scholarly community.

I have noted elsewhere in this PhD by publication that I intend to provide accounts of my experience as a doctoral student using bibliometric methods and conducting autoethnographic career writing throughout my research. In addition, I have two further bibliometric studies in progress, one investigating the broad multidisciplinary of employability research (Healy, Brown, & McIlveen, 2021) and the other the long tail of graduate employability scholarship of teaching and learning (Healy & Hammer, 2021).

As noted in my description of my paradigmatic approach of pragmatism, a key principle of pragmatic inquiry is the fact that the conclusion of a research project is in fact a “program for more work” (James, 1907, p. 18). In fact, I have come to understand that rather representing a finishing line, the completion of this doctoral research is in fact best understood as arriving at the starting line of a robustly conceptualised future research agenda.

I am satisfied that I have presented a curricular vision of careers and employability learning that is coherent, evidence-based, and persuasive. My mission now, in addition to the future research outlined above, is to apply the ideas from this thesis in my own practice, and to work energetically to encourage my peers to do the same. Although I recognise my own academic and professional ambition, these goals are underpinned by the same concern that inspired me to begin this project six years ago: for the practical benefit—the betterment and empowerment—of higher education students and their communities.

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<https://doi.org/10.1177/1094428114562629>

**APPENDIX A: USQ HIGHER DEGREE BY RESEARCH THESIS PRESENTATION SCHEDULE,  
PART 3.6: FORMAT OF A THESIS BY PUBLICATION**

*The following is copied verbatim from the University of Southern Queensland Higher Degree by Research Thesis Presentation Schedule, Part 3.6: Format of a Thesis by Publication:*

<https://policy.usq.edu.au/documents/151774P>

A Thesis by Publication will be formatted according to the Standard Thesis as outlined in Section 3.5 although published sections may be inserted without re-formatting.

The Thesis by Publication must contain an introduction that contextualises the research project in relation to the present state of knowledge in the field.

The Thesis chapters and articles must act as one cohesive document. The Thesis must flow logically in a coherent sequence, articulating a clear argument that supports the main findings. The Student must also address how each publication contributes to the advancement of the research area.

The number of publications and the type of publications will vary between disciplines. Normally, the Thesis will be based on a minimum of three publications for a Doctor of Philosophy Academic Program, two publications for a professional doctorate Academic Program and one publication for master by research Academic Program.

Normally these papers will have been published, accepted, submitted or prepared for publication during the period of candidature. The quality of such papers must be appropriate for the Academic Program and have been written by the Student as the sole or joint author.

Where the published papers have joint authors, a statement must be included within the preliminary pages of the Thesis declaring that the Student undertook the majority of the research and authorship of the papers. Normally, a Student would be expected to make 50% or greater

contribution to each paper. An acknowledgement of the contribution of other authors must also be outlined in the Thesis acknowledgment section.

The Student must include an independent and original general discussion that integrates the most significant findings, as well as a conclusions chapter that draws together the findings of the published papers in a coherent manner.

The Thesis may include relevant appendices, including additional papers that do not relate to the main thrust of the Thesis, raw data, computer code, questionnaires and other material as deemed appropriate for the relevant discipline.

**APPENDIX B: AUTHORSHIP AGREEMENTS**

In this appendix I share the authorship agreements for the two co-authored journal articles that are presented in this these. I created these authorship agreements to record a more detailed account of the contributions made by each author.

**B.1 Authorship Agreement for Healy et al., 2020**

The authorship agreement of Healy et al. (2020) will be presented on the following pages.



## Authorship Agreement

Use this form to discuss, plan, and record the authorship of research outputs with contributors. Use as much space as required. Plans may change over time. Plans must be agreed upon by all contributors.

### Research Project Details

**Date:**

21 July 2020

**Title:**

Mapping graduate employability and career development in higher education research: A citation network analysis

**Summary:**

In this article, we present visualisations of direct citation networks among 4068 journal articles focused on graduate employability and career development and consider the disciplinary landscapes that they reveal.

**Authors in order:**

Michael Healy, University of Southern Queensland

Sara Hammer, University of Southern Queensland

Peter McIlveen, University of Southern Queensland

**Human ethics approval:**

This project does not require human ethics approval.

### Intended Research Outputs

**Primary intended research output:**

An article in *Studies in Higher Education* or *Higher Education Research and Development*.

**Expected date of submission:**

First submission May 2020.

**Additional research outputs:**

Findings from this project may also be presented at relevant academic or industry conferences, such as NAGCAS or HERDSA. All presentations will carry the same authorship as described in this agreement.

## PhD by Publication

This research project is intended to contribute to the PhD by publication of Michael Healy. A condition of inclusion in the PhD publication portfolio is that Michael Healy is the first author of the publication, and accordingly has made 50% or greater contribution to the research and writing of it. Michael Healy will be primary contact for all co-authors, responsible for managing the research project, and managing the submission and revision of the manuscript.

## Record of author activity

Planned contributions are shaded **orange**, actual contributions are shaded **green**.

Activity	A1	A2	A3	A4
<b>Research preparation</b>				
Research concept, questions, and warrant	60	20	20	
Human ethics approval	n/a			
Literature search	100			
Research design	80	10	10	
Data collection	100			
Data analysis	80	10	10	
<b>Manuscript writing</b>				
Abstract	90		10	
Introduction	70	20	10	
Methods	100			
Findings	90	5	5	
Discussion	80	10	10	
Limitations	100			

Future research	100			
Conclusion	90	10		
<b>Managing submission</b>				
Corresponding author	100			
Making changes based on reviews	80	10	10	
Responding to reviewers	100			
<b>Total contribution</b>				
Total contribution	75	15	10	

### Acknowledgement of authorship

By signing below, the authors acknowledge this agreement as a true record of the contribution of each author.

Author name	Signature	Date
1. Michael Healy		
2. Sara Hammer		
3. Peter McIlveen		

**B.2 Authorship Agreement for Healy, Brown, & Ho, 2021**

The authorship agreement of Healy, Brown, & Ho (2021) will be presented on the following pages.





## Authorship Agreement

Use this form to discuss, plan, and record the authorship of research outputs with contributors. Use as much space as required. Plans may change over time. Plans must be agreed upon by all contributors.

### Research Project Details

**Date:**

25/03/2020

**Title:**

Who does employability in Australian higher education?

**Summary:**

A survey of positions in Australian universities directly responsible for the development of students' graduate employability. Template analysis of 500 position descriptions and job advertisements from 2013 to 2019. Coded according to HEW level, specialism, appointment terms, organisational location, student cohorts, and required qualifications and experience. This project will explore the boundaries of employability work, particularly between positions inside careers services and those outside.

**Authors in order:**

Michael Healy, University of Southern Queensland

Jason L. Brown, University of Southern Queensland

Candy Ho, Kwantlen Polytechnic University

**Human ethics approval:**

This project does not require human ethics approval.

### Intended Research Outputs

**Primary intended research output:**

An article in the International Journal of Higher Education Policy and Management or Higher Education Research and Development.

**Expected date of submission:**

First submission approx.. June 2020.

**Additional research outputs:**

Findings from this project may also be presented at relevant academic or industry conferences, such as NAGCAS, UniSTARS, or HERDSA. All presentations will carry the same authorship as described in this agreement.

## PhD by Publication

This research project will contribute to the PhD by publication of Michael Healy. A condition of inclusion in the PhD publication portfolio is that Michael Healy is the first author of the publication, and accordingly has made 50% or greater contribution to the research and writing of it.

Unless otherwise stated, Michael Healy will be primary contact for all co-authors, responsible for managing the research project, and managing the submission and revision of the manuscript.

## Record of author activity

Planned contributions are shaded orange, actual contributions are shaded green.

Activity	A1	A2	A3	A4
<b>Research preparation</b>				
Research concept, questions, and warrant	75	25		
Human ethics approval	n/a			
Literature search	80	10	10	
Research design	100			
Data collection	75	25		
Data analysis	70	15		
<b>Manuscript writing</b>				

Abstract	100			
Introduction	60	20	20	
Methods	90	10		
Findings	80	10		
Discussion	60	20	10	
Limitations	100			
Future research	80	10	10	
Conclusion	80	10	10	
<b>Managing submission</b>				
Corresponding author	100			
Making changes based on reviews	80	10	10	
Responding to reviewers	100			
<b>Total contribution</b>				
Total contribution	70	20	10	

## Acknowledgement of authorship

By signing below, the authors acknowledge this agreement as a true record of the contribution of each author.

Author name	Signature	Date
1. Michael Healy		
2. Jason Brown		
3. Candy Ho		

**APPENDIX C: ABSTRACTS OF ADDITIONAL PEER-REVIEWED PUBLICATIONS****C.1 Use of My Career Chapter to Engage Students in Reflexive Dialogue**

Healy, M., McIlveen, P., & Hammer, S. (2018). Use of my career chapter to engage students in reflexive dialogue. In F. Meijers & H. J. M. Hermans (Eds.), *The Dialogical Self Theory in education: A multicultural perspective* (pp. 173–187). Springer. [https://doi.org/10.1007/978-3-319-62861-5\\_12](https://doi.org/10.1007/978-3-319-62861-5_12)

Higher education students provide many reasons for their taking a particular degree. These typically relate to their current vocational interests and future employment prospects. This is significant since students' vocational identities and consequent decisions develop in a complex dynamic of vocational personality, characteristic adaptations, and life stories, all interacting with affordances in the social, economic, and cultural contexts of students' lives. Using contemporary personality theory and vocational psychology theory, we focus on the third dynamism - life stories - to explicate a method that facilitates assessment for and of learning in the context of career. Here we describe the conceptual and methodological dimensions of *My Career Chapter: A Dialogical Autobiography* as an exemplar of an innovative pedagogical method with its conceptual foundations in vocational psychology and the theory of dialogical self. We will describe examples of its application in postgraduate studies and elaborate on its teaching and assessment affordances for career education. Finally, we will outline practical implications for the continuing application and evaluation of *My Career Chapter*, and the curricular vision that drives it, in higher education and career development learning.

**C.2 Career Services in Australian Higher Education: Aligning the Training of Practitioners to Contemporary Practice**

Brown, J. L., Healy, M., McCredie, T., & McIlveen, P. (2019). Career services in Australian higher education: Aligning the training of practitioners to contemporary practice. *Journal of Higher Education Policy and Management*, 41(5), 518–533.

<https://doi.org/10.1080/1360080X.2019.1646380>

As university graduates face increasingly changing and challenging labour markets and work environments, universities are prioritising the work of helping students develop their graduate employability. As a result, university Career Services and career development practitioners are subject to changing strategic and operational approaches to the provision of careers and employability learning opportunities at institution-wide scale. In this study, we examine current conceptualisations of careers and employability practice through the analysis of three sources of data: program descriptions of postgraduate career development qualifications, position descriptions for careers and employability jobs advertised in Australia over the past four years, and focus groups with career development practitioners. We evaluate how well existing career development qualifications align with the work of contemporary university career development practitioners, and identify opportunities to continue evolving the profession, to better help our students meet the demands of future life and work.

### **C.3 Connectedness Learning in The Life Sciences: LinkedIn as an Assessment Task for Employability and Career Exploration**

Brown, J. L., Healy, M., Lexis, L., & Julien, B. (2019). Connectedness learning in the life sciences: LinkedIn as an assessment task for employability and career exploration. In R. Bridgstock & N. Tippett (Eds.), *Higher Education and the Future of Graduate Employability: A Connectedness Learning Approach* (pp. 100–119). Edward Elgar.

<https://doi.org/10.4337/9781788972611.00015>

“You’ve been doing employability the wrong way” would be the click-bait headline if this chapter were to be published in an online news website. The prevailing approach to promoting graduate employability taken by higher education around the world is focused on the development of human capital, that is, work-related skills and knowledge. However, graduate employability frameworks and strategies often overlook significant dispositional and contextual factors that contribute towards a person’s employability. To more adequately promote the development of graduate employability, universities need to do more to connect students to their extensive networks of alumni and industry and provide careers and employability learning that helps students learn to explore and express their emerging professional identities. In this chapter we will explore the approach taken within

one Australian university to enhance the employability of life science students through embedding into the curriculum a careers and employability learning module that uses social media, specifically LinkedIn, as a pedagogical tool to develop students' career identity and connect them with professional networks.

#### **C.4 My Career Chapter: The Dialogical Self as Author and Editor of a Career Autobiography**

Healy, M., & McIlveen, P. (2019). My career chapter: The dialogical self as author and editor of a career autobiography. In N. Arthur, R. Neault, & M. McMahon (Eds.), *Career Theories and Models at Work: Ideas for Practice* (pp. 147–158). CERIC.

*My Career Chapter (MCC): a Dialogical Autobiography* is a qualitative career assessment and counselling tool based on the systems theory framework and dialogical self theory. MCC leads the client through a reflective writing process based on their internal dialogues about their career and helps the client to edit the resulting manuscript into a productive and empowering narrative. MCC's theoretically informed practical features may be used to develop the reflective capacity of the client beyond the end of the counselling event, promoting lifelong learning, informed self-judgment, and improved self-regulation. This chapter describes the theoretical foundations of MCC and its application in a case vignette.

#### **C.5 Microcredential Learners Need Quality Careers and Employability Support**

Healy, M. (2021). Microcredential learners need quality careers and employability support.

*Journal of Teaching and Learning for Graduate Employability*, 12(1), 21–23.

<https://doi.org/10.21153/jtlge2021vol12no1art1071>

Providers, industry, and governments have embraced microcredentialing as a solution to the volatility and velocity of changes in labour markets, workplace competencies, and the needs of the 21st century lifelong learner. However, microcredentials do not, in and of themselves, guarantee career or employment success. Seeking a microcredential is one adaptive career behaviour that people might enact in pursuit of their career goals. Similarly, holding a microcredential is one form of employability capital that people might highlight when seeking employment. As Kift (2021) has noted, microcredentials should be designed

and delivered in a lifelong learning ecosystem of educational, employment, and social support systems. One crucial element of this support is ensuring that learners have the requisite career management skills and labour market literacy to make the best use of microcredentials to achieve their goals. In this essay, I pick up this point to argue that career development practitioners have a crucial role to play in helping learners approach microcredentials as part of a cohesive career strategy, integrate them into their career narratives, and express their value to employers.

### **C.6 Career Assessment**

McIlveen, P., Perera, H. N., Brown, J. L., Healy, M., & Hammer, S. (2021). Career assessment.

In P. J. Robertson, T. Hooley, & P. McCash (Eds.), *The Oxford handbook of career development* (pp. 313–324). Oxford University Press.

<https://doi.org/10.1093/oxfordhb/9780190069704.013.23>

Career assessment is inherent in the professional practices of career development. Career assessment has its scientific, technical, and aesthetic foundations in applied psychology and education. It takes the forms of objective or subjective observation of another—a student or client—or reflectively of self. Assessment enables the practitioner, researcher, client, and student to conceptualize behaviour essential to performing acts of career development, such as identifying vocational interests, decision-making, and making meaning in diverse contexts of education and work. Its utility in higher education is demonstrated by examples of qualitative and quantitative methods of career assessment focused on employability. Considerations are given to the future potential and limitations of career assessment.

### **C.7 About University Career Services' Interaction with EdTech.**

Knight, E., Staunton, T., and Healy, M. In press with Cambridge University Press, publication expected in May 2022.

International trends in higher education include a growth in focus on the importance of supporting graduate career destinations. and the rise of EdTech as a major force in higher education. There is an ever increasingly competitive market for contemporary higher

education, thus universities are under growing pressure to demonstrate that they make a meaningful difference to their graduates' employment and career success. This outcome, essentially framed as the return on investment of personal and public investment, underpins higher education institutions' claims as attractive options for prospective students. The employability agenda has prompted moves toward institutional cultures of shared responsibility – by academics and support staff alike – for student employability and career success. As a result, higher education institution (HEI) career and employability services are evolving from bounded, stand-alone services toward being members of 'connected communities', pursuing projects in 'coordinated collaboration' with a wide range of internal and external stakeholders such as faculty, alumni and engagement units, ICT and university systems and employer networks. This has required a shift in career and employability service priorities from the traditional intensive individual career counselling and guidance, toward efforts to work at greater scale with cohorts, such as contributing to the curriculum or delivering large-scale career education programmes and services that work alongside it. The shift in orientation of career and employability services requires practitioners and researchers to consider how technology is driving change in university career services and how technology impacts on their professional practice. Our chapter explores these strands and starts from a position that incites career services in HEIs to approach innovation from a more critical perspective.

#### **C.8 LinkedIn as a Pedagogical Tool for Careers and Employability Learning: A Scoping Review**

Healy, M., Cochrane, S., Grant, P., and Basson, M. (2021). Manuscript submitted to *The Internet and Higher Education* on 04 November, 2021.

Graduate employability is a fundamental concern for universities in the marketised economy of contemporary higher education. Employability is now specifically targeted in higher education curricula through a variety of strategies including the integration of career development learning, work-integrated learning, and graduate attributes. As universities seek to demonstrate the currency and relevance of their education and their links with industry and employers, educators have identified professional networking as a crucial adaptive career behaviour and target learning outcome of several employability-oriented pedagogical strategies, such as mentoring, career-information interviewing, work-integrated learning, e-portfolios, and innovation boot-camps. In this article, we report



findings from a scoping literature review of 30 articles and chapters which consider the use of LinkedIn in the higher education classroom, as a case study of how pedagogies to promote networking behaviours have been conceived, implemented, and evaluated. We argue that, as useful as these individual studies might be, this is not yet a body of research that supports the kind of synthesis necessary to be useful as an evidence base for other educators to draw from, and that employability educators and researchers should make efforts to ground their work in more coherent, cohesive, and integrated theories of careers and employability learning.

### **C.9 Constructing a Life Narrative for Student Paramedic Careers and Employability Learning: A Collaborative Study**

Healy, M., Bell, A., and Ryan, G. (2021). Manuscript in preparation.

All university disciplines are answerable to the employability agenda. In health professions education, employability per se has been comparatively slow to take hold, but there has been a growing focus on professional identities and the importance of broader understandings of what clinical competence means. Paramedicine is at an evolutionary crossroads in its development as a healthcare profession, from a technical skills-based occupation to an internationally recognised and accredited healthcare profession. In this article we describe the design and delivery of a career writing exercise, designed to elicit paramedicine students' values and character strengths as they relate to their career choice in a clinical health profession, and support the development and expression of the students' careers and employability narrative. Following a collaborative autoethnographic approach, we will each describe our own insights into and experience of the career writing activity, from the perspective of an employability professional, a paramedicine lecturer and the student paramedic themselves. We will consider how career writing might be applied in the paramedicine curriculum, and the health professions more broadly, to support students' careers and employability learning and graduate employment success.

### **C.10 Employability: A Bibliometric Systematic Review of the Literature**

Healy, M., Brown, J. L., McIlveen, P. (2021). Manuscript in preparation.

In the last decade, employability has become one of the most studied topics in psychological career development research. However, employability is not interdisciplinary, but multidisciplinary. Psychological research into employability is itself only a part of the broader body of research based on the concept. Employability has also become a focus of research in the fields of higher education, disability and rehabilitation, and the sociology of education and work. As important as employability is as a focus of research, it lacks a cohesive conceptual foundation, particularly one that can traverse the various disciplinary fields in which it is studied. To advance a more mature employability research agenda, we will report findings from a bibliometric systematic literature review of 3848 research articles focused on employability, drawn from a broadly inclusive search of the Web of Science database. We will first report on a descriptive analysis of publication rates, authorship, and key journals. We will then illustrate employability research's *intellectual structure*, as represented by co-citation networks and the clusters that can be observed in them, and *conceptual structure*, as represented by topic modelling applied to the titles, keywords, and abstracts of the articles. The aim of this research is to provide an empirically derived description of the current state of employability research, upon which an integrative research agenda can be built to advance employability to a more mature, integrated, and impactful field of research.

### **C.11 The Long Tail of Graduate Employability Research**

Healy, M., and Hammer, S. (2021). Manuscript in preparation.

Graduate employability has become a central strategic concern for higher education institutions, as a result of the massification and commercialisation of higher education and debates about the role of universities in delivering skilled graduates into the labour market. Increasingly, employability is targeted in higher education curricula and pursued through a variety of strategies in and alongside the curriculum. Accordingly, many academics have developed a scholarly interest in and practical concern for their students' career success. As a result, graduate employability has provided the warrant for a range of learning and teaching activity and related scholarship of teaching and learning, focused either on exploring employability in the context of a specific discipline or profession, or on evaluating pedagogical approaches to supporting employability. In this article, we compare the research in the core of employability research with the SoTL in the long tail of

employability research, by way of bibliometric analysis of the intellectual and conceptual structure of the research literature. We argue that broad attention to employability SOTL is positive, but it would benefit from better grounding in core employability research. For its part, employability researchers within the core group should be careful to avoid crystallising the key concepts and approaches of the field before it has adequately matured.