

“FOR ME IT’S LIKE OXYGEN”: USING DESIGN RESEARCH TO DEVELOP AND
TEST A RELATIONAL EMPLOYABILITY FRAMEWORK

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Abstract

My doctoral research thesis project aimed to inform a paradigm shift in graduate employability at Edith Cowan University (ECU) through the creation of a new relational employability teaching-learning framework (Cook, 2023). I sought to address the problematic nature of the prevailing skills-focused employability concept within universities by advocating for a more holistic concept that could be used by academics to foster critical thinking, global citizenship, creativity and connectedness among students, thus contributing to the mitigation of issues arising from the commodification of skills. To guide the research, I adopted a pragmatist standpoint and crafted a conceptual framework embodying two key concepts: relational higher education and Lacković's (2019) relational graduate employability paradigm. The research objectives were to develop and test the new framework in units of study during one semester, collect and analyse data to assess the framework's practical application and value for academics and students, and establish a basis for ongoing evaluation. By introducing the new concept of 'relational employability' to ECU academics and students, I aimed to expand their thoughts and actions regarding employability from solely individuals' employment-related skills and outcomes to including relationships with others (humans, species, environments, artefacts, technologies, etc.) throughout careers (life and work). I employed a design research methodological framework that incorporated various data collection and analytical techniques across three phases: preparation and design; implementation over one semester; and analysis and sharing of practice. During the preparation and design phase, I completed two literature reviews (one of these is published), designed a prototype relational employability framework, and conducted pre-implementation qualitative interviews with 22 participants, including ECU academics, employability experts, careers practitioners and a senior learning designer. Codebook thematic analysis of the interview data provided insights into the meaning and value of relational employability among participants and enabled refinement of the framework.

During the implementation phase, I collaborated with four academics from Medical and Health Sciences and Nursing disciplines to integrate the framework into five units, spanning undergraduate to postgraduate levels. After implementation, I administered student questionnaires and conducted qualitative interviews with three academics and three students to gain insights into their experiences and perspectives of the new framework and relational employability concept in existing teaching-learning and assessment. I also examined institutional unit level data to ensure there were no ill effects of the study on student outcomes and experiences and to establish baseline data to inform ongoing implementation and evaluation of the framework at ECU.

The study revealed the benefits and some challenges of incorporating the framework into units of study. There were largely positive effects on student success and satisfaction, with the framework serving as a catalyst for holistic employability development and wider considerations of the implications of personal and collective interactions and contributions throughout careers. Academics discovered that integrating relational employability into existing teaching-learning and assessment was feasible and could enhance the meaningfulness of employability for students if they, themselves, understood the relational framework and could associate it with their discipline. The findings also suggested that the framework could assist academics to establish connections between technological considerations and the concept of employability. Questionnaire results revealed students felt the framework positively impacted their development, including confidence and self-esteem. Both academics and students shared a view that the framework should be integrated across the entire degree program, starting from first year and continuing through to graduation.

The outputs of this research included a SharePoint site for staff that provides educational resources to support the adoption of relational employability within ECU. More broadly, the study offers 16 practical recommendations for educators and universities to incorporate relational employability principles into their educational practice.

Keywords: relational higher education; relational employability framework; academics; intra-curricular careers education; design research, evaluation.

Declaration

I, Elizabeth Janice Cook, certify that this thesis does not, to the best of my knowledge and belief:

- i. incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;
- ii. contain any material previously published or written by another person except where due reference is made in the text of this thesis; or
- iii. contain any defamatory material.

Date: 11 December 2023

Acknowledgments

As an uninvited visitor on unceded Aboriginal territory, I have a responsibility to examine my part in settler colonialism, to acknowledge the Traditional Custodians of the land where I live and work, and to work toward justice and equity. I respectfully acknowledge the Whadjuk people of the Noongar nation, the traditional owners of the land upon which this thesis was constructed.

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List of Abbreviations

CoP – Community of Practice*

DBR – Design-based research

ECU – Edith Cowan University

HE – Higher Education*

HDR – Higher Degree by Research*

OECD – Organisation for Economic Co-operation and Development

PhD – Doctor of Philosophy

UNESCO – United Nations Educational, Scientific and Cultural Organization

* Only used in Table 18.

List of Publications (resulting from this research)

Book chapter

Lacković, N., & Olteanu, A. (2024). Graduate employment futures and relational employability: In conversation with Elizabeth J. Cook. In *Relational and multimodal higher education*. Routledge.

Journal articles

Please note: sections of this article are included in the thesis (cited and quoted)

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Non-traditional research outputs

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<https://open.spotify.com/episode/2JB44BrFYdiglwhiKhbvUY?si=2b75691a0308470f>

Chapter 1: Introduction

We are living in a period of intense turmoil and disruptive change that may soon radically impact on all our lives and is already shaping the lives of many of our students and communities around the globe. (Facer, 2019, p. 3)

The employability policy problem

Governments around the world expect universities to improve graduate employment outcomes (Dearing, 1997; Funck & Karlsson, 2019; Jongbloed & Vossensteyn, 2010; OECD, 2017; Williamson, 2019) amidst growing numbers of graduates, and constrained and volatile labour market conditions (Jackson, 2020; Jackson & Bridgstock, 2021). In Australia, where this study is conducted and I am based, the Federal government incentivises universities to enhance graduate employment outcomes (see Wellings et al., 2019; Department of Education, Skills and Employment, 2021). As a result, universities include graduate employment outcomes in their strategic plans (Jackson & Bridgstock, 2021) and implement employability-focused policies and practices within, alongside and outside the curriculum (Cook, 2022; Hewitt, 2020).

The concept of employability is multifaceted and subject to different interpretations (Jackson, 2016; Römgens, et al., 2020; Cook et al., 2021). Definitions of employability have encompassed achievements that improve graduates' employment prospects and success in their chosen fields (Hillage & Pollard, 1998; Yorke, 2006; Dacre Pool & Sewell, 2007), as well as critical and reflective abilities that empower learners beyond job-related attributes (Harvey, 2005). In Australia, employability has also been defined in terms of human connectedness (Bridgstock, 2020), a notion that this study builds upon and extends, and as the capacity to autonomously navigate and adapt to a changing labour market, apply and

modify one's expertise, skills and attributes to suit work settings, and showcase talents to potential employers (Small, et al., 2018). For the purpose of this thesis, which is focused on students' employability development within the curriculum, the **current dominant employability paradigm** is defined as the combination of "institutionally driven activities and individual capabilities that culminate in heightened probability of being employed and self-managing future career trajectories" (Cook et al., 2021, p. 150). However, this thesis seeks to expand the current paradigm and concurs with Sloane and Mavromaras (2020) who noted that integrating employability initiatives within universities can be challenging due to competing priorities and limited control over graduate employment outcomes and job characteristics.

In today's neoliberal landscape, the concept of employability has a "performative function" in universities, which Boden and Nedeva (2010, p. 47) argued has:

created an expectation amongst employers that graduates ought to be ready for 'the job' rather than prepared for employment; reduced considerably the agency of most universities over the employment skills they develop, their curricula and the type of education and graduates these provide; and precipitated the re-casting of the student as a customer and of education as an investment that will bring long-term and generous financial returns. Universities, in turn, have had their strategic capacity to act on the basis of their professional judgement severely circumscribed.

Boden and Nevada (2010) also highlighted that the prevalence of employability discussions could impact the quality of teaching and educational content, with detrimental effects for students. They added that, despite the professed goal of promoting social justice, the drive toward employability objectives could potentially lead to the emergence of two distinct categories of university – those producing compliant workers and those producing

future employers and leaders – thus widening inequities and social injustices, with implications for civil society. Frankham (2017) further postulated that the culture of performativity within higher education, driven by metrics and league tables, might yield an outcome contrary to its purpose – that is, it might fail to adequately prepare learners for the demands of the workplace.

Building on Brown et al. (2020) and Buchanan et al. (2020) – who exposed the limitations of human capital theory for driving the employability paradigm and addressing educational challenges – Wheelahan et al. (2022) argued that skills-focused policies fall short of addressing economic issues. In this thesis, I extend this argument to encompass ecological and technological concerns. Wheelahan et al. (2022) cautioned against the excessive idolisation and commodification of skills, which undermine the true purpose of education, degrade work quality and impede social interactions. Furthermore, they argued that a disproportionate emphasis on skills, to the detriment of critical thinking, creativity, personal growth and social connections, diminishes human flourishing – a point to which I concur.

In a similar vein, Molesworth et al. (2009) rightly argued that the current employability paradigm – focused on delivering desired content at a market rate for students as consumers (instead of learners) – diminishes intellectual complexity and prioritises workplace connections based on demand. They also contended that the proliferation of vocational business courses reinforces a culture of acquisition, limiting the broader purpose of education. Instead, Molesworth et al. (2009) advocated for a shift toward a perspective of ‘being’ rather than ‘having’, emphasising the importance of relationships and one’s existence in the world. This existence also includes the material environment. As Fenwick et al. (2012, p. 11) emphasised, professionals in work need to be able to understand “knowledge and knowing practices through material dimensions, not just the objects and texts interwoven

with their activity, but the sociomaterial webs through which the important moments of professional action and decisions emerge”.

Considering each of these critiques, it becomes not just a matter of reasonableness but of significance to explore whether the concept of employability can be refined to assimilate these valid criticisms of the prevailing paradigm. This very contention was posited in my article (Cook, 2022, p. 38) in which I raised the question: “Is it time to rethink the meaning and purpose of ‘employability’?” I reasoned that incorporating wider understandings, perspectives and actions of employability would greatly benefit graduates, aligning more effectively with the supercomplexity of life and work as proposed by Barnett (2000^a, 2000^b) *and* supporting the integration of employability with broader university strategic agendas, such as sustainability, equity, diversity and inclusion.

Scholars posit that universities carry a social and moral responsibility to cultivate employable graduates who are not just professionals but also citizen scholars (Arvanitakis & Hornsby, 2016; Miller et al., 2020; Mortari, 2016). These citizen scholars are employed individuals who possess both the motivation and capacity to catalyse positive change for themselves *and others*. While career guidance has long upheld a social justice tradition, this perspective remains largely unexplored in mainstream employability literature. Social justice, as highlighted by Hooley and Sultana (2016), extends beyond individual support, encompassing broader goals of social inclusion, cohesion, solidarity, and safeguarding human rights and needs. I elaborate on these ideas, in the context of employability, in Chapter 2.

Furthermore, the prevailing employability paradigm may not work for universities *because* it does not easily integrate with teaching-learning and the curriculum (Cook, 2022), thereby also disrupting the educational purpose of universities (Ashwin, 2020). This paradigm is influenced by notions of graduate capitals (Tomlinson, 2017), neoliberal perspectives (Tight, 2019), consumerism and materialism (Naidoo & Jamieson, 2005), and

increasing competition, marketisation and massification within higher education (Ball, 2008; Marginson, 1997; Middlehurst, 1999; Olssen & Peters, 2005; Williamson, 2019). I found Lacković's (2019) conceptualisation of a graduate employability paradigm shift particularly intriguing as, unlike the other employability models I examined (e.g., Holmes, 2015; Tomlinson, 2017; Clarke, 2018; Bennett, 2018; Bridgstock, 2020), which are based upon the prevailing employability paradigm, hers was relational in nature and included a proposition for a relational paradigm of employability in higher education. This relational employability paradigm suggested greater potential for integration into teaching and curricula and I, therefore, recommended further exploration of Lacković's (2019) model (Cook, 2022).

In this thesis, I adopt and adapt Lacković's (2019) ideas to develop and test a new relational employability teaching-learning framework, drawing on my career development learning expertise from my previous role as a Career Development Learning Designer at James Cook University. My decision to take this next step emerged from recognising the necessity to broaden the concept of employability beyond human individuals and organisations, particularly given that even the most recent employability model (Donald, et al., 2023) primarily centres on those aspects.

The inclusion of more-than-human elements has become vital for addressing contextual dynamics and systemic issues (Cook, 2022). Lacković's relational graduate employability model (2019), encompassing ecologies, materials and technologies, offers the means for such incorporation and is elaborated upon in Chapter 2, then again in Chapter 3 as, combined with the broader notion of relational higher education (Lacković & Olteanu, 2024), these concepts constitute the conceptual framework in this thesis. Currently, relational dimensions are largely overlooked within academia and universities *with respect to employability*. Therefore, my thesis is dedicated to bridging this gap by developing

Lacković's (2019) model and testing my adaptation of it, within my university context, specifically and necessarily in the curriculum (for reasons as described next).

The curricula and teaching-learning problem

Inequitable access to employability development opportunities presents a risk to equitable retention, student success and graduate outcomes among students with disadvantage. (Bennett, 2021, p. 191)

Ensuring equal and sufficient opportunities for every student to develop their employability is a challenging but exceptionally worthwhile task (Bennett, 2021). However, the research findings of Cook (2022) and Boden and Nedeva (2010) (discussed above) diverge from the recommendations of scholars, including me, who advocate for intra-curricular employability approaches (Artess et al., 2017; Blackmore et al., 2016; Bridgstock et al., 2019; Cook, 2022; Daubney, 2021; Kinash et al., 2016; Pegg et al., 2012). Notably, not all researchers agree on the value of intra-curricular employability (e.g., Cranmer, 2006) yet their research was conducted within the confines of the existing paradigm, which this thesis aims to challenge, broaden and build upon.

I view teaching-learning as the practical implementation of the university curriculum, which provides the structure for educational content and, in the context of employability, the necessary link between a discipline(s) and careers/employment. This perspective positions curricula, teaching-learning and employability development as interdependent components that work in tandem to shape diverse and nourishing educational experiences and careers for students. I contend that an intra-curricular relational approach to employability would enable universities to address the challenges and limitations imposed by the existing employability paradigm, while promoting inclusive and equitable educational experiences for diverse learners (Daubney, 2021) to enable them to have their best possible career futures.

Lacković's (2019) relational graduate employability model (see Figure 1, Chapter 2) is specifically designed for academics to support their teaching practices, but its integration into university curricula remains unexplored globally. This thesis represents the initial stride toward realising a relational conceptualisation of employability in educational programs. Building upon that work (Lacković, 2019), and considering the notion of relational higher education (Lacković & Olteanu, 2024), I propose a refined definition of relational employability comprising three interconnected focal elements: (1) establishing foundational career development and personal/professional identities (self); (2) fostering humanistic interactions and contributions throughout careers (other humans); and (3) nurturing interactions and contributions involving more-than-human entities throughout careers (beyond humans). Chapter 3 will provide further elaboration on each of these ideas; and this thesis shares how relational employability was designed, developed and tested within units of study at Edith Cowan University (ECU) through design research.

As I discussed in episodes of the podcasts "[What is the future of education?](#)" and "[Educational researcher](#)", there is a growing movement in higher education, and education in general, to embrace a relational ontology and corresponding pedagogical approaches (Bingham & Sidorkin, 2004; UNESCO, 2021^b; Gravett, 2022; Lacković & Olteanu, 2024). Therefore, even though Lacković's (2019) framework has not yet achieved full acceptance within the higher education community, the overarching trend toward embracing relational perspectives has been steadily gaining traction and should ideally encompass the realm of employability as well (Lacković, 2019; Cook, 2022). One prominent example of this paradigm shift is the emergence and evolution of relational sociology over several decades (Crossley, 2011; 2015; Dépelteau, 2018). Additionally, extensive discourse has taken place concerning the significance of relationships and connections within pedagogy, encompassing not only the more traditional perspectives (Noddings, 2013), but also those rooted in

posthumanism, feminism and materialism (Pearce & Down, 2011; Braidotti et al., 2018).

Thus, as we witness the expansion of relational perspectives across various domains, it becomes imperative to extend this paradigm to the context of employability.

By adopting a relational lens with respect to employability, the sector could strengthen its interconnectedness and interdependence with the world at large (not just the world of work) to catalyse positive change in support of a planet in crisis. Importantly, a turn toward relational employability would include wider concerns for the wellbeing of others and environments alongside and in-step with humankind (Petrilli, 2004). The integration of such critical understandings within the higher education community could help to create a more connected and compassionate society, which is always an outcome worth striving for.

As we face challenges posed by pandemics, climate change and growing automation, the traditional individualistic and neoliberal notions of employability will increasingly fall short. A relational approach to employability (Lacković, 2019; Cook, 2023) expands the construct and, if included in the curriculum, would open up new possibilities for students and academics to think in relational ways and be active agents of change (Lacković & Olteanu, 2024). Universities, driven by their core purpose, have a responsibility to enable individuals to flourish and contribute toward our supercomplex world (Barnett, 2000^a), while also offering solutions and fostering thriving, equity-driven communities, environments and technological developments. By focusing on addressing ‘wicked problems’ (Wong, n.d.) via the approach of relational employability, universities may better prepare students for the challenges and opportunities they will face throughout their careers, while enhancing their institutional reputations.

Aims and objectives

This thesis is based on the premise that a paradigm shift in graduate employability is both necessary and desired. Therefore, my goal with this thesis is to contribute to the

understanding, development and application of a relational graduate employability paradigm and explore how academics and students within my university perceive and initiate the experience of relational employability in units of study. Ultimately, my vision with this thesis is to support academics and students in engaging with and reshaping the paradigm of employability beyond individual and organisational outcomes to include holistic (relational) considerations and contributions, which are needed for humans to thrive throughout their careers in our supercomplex world (see also Barnett, 2000^a, 2000^b; Cook, 2022). Therefore, building upon Lacković's (2019) relational graduate employability paradigm, my own published work (Cook, 2022), and contributing to the notion of relational higher education (Lacković & Olteanu, 2024), the practical objectives of this doctoral research project are to:

- (1) Develop a new relational employability teaching-learning framework that includes not only individuals' employment-related skills and outcomes, but also interactions with, and contributions to, other individuals, beings and entities; thus, including humans, ecologies, materials and technologies in the concept.
- (2) In collaboration with academics at ECU, test the new framework with students in units of study over the course of one semester.
- (3) Collect and analyse data to assess the framework's practical application and value for academics and students; and establish the basis for ongoing evaluation using institutional data.
- (4) Document the use of the new relational employability teaching-learning framework at ECU to: i) emphasise its practical application and value; and ii) begin to build evidence of the impact.

This project is centred on the development and testing of the relational employability framework within the context of *existing* academic work. Therefore, my study did not explore curriculum development, instructional methods and learning approaches. Partly this was to

ensure that the final product (relational employability framework) could be utilised by academics in any educational setting, within existing learning and assessment structures, and with minimal disruption to established teaching practices. In addition, there were the limitations of time and thesis length. I called it a ‘relational employability teaching-learning framework’ to signal to academics that it can be used to guide their practice and students’ learning.

Motivations for this research

Due to my wide and varied career, and the benefits I have experienced from being opportunistic and entrepreneurial in my own career management, the topics of employability and career development learning have piqued my interest for many years. In employment, I have shared career insights and advice with learners as a secondary school teacher, assisted academics in educational design, integrated career development learning within university curricula, and presented and [published](#) on employability-related topics. With this expertise, I knew I had the necessary and unique combination of skills, knowledge and passion to bring Lacković’s (2019) graduate employability paradigm to life.

I have also worked in evaluation, at the Centre for Program Evaluation the University of Melbourne, and published two journal articles focused on evaluation in higher education (see Cook, 2021; Boyle & Cook, 2023). Therefore, establishing a basis for ongoing evaluation of the framework at ECU was important to me and forms part of this thesis. The podcast episode titled, “[A new relational employability approach for universities with Elizabeth J. Cook](#)” shares what I imagined for this thesis and outlines the research approach.

Study site and research approach

This study was conducted at my workplace, which is a public university in Western Australia. Given the above objectives, I used a design research methodological framework that incorporated data collection and analysis across three phases. As a design study, this

research is ongoing (supported by internal teaching-learning grants) under the approval of ECU Ethics. A future challenge will be to integrate the framework into research degrees, extending its application beyond coursework, as that aspect is currently less developed at ECU and in the wider sector (Cook et al., 2021). Building on the identified gap, the below research questions guided this study.

Research questions

1. How do participants (students, academics, careers practitioners and employability experts) understand and value relational employability?
2. How can a new relational employability teaching-learning framework be integrated in coursework across course levels?
3. What were the challenges, opportunities and enablers experienced by academics when using the framework in one semester?
4. How did students engage with the framework during the semester and how do they think the experience influenced their educational experience and employability?

Research significance and anticipated limitations

The original contribution to knowledge, developed and tested through this study, is a new relational employability teaching-learning framework for universities (aka ‘framework’ or ‘relational employability framework’ in this thesis). This new framework may help address the current need for a wider focus, moving from solely individuals, organisations and economy, toward collective and transformative career futures with more-than-human ‘others’ in mind. Moreover, this relational employability framework builds on and feeds into the concept of relational higher education (Lacković & Olteanu, 2024). By conducting this study, I aim to establish an approach that will enable a broader range of students, not only those who actively seek out career-related experiences and supports, to derive meaningful benefits from collective engagement in intra-curricular relational employability development/learning. In

this way more students can become better prepared for the real world, which is fundamentally relational in nature. Furthermore, by using the envisaged relational employability framework with students, future graduates will have already been challenged during their degree studies to consider the complexities of life and work in a changing world. Thus, graduates would be more enabled to contribute real-world value and benefits throughout their careers.

The limitations of this research stem from the fact that this is a doctoral thesis project and presents the findings of one case study. There is only so much I can do within a limited period of time, at one university and with a small sample of participants. Therefore, from the onset, I was aware that one key issue would be external validity. As such, I aimed for analytical and theoretical generalisability, so that the findings and outputs could be taken and adapted and, thus, generalised in a theoretical and practical sense to other contexts, by others. Moreover, I aimed for a high degree of methodological and reporting transparency so that the decisions I made in this research could be verified by others and, hence, that this study could be viewed as producing reliable and useful outputs that could be generalised. The internal validity of this study was also important and was supported by my use of qualitative and quantitative methods of data collection and analysis, which could later be brought together (and added to in subsequent iterations/evaluations) to bolster the findings and conclusions from this research.

Thesis outline

This thesis is structured into seven chapters to provide a comprehensive examination of the research topic, processes and outputs. In this introductory chapter (Chapter 1), I explained the problem, my motivations for this research and the context of the design study. I also stated the research aim, objectives and research questions, and summarised the anticipated significance and limitations of the study. In Chapter 2, I review relevant literatures relating to the research questions and my own prior research to establish the

conceptual and practical foundations of this study. I do this by synthesising and providing critique on what is currently perceived, known and practiced with respect to (predominately intra-curricular) employability, and what may need to be considered moving forward, including my own review of graduate employability models, which provided the impetus for this study. In Chapter 3, I present the conceptual framework, which is comprised of two key concepts – relational higher education and a relational graduate employability paradigm – that informed the design and implementation of the new framework in this study. In Chapter 4, I detail and explain the design research methodological framework that incorporated various data collection and analysis techniques across three phases, and the ethical considerations of this research. In Chapter 5, which is organised by research question, I present the collected data and research findings. In Chapter 6, I discuss my analysis of the findings with respect to the research questions – thus also returning to, and building upon, the reviewed literatures and conceptual framework – and the limitations of the study. In Chapter 7, I summarise the contributions of this thesis, thus highlighting its significance, and conclude with recommendations and identified opportunities for future research.

Chapter 2: Literature review

I believe it is possible to improve employability strategies to better reflect broader issues, concerns and challenges and that intra-curricula employability practices are not yet integrated in academic teaching. Moreover, I believe that many students experience diminished hope in respect to making positive change as their degree progresses, often due to labour market pressure and discourses focused heavily on economy and jobs. (Cook, 2022, p. 41)

Continuing from the preceding chapter, the purpose of this review is to synthesise the literature and practical underpinnings used to inform the development and implementation of the relational employability framework at ECU. I begin this chapter with relevant parts from my published narrative review of graduate employability models (Cook, 2022), which led to this thesis. I then proceed to address the following review questions, which are derived from the research questions of this thesis:

1. How do people understand and value employability as it is currently defined? This question seeks to explore existing perceptions and perspectives of students, academics, careers and employability researchers, employers and the health profession (the latter being the disciplinary context of this study), regarding the prevailing definition of employability.
2. How can employability be integrated in university curricula? This question seeks to examine current recommendations, practices, strategies and ideas relating intra-curricular employability; and I explore future possibilities for intra-curricular relational employability.

By presenting my prior work (supporting a move toward relational employability), and addressing the above review questions, this chapter establishes the necessary background for the thesis and situates it into existing literatures.

It is worth mentioning that the findings from the cited literatures will undoubtedly be shaped by various factors, including the individuals and groups involved in and doing the research, the specific contexts examined and the researchers' perspectives on employability. However, due to space constraints, this review does not delve into these potential influencing factors, nor does it claim to be exhaustive in its coverage.

A review of graduate employability models

This section provides parts from the narrative review of 13 graduate employability models (Cook, 2022). In the review, a 'model' is defined as a framework represented by a diagram (with supporting text) that summarises what the author(s) of the reviewed literature conceive as included in the construct of 'graduate employability'. The following questions guided the review:

- What are the distinguishing characteristics or features of each model?
- What is the relationship (estimated proximity) of each model to teaching and the curriculum, i.e., intra-curricular, or extra- or co-curricular?
- Is there a relationship between orientation (paradigm) and proximity to teaching and curricula across the models? If so, why might that be?
- Where, on a spectrum of individualistic to relational graduate employability orientations, could each model be positioned? (see Figure 2)

The methodology and method of the review are explained in Cook (2022, pp. 42-44). Table 1 shows how I defined intra-, extra- and co-curricular employability initiatives for the review.

Table 1: Three common types of employability initiatives with respect to university curriculum

Type	Description	Examples
Intra-curricular	Embedded or integrated within curricula as part of formal learning and often assessed.	Work-integrated learning; study tours; capstones.
Co-curricular	Activities that sit outside curricula; developed and delivered by universities often via the career service centre.	Professional networking events; leadership/mentoring programs; community/outreach activities.
Extra-curricular	Opportunities outside the university; sometimes advertised by the career service centre.	Paid work; volunteering.

Table 2 shows the characteristics of the two imagined opposite extreme orientations of employability (individualistic and relational). I created this table as a framework to guide and clarify my understandings of the differences in orientations of the authors with respect to employability. Lacković's (2019) book chapter was instrumental in the development of this framework because it clearly articulates the prevalent individualistic paradigm of graduate employability and introduces possible ways for defining alternatives. Note that these paradigms (orientations) are not exclusive, nor bad or good, but, rather, are imagined as two ends of a spectrum. Moreover, the models are not strictly at either end of the spectrum (as they are not black and white) but can be closer to one end or another (as variable shades of grey), depending on the perceived stance of the authors' writing with respect to graduate employability.

Table 2: Characteristics of the imagined extremes of individualistic and relational orientations of employability

Individualistic orientation	Relational orientation
<i>Individualism</i>	<i>Relationalism</i>
Focused on self and selves, excluding considerations for others, i.e.:	Focused on self, selves <i>and</i> humanistic aspects, such as:
- individual employment-related skills, outcomes, characteristics and employment	- interactions with other humans in employment and career
- competitive advantage	- considerations for others
	- concerns for equity and social justice

Individualistic orientation	Relational orientation
- my world, my career future, for me	- our world and our career futures
<i>Human-Driven</i>	<i>More-Than-Human Inclusive</i>
Market-driven higher education	All above aspects (under
Neoliberal marketisation	<i>Relationalism</i>) plus relationships with
Students as consumers	ecologies, other species, materials,
Knowledge economy	technologies, etc., during career and in
Labour market	employment
Unemployment and underemployment	
<i>Human Capital</i>	<i>All Capitals</i>
Emphasis on developing and possessing	Having awareness of, and developing,
human capitals for personal gain	human, social, cultural, identity and
	psychological capitals
<i>Economic</i>	<i>Greater Good</i>
Economic value of university degrees	Higher education for positive change,
Creation of knowledge economy	beyond values for selves and economy
Value for self, driven by financial gain	Creation of knowledge for
	sustainability, survival and the greater
	good; and equitable living

Review findings

These were my personal analytical observations and how I saw the reviewed literature as aligned with my review questions. Obviously, any qualitative research involves personal interpretation, and I provided the reasons for my analytical positioning (see Cook, 2022). My intention was to stimulate discussions about the ways that educational researchers have conceptualised employability and guided its operationalisation, specifically with respect to the curriculum.

Models focused predominately on individuals' skills and success

Knight and Yorke's (2006) Understanding, Skills, Efficiency beliefs and Metacognition (USEM) model is heavily focused on developing individual learners' subject-understandings, skills, meta-cognition and attributes without considerations for others.

Teaching quality is mentioned without description of intra-curricular approaches.

The models by Harvey, Locke and Morey (2002, p. 18) and Harvey (2005, p. 15) are almost identical and focus on individuals' employment success. The pivotal distinction between these models lies in Harvey's (2005) emphasis on university-led employability

initiatives and centralised career support services. Although both acknowledge extra-, intra- and co-curricular employability activities, they omit specifics regarding teaching-learning practices.

Penttinen, Skaniakos, and Lairio's Pedagogical Working Life Horizon model (2013, p. 888) is focused on learners' concerns for their futures to the exclusion of concerns for others. 'Working life orientations' (i.e., individual relationships, knowledge and skills, and employability) are described as embedded in curricula, without pedagogical details, although they recommend supporting reflection and inquiry. Noteworthy recommendations include the need to consider the careers guidance literature and include employability in all degrees to reach all learners.

Dacre Pool, Gurbutt and Houston's (2019, pp. 85-89) model is comprised of Dacre Pool and Sewell's (2007, p. 281) CareerEDGE model and Duckworth's (2016) concept of resilience. Drawing inspiration from Knight and Yorke's (2003; 2004; 2006) USEM and Watts' (2006) DOTS model, they propose that educators and career practitioners use their model to facilitate career development learning, reflection and evaluation. However, they do not elaborate on the practical implementation of their model, particularly in terms of teaching and curriculum integration. While Dacre Pool, Gurbutt, and Houston's (2019) model is predominately focused on developing individuals for their own gain, this is not emphasised as strongly by these authors as those previously discussed. The reason I say this is because these authors mention the need for social interactions both for evaluation (Cook, 2021) and the development of emotional intelligence (EI) (see Goleman, 1998). Dacre Pool, Gurbutt and Houston's (2019) model has strengths including emphasising intra-curricular employability, referencing career development learning theory and highlighting the importance of student wellbeing (reflecting a shift toward learner-centred approaches in higher education). Dacre Pool, Gurbutt and Houston (2019) recommend using their model to support the audit of

graduate employability activities, integrate resilience and EI in curricula, and develop learners who reflect and evaluate their employability, but have not published details to guide such practices.

Models focused on individuals' success and social and/or cultural aspects

Holmes (2013) was among the first scholars to critique the prevailing individualistic focus of university employability activities. He felt that the existing approaches overly focused on *possession* (of human capital through skills and attributes) and *positioning* (accumulating social capital) of graduates, suggesting that *processual* aspects (e.g., career management and graduate identity development) were needed as well. While I acknowledge the significance of all three aspects, I contend that there is more to employability, careers and employment than these ideas convey, as we need to include responsibilities to others, both humans and more-than-humans, as well as the need for kindness and care on Earth.

Holmes advocates for extra- and co-curricular employability approaches (managed by career services), as opposed to intra-curricular approaches, which is contrary to my stance. Nonetheless, scholars have built upon Holmes' ideas to explore curriculum-related research, such as investigating the influence of intra-curricular interventions (Jackson, 2016; Tomlinson & Jackson, 2019). Despite acknowledging the importance of graduates showcasing their value to employers (to get jobs), Holmes does not fully consider the potential influence of social connections on employment opportunities and workforce dynamics, which can arguably outweigh the impact of any employability training or similar. Challenging his viewpoint, I propose that, given the inherently relational nature of social interactions and everything on Earth, graduate employability should embrace a relational framework.

Cole (2019) steps further from the dominant individualistic perspective with his Dimensions for Learning model (p. 256), which extends beyond mere employment outcomes.

This model encompasses learning, life and work in its broadest sense, and as part of a complex system. Although Cole portrays learners as monitoring, articulating and reflecting on their employability and learning, he emphasises the importance of learners developing socio-cultural awareness and values through practiced interactions with peers and communities (moving beyond individuals and toward considerations for others).

Furthermore, Cole introduces the model as a scaffold to support the curriculum design process. He emphasises the value of teachers listening to learners' definitions, perceptions, experiences and critiques of graduate employability, and defines the 'what', 'why' and 'how' of each dimension of learning to support pedagogical practice but does not provide explicit examples to guide lesson planning. In agreement with other well-informed scholars (e.g., Artess, Hooley, & Mellors-Bourne, 2017; Blackmore et al., 2016; Hewitt, 2020), Cole highlights that it is important to involve career services, learning supports and prospective employers in the employability curriculum development process, while aligning institutional employability agendas with national frameworks, for example, the HE Academy's employability framework (Cole and Tibby, 2013).

Bennett's (2018) employABILITY thinking model is founded on six interrelated employability literacy types – basic, rhetorical, personal and critical, emotional, occupational, and ethical, cultural and social – that she contends individuals need to develop. I consider these employability literacy types to be competencies or forms of knowledge. However, some relate to wider society, and Bennett (2018) does emphasise the need for individuals to attend to issues of social and cultural difference, and the development of ethically responsible citizens; to which I wholeheartedly agree. Through employABILITY, Bennett is aiming to show how educators might transform their teaching practice. She has contributed an open-access website (<https://developingemployability.edu.au/>) with a plethora of resources to assist educators to use employABILITY. Bennett socialises this resource through regular updates

on LinkedIn and X (formerly known as Twitter). Salient features of employABILITY include its strength-based metacognitive approach and emphasis on integrating employability within existing curricula.

Tomlinson's Graduate Capitals model (2017, p. 340) is comprised of five Capitals – human, cultural, social, identity and psychological – which he maintains are drawn upon by graduates transitioning to work and managing their careers (portrayed as an individualistic focus). However, I have positioned Tomlinson's work at the half-way point of the spectrum (see Figure 2) because it includes social and cultural Capitals, which require social interactions that may result in contributions toward others. I feel that these aspects of employability are described more explicitly than in Coles' model, but less explicitly with respect to learning and not at all with respect to teaching practice. However, anecdotally, I am aware that Tomlinson's model has inspired thought with respect to curriculum development for graduate employability at my university (and others as seen in case studies).

Clarke's (2018, p. 1931) Integrated Graduate Employability model is an extension of Tomlinson's (2017). While Tomlinson (2017) focuses on the application and utility of individuals with respect to labour markets (not on the labour market context itself), Clarke (2018) incorporates considerations of labour market supply and demand, other external employment-related factors and how these impact individual graduate outcomes. These additional aspects may include people and materials in networked societies, but this does not appear to be part of Clarke's focus. Despite the name of this model, and suggestions that educators' scaffold learning to support employability development, Clarke does not elaborate on what teaching-learning for employability, using her model, might entail.

Cloutman and Higgs' (2019, p. 73) Employability Development (EmD) model is described for intra-curricula use but these authors do not provide details to guide its operationalisation (other than, what I perceive to be, loose descriptions that could be

inspirational for some). I found no evidence of the use of EmD by educators, so its effectiveness as a pedagogical approach is yet unknown. Cloutman and Higgs describe graduate employability as a life-wide and lifelong process of understanding, pursuing and managing, by individuals and populations. While they address workforce considerations (and related effects on individuals and populations), they do not acknowledge wider relational aspects, or human interactions and contributions toward more-than-human others.

Bridgstock's (2020) GE2.0 connectedness learning model is unique compared to the other models discussed so far. It concentrates on cultivating learners' aptitude to leverage the opportunities offered by digital and analogue social networks for professional and career development. While GE2.0 aims to connect learners, educators and university programs with industries and communities through building authentic partnerships and knowledge-sharing networks, Bridgstock does not consider broader employability challenges or how learners may contribute to society through their connectedness. Like Bennett (2018), Bridgstock developed a framework and strategies to facilitate the use of GE2.0 (<http://www.graduateemployability2-0.com/>). However, some strategies that she categorises as 'pedagogic' might better align with co-curricular approaches or could be challenging for educators to implement without adequate training and resources (e.g., industry/alumni engagement). Two noteworthy intra-curricular suggestions posed by Bridgstock include: (1) using social media and e-portfolios; and (2) 'connectedness learning', which is described as authentic, just-in-time inquiry or problem-based learning activities operationalised in networks and/or with community/industry.

Model focused on both individuals' success and more-than-human aspects

One model stood out as unique: Lacković's (2019) relational graduate employability paradigm (Figure 1), which comprises three integrated meta-layers: relational recruitability; socio-emotional relationality; and eco-technological relationality. The layers of this model

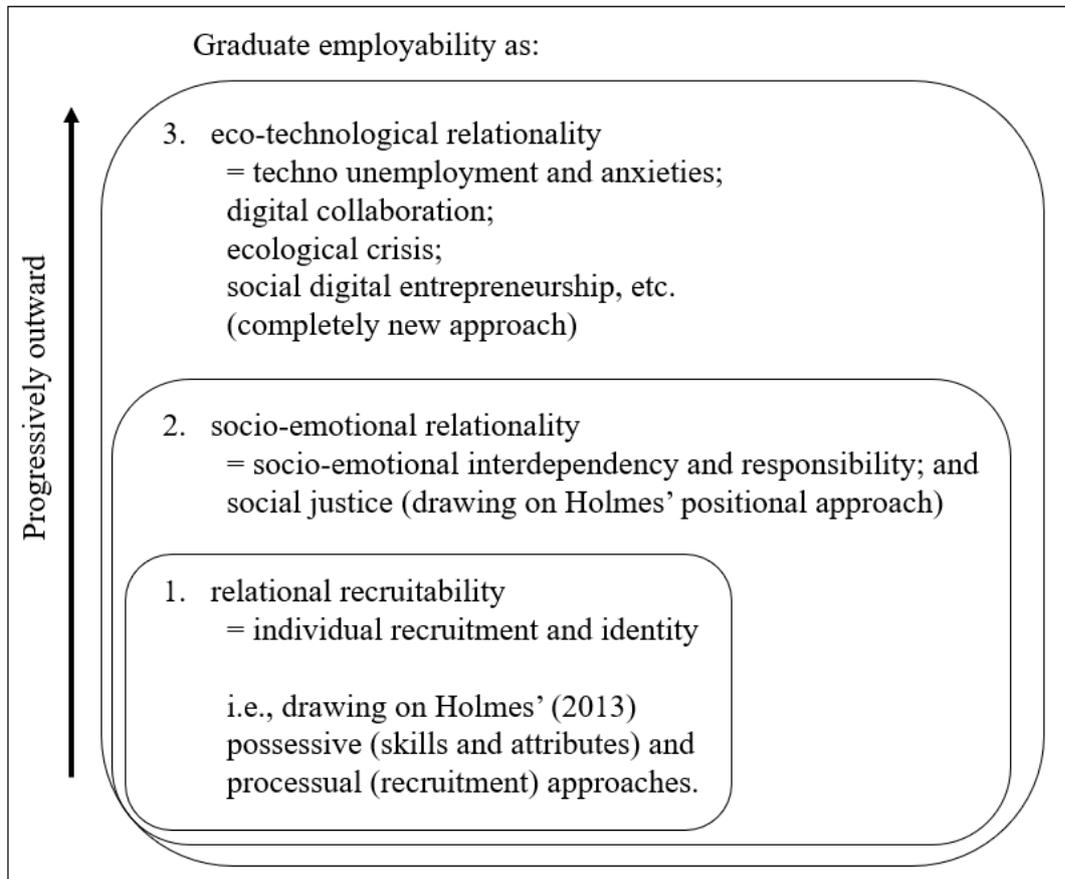
are concentric, with the inner (base) layer (*relational recruitability*), incorporating many of the notions discussed in the section above titled *models focused predominately on individuals' skills and success*. However, it is still positioned as relational (i.e., *relational recruitability*) because Lacković (2019) incorporates how individuals develop relations, which supports their employability networks for recruitability. That is, the term *recruitability* signals that the base layer is practical with respect to being recruited, and the term *relational* is about how individuals develop relations to be recruited. Thus, the basic inner layer is focused on what individuals can do for their own life and work success, which resembles a classical graduate employability approach. However, Lacković (2019) contends that this layer alone is not enough and requires expansion. Hence, the next two layers.

The middle layer considers family and work interactions and caring relationships, emotions and affect, and interdependencies and concerns for social justice that come into play in life and work (e.g., considerations for how employment decisions relate to other humans in society, not just individuals for their own success and benefits). Finally, the outermost layer considers wider, more-than-human issues and relationalities, challenges and concerns, which Lacković (2019) identifies as the technological and ecological aspects of life and work (e.g., how life and work are environmentally and digitally embedded, and what this means for careers).

When amalgamated, these three layers serve to inform a comprehensive understanding of employability that encompasses “relations with others for individual recruitment, relations to others as humanistic care for the closest and widest society, and the relationality to the ecosystem and technology” (Lacković, 2019, p. 204). I believe that Lacković may have used the word ‘paradigm’ in the name of this model to reflect its intended purpose as a philosophical and theoretical framework for guiding thoughts and actions regarding graduate employability. Given that this model is so unique and forms an important

part of the conceptual framework of this thesis, I provide further elaboration on each layer below.

Figure 1: A new graduate employability paradigm, adapted from Lacković (2019)



The relational recruitability layer recognises both the *possessive* and *processual* aspects of graduate employability, as proposed by Holmes (2013). In terms of the possessive aspects, this layer addresses individuals' desires to build employability skills and attributes, enhance self-awareness and develop professional identities – aspects of the 'self' that students/graduates strive or are expected to *possess*. For the processual aspects, this layer refers to universities' efforts in facilitating recruitment and transitions in support of graduate employment outcomes and student employability development – *processes* that students/graduates seek out or experience. This layer is individualistic, and outcomes focused, but not in a negative sense. As Lacković (2019) emphasises, this is a necessary

component because workforce demands, labour market conditions and economy (context) will inevitably influence one's career and, thus, should be considered.

The socioemotional relationality layer draws on Holmes' (2013) *positional* approach to acknowledge the significance of social and emotional interdependencies for graduates' employment futures. This layer emphasises the need to address issues of equity and social justice within employability development, employment and workplace dynamics, particularly as students come to university *positioned* differently and having experienced/experiencing different lifeworlds. The socioemotional relationality layer is not concerned with building any cultural, social and psychological capitals (as coined by Tomlinson, 2017) but, rather, in developing holistic and caring orientations toward human others and their needs, including how our work as humans can contribute to close and distant society.

The eco-technological relationality layer extends the boundaries of conventional graduate employability models and is, therefore, the new aspect of employability that Lacković (2019) introduced. This layer emphasises the importance of critical dialogue in the context of employability development, employment and careers for sustainability justice, as humanity and the world face ecological challenges and technological advancements. The ecological dimension of this layer incorporates ecological issues and concerns (e.g., the climate crisis), which must be addressed by individuals and workplaces across the globe. Employers will increasingly expect graduates to create and innovate, and respond appropriately, in this regard. Moreover, students are increasingly advocating for greater attention to matters of sustainability in higher education.

On the other hand, the technological dimension delves into the intersection of technology and employability, encompassing topics, like digital literacy, social digital entrepreneurship, and could also include matters such as the appropriate use of technology, workplace policy arrangements and rights to do with technology at work, and health and

safety concerns (e.g., digital fatigue and ergonomic workspaces). Human reliance of material objects is part of this component too.

In addition to elucidating the paradigm's conceptual underpinnings, Lacković offers pedagogical insights to support its integration into teaching practices. For example, she describes learners developing e-portfolios to explore and share their career experiences using the model's three layers to guide their reflections and analysis. Or learners creating and sharing 'relational network maps', showing personal, local and global social interdependencies, and related complexities in terms of how they relate to imagined careers and employment. Another strength of Lacković's (2019) work is her emphasis on engagement and interactions among learners, and with educators, to reinforce and deepen learning, while enabling the co-construction of a supportive and caring learning environment. The model is not proposed as a new thing to add to teaching (which would be a burden for already overloaded educators), but as means of transforming existing teaching practices into relational pedagogies. Therefore, the paradigm entails expanding and diversifying existing curricula through its integration, aligning with my preference for an intra-curricular employability solution.

Comparing the reviewed conceptual graduate employability models

Table 3 (reproduced from Cook, 2022, pp. 54-56), presents my comparison of how the conceptual models relate to teaching and curricula (as described by each author in the publications I analysed). This positioning is my own 'grading' represented on two spectra: one ranging from individualistic to relational (numbered one to twelve in the far-right column), and the other ranging from distant to near in relation to teaching and curricula (numbered one to twelve in the column second from the right).

Table 3: Summary of observations in response to the review questions – from individualistic to relational, and proximity to teaching and curricula

Notes: The symbol (=) represents an equal ranking of two models on a given spectrum. Reproduced from Cook (2022, pp. 54-56).

Citation	Reference to:			Ranking on the two spectra:	
	Teaching	Curricula	Learners or graduates	Teaching and Curricula – distant (1) to near (12)	Orientation – individualistic (1) to relational (12)
Knight & Yorke (2006)	Meta-cognition, encompassing learning how to learn, and how to reflect and problem solve. Encourages use of assessment to develop the USEM model.	Promotes thinking about how to embed.	Learners	2	1
Harvey, Locke, & Morey (2002)	Engagement, reflection and articulation. Mentions pedagogy but doesn't demonstrate it.	Mentions extra-curricular engagement, work placements and curriculum embedded employability development.	Graduates	=3	=2
Harvey (2005)	Engagement, reflection and articulation. Mentions pedagogy but doesn't demonstrate it.	Mentions extra-curricular engagement, work placements and curriculum embedded employability development.	Graduates	=3	=2
Penttinen et al. (2013)	Mentions pedagogical focus on reflection and inquiry	Emphasis on pedagogy may or may not mean embedded. Extra-curricular engagement is implied.	Learners	5	3
Dacre Pool, Gurbutt, & Houston (2019)	Mentions learning activities to build emotional intelligence and resilience.	Embedded.	Learners	7	4
Holmes (2013)	Not mentioned.	Not mentioned.	Graduates	1	5

Citation	Teaching	Reference to:		Ranking on the two spectra:	
		Curricula	Learners or graduates	Teaching and Curricula – distant (1) to near (12)	Orientation – individualistic (1) to relational (12)
Cole (2019)	Focused on learning and provides a list of learning activities.	Embedded.	Learners	9	6
Bennett (2018)	Promotes learner-centred teaching. EmployABILITY website provides resources to support teaching practice, but these were not included in the analysed documents. Thus, the characteristics of teaching-learning could not be evaluated here – an acknowledged limitation of my paper.	Embedded with an emphasis on integration within existing university curricula.	Learners	11	7
Tomlinson (2017)	Not mentioned.	Emphasis on extra-curricular engagement and co-curricular opportunities organised by careers practitioners.	Graduates	4	8
Clarke (2018)	Mentions scaffolding and skills development in curriculum.	Loose description of extra-curricular, co-curricular and embedded.	Learners	6	9
Cloutman & Higgs (2019)	Not mentioned. This model is process-related, not teaching and learning focused.	Not mentioned.	Learners	8	10

Citation	Teaching	Reference to:		Ranking on the two spectra:	
		Curricula	Learners or graduates	Teaching and Curricula – distant (1) to near (12)	Orientation – individualistic (1) to relational (12)
Bridgstock (2020)	Authentic and connected learning, communities of practice, student co-design, designing learning to meet specific learner needs, interactions and communications, reflection and collaboration, and rubrics to assess learning. Website provides a toolkit of resources for teachers (these resources were not analysed; an acknowledged limitation of my paper).	Mentions extra-curricular engagement, work placements and curriculum embedded employability development.	Learners	10	11
Lacković (2019)	Inquiry-based learning, reflection and collaboration, problem-solving and creativity, use of technology, teacher-learner and peer to peer interactions and communication, literacy development, relationality, teaching practice.	Emphasis on embedding in university curricula both in units and across degrees.	Learners	12	12

Figure 2 is a graphical visualisation of my observations outlined in Table 3. In Figure 2, each of the 13 reviewed models is represented by a coloured circle to indicate whether the authors' focus was on *learners during* their degrees (yellow-orange) or *graduates* (purple) – as there was a clear distinction to that effect across the models. Each model is positioned on a bi-directional spectrum of relative estimated:

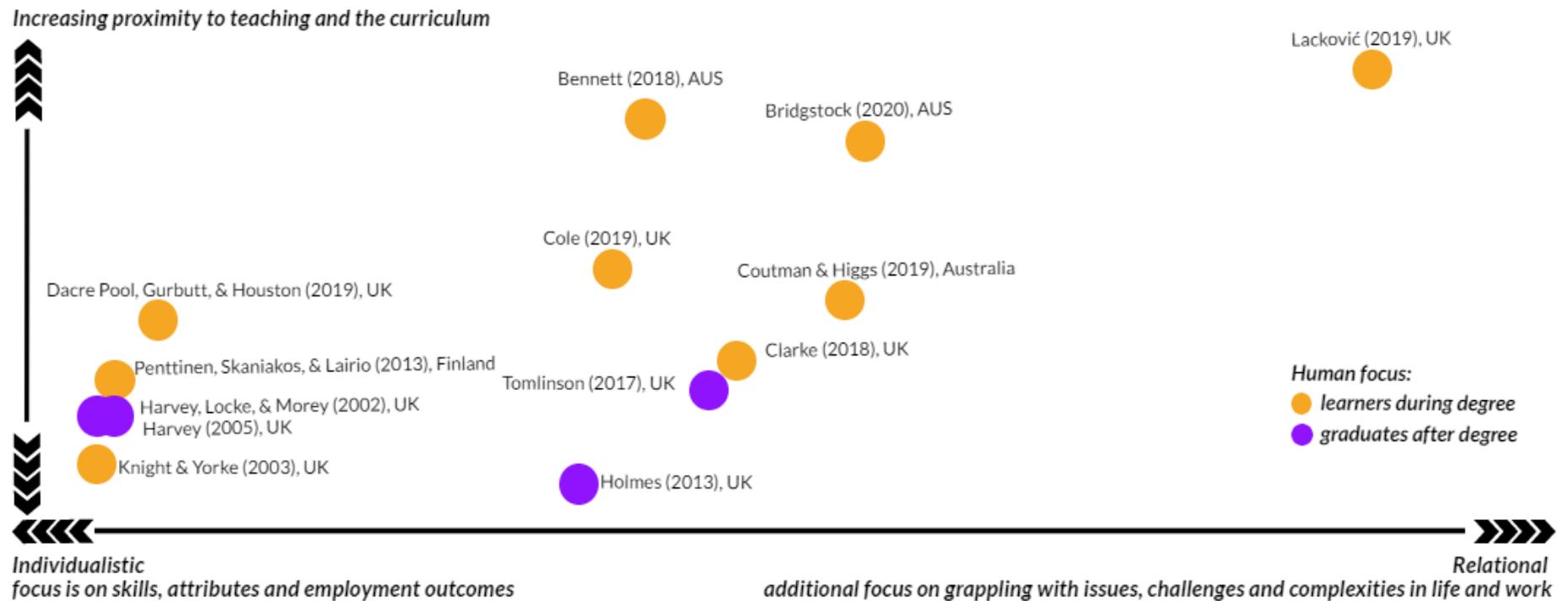
- individualistic to relational orientations (i.e., along the horizontal or x-axis); and
- proximity to teaching and curricula (i.e., along the vertical or y-axis).

Importantly, degrees of affiliation are defined in respect to the extreme and opposite ends of the spectrum, not whether they are exclusively representing one orientation or another (as none did). Precision was not possible as this representation is based on judgement. To elaborate on what is shown, strongly individualistic and skills-focused orientations (i.e., focused on individuals' success) are positioned closer to the far-left end of the horizontal axis, while strongly relational orientations (i.e., focused on individuals and others, both human and [more-than] human) are positioned closer to the far-right end. Similarly, descriptions by authors that indicated stronger connections to teaching and the university curriculum are positioned closer to the top of the vertical axis, while descriptions with little or no reference to teaching and the curriculum are positioned toward the other end of that axis.

The key finding of this review was an inverse relationship between individualistic-relational orientations and proximity to teaching and curricula across the models, implying that models with more individualistic orientations may have less potential for intra-curricula integration.

Figure 2: Bi-directional spectrum of orientations and proximity to teaching and curricula of the reviewed conceptual graduate employability models

Reproduced from Cook (2022, pp. 54-56).



Review limitations and concluding remark

The review was conducted by myself and, therefore, relies upon my own interpretations and understandings. However, it was peer-reviewed for publication, and has been cited six times in Q1 and Q2 journals (as at 20 November 2023) since its publication on 21 April 2022. I also acknowledged that the process undertaken was configurative (Gough et al., 2012), not aggregative, and rapid, making Google scholar adequate and appropriate as the chosen tool for searching the literature. Furthermore, by excluding case study research from the review, I would have missed a number of valuable pedagogical approaches. However, this review was not about pedagogical approaches, but the relational and individual orientations of models and their status as integrated or outside the curriculum. In addition, the search string, by the nature of the chosen words, excluded known frameworks related to graduate employability and curriculum, such as Kinash et al. (2015) and Scott (2016).

Future work will require mindsets and preparation beyond individualistic and neoliberal orientations of employability. This is not to suggest that prevailing approaches are not useful and relevant, but, rather, that they may now need expansion. It may also be the case that a relational and pedagogical graduate employability approach may be more sustainable for the sector in terms of resourcing, not only impact.

Having reviewed graduate employability models in terms of their individualistic-relational and intra/extra/co-curricular positioning, the next section of this literature review chapter explores how people understand and value employability *as it is currently defined*. This is important because the present study explores how participants understand and value *relational employability*.

Current understandings and values of employability

Students

Research into student perceptions and experiences of employability across multiple studies suggests a common thread – students consistently recognise the importance of skills aligned with employers’ needs, while their perspectives on employability evolve over the course of their studies, encompassing both intrinsic attributes and a desire for value from their university experience. For example, Tymon (2013) conducted focus groups and a questionnaire with UK undergraduate students, majoring in business studies, business administration, human resources and marketing, to investigate their perceptions of employability. The findings revealed unanimous agreement across all year levels regarding the importance of skills aligned with employers’ needs, particularly emphasising communication and teamwork. Personal attributes, such as flexibility, adaptability, hard work, commitment and dedication, were also recognised by students across all year levels in this study. In addition, the final-year students recognised the importance of employability for securing future work and valued employability-related experiences, whereas some of the first and second-year students demonstrated limited awareness of employers’ expectations. Tymon (2013) also noted that the students predominantly considered employability as related to immediate job prospects, with only a few recognising its wider potential in relation to career fulfilment and benefits toward others.

In a study conducted by Ingleby (2015), with UK undergraduates studying early childhood studies, a strong emphasis on employability was evident. Akin to Tymon’s (2013) findings, these students associated higher education as enabling them to acquire skills relevant to securing employment. In contrast, Ingleby’s research added another layer of understanding as students expressed a desire for their university experience to provide value for money, while enhancing their employability. This differed from the views of their

academic tutors who emphasised the importance of developing reflective practice; thus, highlighting the complex interplay between students' expectations, academic perspectives and the broader goals of higher education in fostering employability.

Building upon multiple years of research, Higdon's (2016) provides further insights into the misalignment between graduate and student views of employability, compared to government skills-focused policy. The students in this study perceived employability as a complex concept intertwined with the university-industry nexus, emphasising the significance of opportunities and activities that facilitated connections with potential employers. While first year students largely adhered to government definitions of employability, variations were observed across disciplines. For example, some dance undergraduates were unfamiliar with the term 'employability' but still aimed to improve themselves to appeal to employers, whereas an architecture student expressed scepticism toward the employability agenda. Consistent with Tymon's (2013) findings, the conceptualisation of employability differed between first year and third year undergraduates, with the latter prioritising networking and personal connections over specific skills. Notably, first year students expressed an inclination toward self-employment, which Higdon (2016) attributed to possible entrepreneurial aspirations or pragmatism in uncertain times. The influence of pre-university experiences and educational institutions also shaped the employability perceptions of the first-year students, as they were encouraged to view their degree as a prerequisite for securing a 'good' job. Although the students aligned with the dominant government policy view, they acknowledged the importance of social capital for career success. Third year students with aspirations for the creative industries emphasised the role of luck, networking, passion, ongoing personal development and adaptability in accessing and sustaining work, and actively sought industry contacts through work experience.

In their study, Gedye and Beaumont (2018) examined the changing articulations of employability among 63 UK marine sports science students as they progressed through their studies. All students were enrolled in a comprehensive program that integrated enterprise and employability activities into the curriculum. The qualitative findings revealed a noticeable transformation in the students' articulations of employability as they advanced in their studies. Notably, their vocabulary expanded, and their definitions shifted from a sole focus on employers' desires (extrinsic factors) to highlighting the intrinsic qualities and attributes they could offer potential employers. These findings are consistent with prior research by Tymon (2013) and Ingleby (2015), which also identified the evolving nature of students' perceptions about employability. However, what sets Gedye and Beaumont's study apart is the consistent pattern of changing articulations of employability observed across students from different disciplines. These researchers highlighted the significance of providing comprehensive employability education to shape students' evolving and nuanced perspectives about employability, while also enhancing their readiness for the competitive job market.

In a study conducted by Niska (2023), students' diverse perspectives on employability were examined by interviewing 13 Finnish students studying social science. This study revealed variations in how students perceived their *own* employability. While some students framed their employability in terms of traditional organisational roles, others identified themselves as entrepreneurial agents. A particularly noteworthy finding was the presence of ambiguity among certain students as they grappled with the ideological dilemma of balancing the stability and security of established roles, with the variability and risk inherent in entrepreneurial pursuits.

While my exploration in this section has primarily delved into understanding student perspectives within the European context, it has offered insights into the diverse ways students view employability, shedding light on the challenges that universities grapple with to

meet the varied expectations of students. It is, however, worth noting that how we teach ‘employability’ and the societal discourse surrounding the topic significantly influences student perspectives. As discussed previously, the employability discourse has predominantly taken an individualistic stance rather than embracing a relational perspective.

Most importantly, I want to emphasise that the insights gained from this section of the review are not all-encompassing and do not capture the entire spectrum of student perspectives and experiences related to employability, especially those in the Global South. The reason I chose not to include literature from the Global South is not a reflection of a negative view of the research or any racial biases on my part. Instead, over the years, I have observed that this literature tends to heavily emphasise graduate employment outcomes and employability skills, often measured through psychometric tests and statistical analyses (e.g., see Banerjee et al., 2022; Chen et al., 2023), rather than uncovering the nuanced aspects of student perspectives and experiences.

In addition, when students in countries such as India *are* interviewed, their views are heavily oriented toward skills and job attainment (e.g., see Vaghela & Kaushal, 2022) probably *because* their educators, prospective employers and societies are focused on these aspects (they are societal and cultural norms) and students reflect what they learn. Therefore, instead of closely examining the predominant focus on skills and jobs among students of different nations (and drawing on my strong knowledge of the employability literature), I opted to present perspectives that I predicted would later assist in responding to my research questions and the study’s findings. In other words, this was a strategic decision to provide a useful foundation for comprehending the multifaceted nature of employability among students, without repeating at length what is already known.

Before proceeding to the next section of the review, it is useful to mention Kibona’s (2023) study, which revealed Tanzanian university students’ perceptions that the content

learned in class lacks relevance to real-world occurrences and the skills demanded by society. According to Kibona (2023), this finding highlights the necessity for university curricula to foster risk-taking, reflective practice and reciprocal learning among both teachers and students. These qualities of the curriculum align with the relational paradigm of this thesis (see Chapter 3) and how the participating academics and students engaged with relational employability during the study, including how they reflected upon the new ideas and practices presented to them, and what they learned because of their experiences.

Academics

Research into academic understandings and values of the current employability paradigm reveals a nuanced landscape that can vary depending on an academic's discipline(s), beliefs and context. For example, Osborne and Grant-Smith (2017) and Speight et al. (2013) reported resistance stemming from academics' concerns about the commodification of higher education and increased workloads, especially considering the evolving expectations of academic roles over time. These studies also identified disciplinary differences in academics' perceptions of their role in contributing to the employability agenda. Engineering academics, for instance, were seemingly more comfortable with teaching for employability compared to those in the arts and humanities (Speight et al., 2013). Academic concerns have also arisen regarding the role of universities in fostering employability (Sin, et al., 2019). Some academics feel pressured to incorporate employability into curricula without adequate training and support (Majid, et al., 2022), which, as Speight et al. (2013) note, poses a particular challenge for those in generalist degree programs, such as arts and sciences, compared to professionally accredited programs, like teaching, nursing and engineering.

To gain further insights into the experiences of academics integrating employability into curricula, Cotronei-Baird (2020) conducted interviews with eight academics actively

involved in four units of the Bachelor of Commerce program at an Australian university. The findings revealed a shared understanding among academics regarding the importance of employability skills in teaching and assessment practices. The academics in this study recognised two main types of employability skills: disciplinary-specific skills; and skills that enhance employment outcomes by preparing students for the workforce. Notably, the essential employability skills that were highlighted by these academics included analysis, evaluation, problem-solving, critical thinking, communication and teamwork; and they emphasised the importance of incorporating these skills into the university curriculum, acknowledging their roles in doing so. This finding contrasts with previous research (Osborne & Grant-Smith, 2017; Speight, et al., 2013), as these academics (in Cotronei-Baird's research) accepted the responsibility to integrate employability skills, citing employers' active interest in candidates possessing such skills.

Cotronei-Baird's (2020) research also explored the alignment between academics' stated practices and their actual implementation. The academics acknowledged the importance of directly teaching and assessing employability skills, with the goal of bridging classroom and workplace learning and practices, and expressed a commitment to fostering problem-solving, teamwork, communication and critical thinking skills through activities. However, the assessment tasks they used primarily focused on analysis, evaluation and written skills, with limited evaluation of these broader employability skills. Cotronei-Baird's (2020) work, therefore, highlighted inconsistencies in the integration of employability skills by academics, as influenced by factors such as discipline, position, teaching space and experience. Novice academics tended to prioritise unit requirements and disciplinary content assessment, while experienced academics tailored their approaches to incorporate broader considerations. This variability raises concerns about the effectiveness of the current emphasis on employability skills development.

Careers and employability researchers

Traditionally, research into employability and career development has been compartmentalised, with limited exchange between these fields in both theoretical and practical domains (Römgens, et al., 2020; Healy, et al., 2022). To address this divide, Donald et al. (2023) conducted a systematic literature review of journal articles from both fields published from 2016 to 2022. Their review led to the development of the Employability Capital Growth Model (ECGM; see Table 4, reproduced with permission from Donald, et al., 2023), which attempts to integrate insights from both fields and identifies nine Capitals, external factors and personal outcomes that influence individuals' employability.

Table 4: Components of the Employability Capital Growth Model

Theme	Definition
Social Capital	The resources gained through establishing and nurturing relationships, leading to enhanced self-perceived employability.
Cultural Capital	The accumulation of culturally valued knowledge and experiences that contribute to one's self-perceived employability in the labour market.
Psychological Capital	Personal characteristics that enhance self-perceived employability and enable individuals to navigate the labour market effectively.
Personal Identity Capital	How an individual is judged based on their background and presented signals, influencing their employability.
Health Capital	Resources related to an individual's mental and physical wellbeing, impacting their self-perceived employability and job performance.
Scholastic Capital	Resources acquired through pre-university education, university education, and additional qualifications that contribute to employability.
Market-Value Capital	Resources gained through labour market experiences, technical skills, and personal skills, influencing self-perceived employability.
Career Identity Capital	Resources acquired through reflective practices, career counselling, and personal agency, enhancing one's employability signals.
Economic Capital	Access to material resources and financial wealth that can enhance self-perceived employability.
External Factors	Dimensions beyond individual agency that impact self-perceived employability and employment outcomes.
Personal Outcomes	Benefits experienced by individuals through the enhancement of their employability capital.

However, from my perspective, and building upon my review of graduate employability models (presented earlier in this chapter), the ECGM exhibits an individualistic and outcomes-oriented focus that excludes critical considerations, such as issues of social justice and equity, and care for more-than-human others, which are central to Lacković's (2019) model and this thesis. That is, Lacković's model places a strong emphasis on addressing social justice, equity and a more holistic view of employability, within teaching, which stands in contrast to the ECGM's narrower focus. Additionally, Donald et al. (2023) define educators as "people who deliver content to students via a collection of tutoring sessions and modules that cumulatively form a university degree" (p. 8), which may be perceived as mechanistic and outdated, and may not resonate well with academics. Although Donald et al. (2023) propose opportunities for academics that include embedding employability in the curriculum and promoting experiential learning (including self-reflection), they do not provide concrete details on how these could be practically implemented – although, admittedly, that was not the purpose of their review. My point here is, how can educators implement the ECGM if they are already grappling with embedding employability and integrating these concepts into experiential learning and self-reflection activities?

When I now imagine the ECGM positioned on my bi-directional spectrum that considers individualistic-relational orientations and proximity to teaching and curricula (see Figure 2 earlier in this chapter), I see it as positioned just to the right of Clarke's (2018) model. While the ECGM primarily focuses on enhancing employability and success for students, graduates and employing organisations, this thesis aims to additionally incorporate wider concerns and contributions, which include more-than-human others. In recognising the importance of social justice in employability discussions, I believe it is essential to consider social inclusion, solidarity and the fulfilment of human rights and needs (Hooley & Sultana,

2016). Authentic work education, as advocated by Sultana (2020), equips learners with intellectual tools and moral resolve to foster socially just ways of coexisting, which may also promote human flourishing. By instilling these values of care, respect and collective solidarity into employability education, students and graduates may be more aware both of the importance of addressing local and global challenges, and their ability to do so throughout their careers (Cook, 2022).

To counter the dominance of neoliberalism, Hooley, Sultana and Thomsen (2017) emphasised the need for universities to integrate social justice and sustainability into employability discourses. Critical and communitarian perspectives challenge the prevailing narrative of individual responsibility and explore the concepts of humanness, humanity and sustainability in the context of careers, employability and work (Blustein, et al., 2005; Carosin et al., 2022). By adopting these perspectives in curricula, universities may contribute to a more balanced and inclusive society (Cook, 2022).

Building upon the work of Pearson et al. (2023), who highlighted the importance of relational approaches to employability (specifically the balance between work and family relationships), this thesis aims to address the holistic needs and aspirations of diverse student cohorts, including those from underrepresented equity groups. This thesis also aims to empower academics and students (who will become graduates) to be the agents of positive change, capable of addressing complex challenges, and promoting wellbeing among individuals and society at large (Arvanitakis & Hornsby, 2016; Miller et al., 2020; Mortari, 2016).

Employers and workforce

While the present study does not directly involve employers, it is essential to acknowledge the significance of employer and workforce perspectives as they influence the role, and expectations placed on, universities and their staff. In this regard, it is worth

mentioning a recent literature review by Cheng et al. (2022), which highlighted a noteworthy gap between the skills and attributes desired by employers, versus what governments consider relevant for graduate employability. Their study serves as a timely reminder of a longstanding argument: that the policy signals from governments to universities, regarding skills, are not necessarily accurate and reliable. Thus, it is crucial that the sector broaden its focus beyond skills and outcomes alone. If we fail to do so, we risk perpetuating ongoing issues without meaningful progress. Therefore, this thesis aims to develop a new and holistic approach to employability that will align with the policy signals of governments, while encompassing wider considerations to align with the supercomplexities of work and, thus, employer needs.

Further evidence of the need to widen our gaze is provided by Dickerson et al.'s (2023) study, which identified a consistent set of top six 'essential employment skills', including collaboration, communication, creative thinking, problem-solving, information literacy, organising, and planning and prioritising work. These skills are projected to increase in demand by 2035 and will require a higher level of proficiency. Despite the current policy focus on technical and digital skills, Dickerson et al. (2023) discovered that these 'essential employment skills' have remained relevant across various occupations since 2010, and complement specialised and technical expertise, which they predict will also undergo changes as the labour market evolves. My point here is that because those 'essential employment skills' have remained largely consistent (while governmental policy has shifted from time to time) focusing on skills alone will not solve anyone's problems (or they would have already).

Health profession

Given the disciplinary context of the present study (health sciences and nursing), Leadbeatter et al.'s (2023) scoping review signifies the prevailing understanding of employability as synonymous with acquiring a professional job, as well as its significance for

sustaining employment and thriving in work environments. The authors suggest this emphasis provides an opportunity for research to shift its focus from solely examining graduates' skills and capabilities, to exploring how universities can better prepare graduates for future labour market changes and turbulent conditions. Leadbeatter et al. (2023) recommend further research in the field of health professional education to investigate the impact of structural factors, such as social and economic situations, policies and organisational environments, on the employability of graduates, and call for the identification of institutional strategies to help foster conditions for thriving during periods of disruption. This thesis, through developing and testing a new relational employability framework with health science students and academics, may provide a useful institutional strategy to address Leadbeatter et al.'s call.

The final section of this chapter explores current and future possibilities for intra-curricular employability as the specific practical focus of this thesis.

Integrating employability in university curricula

Current intra-curricular employability approaches

Pegg et al.'s (2012) 'Pedagogy for employability' remains a relevant source of information about the ways that academics (and professional staff) currently work to engage and support students to develop their employability. Pegg et al. (2012) emphasised the importance of developing a shared community of learning focused on a degree program, encouraging collaboration between staff and students, and recognising students as active partners in their education. They highlighted the need for students to understand the wider purposes of activities aimed at developing employability and to learn how to explicitly articulate their development through reflection, thus building self-confidence. To effectively integrate employability in curricula, Pegg et al. (2012) suggested constructivist approaches, utilising a range of teaching strategies (e.g., experiments, field trips, simulations, conferences) and methods (lectures, tutorials, seminars, online delivery and individual/group

projects). According to Pegg et al. (2012), realistic, disciplinary-specific assessment tasks are crucial to motivate and engage students in their employability development, as well as opportunities for self- and peer assessment to evaluate skill development. I agree with this advice but reiterate that the focus needs to go beyond skills alone.

Pegg et al. (2012) also recognised the importance of overcoming barriers and challenges to effective intra-curricular employability, including the culture of prioritising research over teaching, opposition from academics to embed, curriculum constraints, a lack of clarity on graduate attributes among staff, and the potential separation of generic skills from disciplinary knowledge. To address these challenges, they recommended cultural shifts, integrating employability skills within disciplinary knowledge, contextualising graduate attributes within specific disciplines, and providing training and support for practitioners to use flexible, tutor-driven approaches to assessment. Pegg et al. (2012) also emphasised the inclusion of a wide range of creative assessment methods and the need for assessment literacy among tutors. They encouraged the inclusion of work-based learning opportunities, the development of enterprise and entrepreneurial skills, and the integration of interdisciplinary teamwork and learning experiences across levels and subjects of study. Good practice examples are provided in Pegg et al.'s (2012) work.

Arguing for a more critical approach to teaching-learning in universities (notably as related to entrepreneurship, yet still relevant to explore in this review), Lambert et al. (2007) shared examples of student research projects that challenged the traditional academic norms of the time (centred on neoliberal views). The first example was the creation of a book produced and edited by undergraduate students, which featured sociological fiction and photographic images. This project enabled students to engage in sociological research through storytelling and imagery, departing from traditional essay-based assessments. The second example was a student-staff collaborative research project focused on gender

transformations and academic activism, which involved students in genuine inquiry engaging with critical pedagogy principles. The third example was a documentary film produced by undergraduate students (as researchers) to present the impact of global economic and political factors on higher education, including the commodification of students and exploring alternative ways of living, working and studying. Together, these illustrative cases highlight the potential of undergraduate students to undertake meaningful research, gain funding and generate impactful real-world outputs, while also challenging the traditional paradigms of academia and empowering students to actively engage with pressing societal concerns. In alignment with these principles, my own research endeavours to nurture and harness the agency inherent in both students and academics. Through the relational employability framework, my aim is to encourage a more profound consideration of the wider implications of students and academics thoughts and actions, not only for their careers but also for the wellbeing of others, both human and more-than-human.

Inspired by the work of Sambell et al. (2021, p. 348), which recommended “the introduction of curriculum activities in the first year of their degree”, Spagnoli et al. (2023) conducted a study to investigate whether the explicit integration of ‘employability’ in assessments could enhance first-year students’ understandings of the concept. The researchers invited first-year students to use a new reflective tool, which they called iASK (identify, Attributes, Skills, Knowledge), to reflect on the connections between employability and their assessment experiences. Thematic analysis of the responses from 114 students revealed that they associated communication, independence and organisation with their assessments, suggesting the development of these skills as integral to their identity and attributes. The students recognised various assessment types as contributing to their communication and independence skills, demonstrating these skills can be nurtured without explicit inclusion in assessment. Their study prominently emphasised the significance of

incorporating reflective strategies into the educational process, effectively empowering students to discern the employability merits embedded within various assessment methods. Nonetheless, it also brought into focus the imperative of addressing the concepts of global citizenship and critical thinking, as students often failed to associate these attributes with any specific assessment types. In alignment with these findings, this thesis endeavours to design and test a relational employability framework that enables academics to draw students' attention to both the need for critical global citizenship and their self-awareness of such aspects through reflective activities incorporated into assessments.

Karunaratne and Calma (2023) examined the deficits and improvements in creative thinking skills among first-year business and economics undergraduates. They utilised an authentic assessment task centred around three themes: creative expression; knowledge creation; and creative problem-solving. The findings highlighted specific areas in which students exhibited deficits in creative thinking abilities and how these could be improved through assessment. Karunaratne and Calma (2023) emphasised the importance of providing students with opportunities to enhance their creative thinking skills through active learning, advocating for the design of resources, learning activities, assessment practices and feedback processes that could promote the development of creative thinking skills among students. Furthermore, they argued for the prioritisation of preparing academics to effectively facilitate the cultivation of creativity in the classroom. This perspective aligns with the viewpoint of Dickerson et al. (2023), who similarly stressed the recognition of creative thinking as a critical employability skill alongside other essential skills, such as critical thinking, problem-solving, collaboration and communication. Through the development and testing of the proposed relational employability framework in this thesis, educators may find themselves better equipped to foster the cultivation of creative thinking skills among students through

meaningful learning experiences and assessments that inherently prioritise interconnection, care and the pursuit of more equitable career futures.

Bennett's (2015, 2016) pioneering research explored using visual narratives and methodologies to enhance employability development among university students. Her studies specifically focused on two distinct groups: pre-service teachers; and tertiary music students and educators. In the pre-service teacher study, Bennett (2015) utilised visual narratives as powerful mental models of teaching and found that, through the use of drawings, diverse representations of teaching identities and aspirations were uncovered. Notably, the findings revealed that pre-service teachers who depicted themselves without including students were less likely to express an intention to teach, including those who showed little or no interest in pursuing a teaching career. The alignment between visual and written narratives accentuated the valuable insights that visual narratives provide in comprehending identities and potential career futures. As a result of these findings, Bennett (2015) recommended the integration of written and visual narratives as effective prompts for facilitating discussions on self and identity development – a strategy which I encouraged academics to trial (and one did) during the research process outlined in this thesis.

In Bennett's (2016) study involving tertiary music students and educators, she employed visual methodologies, including drawings and captions, to explore conceptualisations of what it is to be a musician in the context of higher education music studies and graduate work. Her research findings illuminated the potential of visual methodologies in stimulating career-oriented thinking, challenging conventional research approaches, and nurturing self-awareness and artistic identity among students. Bennett (2016) argued that, by challenging prevailing narratives through alternative and creative methods, students can develop the necessary skills for careers that demand resilience and an entrepreneurial mindset. Furthermore, communicating positive and realistic career previews

were found to help reshape inadequate employability expectations, while fostering meaningful dialogue within professional and education communities.

Overall, Bennett's (2015, 2016) research underscores the significance of visual narratives and method as instrumental tools for promoting self-reflection and facilitating the exploration of complex concepts. These innovative approaches contribute to the development of self-identity and the cultivation of career-oriented thinking. Importantly, Bennett's (2015, 2016) research emphasises the critical role of understanding students' thinking and calls for the incorporation of narrative-based approaches in career-related learning and support.

In higher education, the application of visual media for reflective purposes is often limited unless the program or subject context is traditionally viewed as image and art-friendly, such as music, the arts and media studies. However, the utilisation of visual media-based reflection and analysis, termed 'inquiry graphics', has shown notable potential in higher education teaching and learning more generally. This method, as evidenced by Lacković (2020), has promoted students' creative and critical thinking, enhanced their understandings of concept and skills diversity, and encouraged pluralistic perspectives when applied with both doctoral researchers in Education from various disciplinary backgrounds and Master of Arts students specialising in educational psychology. For that reason, and given its alignment with the relational approach to employability that this thesis pursues, the present design research project employs the method of inquiry graphics (Lacković, 2020) in one unit of study (Unit 3) to explore the use of images in supporting students' reflections on their developing relational employability/identity. This approach will aim to enhance students' creative thinking skills and foster a deeper understanding of the complex concepts related to relational employability.

Future possibilities for intra-curricular relational employability

Almond's (2022) research delves into the concept of pedagogical ecologies and their influence on students' perceptions of work and life after graduation. By highlighting the relationship between work and life, Almond identifies two contrasting perspectives: viewing work as detracting from life, versus perceiving it as contributing to life. The former separates purpose and meaning from work, while the latter emphasises a more intimate connection between work and a sense of fulfilment. Almond argues that, while universities excel at preparing students for the practical aspects of the job market, they often neglect to nurture their exploration of deeper existential questions and purpose. To address this, Almond suggests that universities intentionally and systematically foster purposeful and globally engaged citizens through inclusive practices. Drawing on Palmer's (2000) reflection on vocation, Almond emphasises the importance of understanding one's authentic life path for making a meaningful impact in the world. He proposes that educators begin *first* by acknowledging students' current perspectives, *and then* incorporate language, perspectives and practices related to career exploration to nurture their transformation; thus, expanding their view of education beyond a means to find a job. These ideas, from Almond (2022), are closely related to the ultimate goal of relational employability in this thesis, which is to expand thoughts and actions relating to employability toward the inclusion of concerns for holistic personal and societal development, fostering a sense of purpose, promoting equity, social justice and environmental consciousness, and preparing students for meaningful contributions to the world beyond their immediate job prospects.

In a similar vein, Kenny et al. (2019) and Carosin et al. (2022) both emphasise the need for transformative education that transcends traditional approaches. They advocate for addressing systemic barriers, fostering individual and collective agency in shaping meaningful careers, and contributing to a just and sustainable society. Recognising the

detrimental effects of systemic barriers, social identities and discrimination on marginalised youth, both studies propose interventions that actively address these challenges, while promoting resilience, motivation and emotional wellbeing. Kenny et al. (2019) specifically focus on career development education in schools, suggesting interventions to foster critical consciousness, nurture purpose and instil a sense of social impact among students, preparing them for the complexities of evolving career paths. In contrast, Carosin et al. (2022) shift the focus to lifelong guidance for youth in high school and university settings. They emphasise the importance of collective approaches, the redefinition of identities and the cultivation of meaningful relationships. Carosin et al. (2022) propose a conceptual framework intended to facilitate the design of interventions promoting social justice, decent work and sustainable development. These interventions aim to create spaces where personal and social transformation can occur, empowering students to redefine their identities, acquire relevant knowledge and skills, and build resonant relationships with others and the world at large. In alignment with the principles advocated by Kenny et al. (2019) and Carosin et al. (2022), this thesis seeks to build upon the foundation of transformative education by developing and testing a relational employability framework. This framework will aim to empower students to navigate, not only evolving career paths, but also to actively engage in promoting equity, social justice and environmental sustainability, so they can contribute meaningfully to a fair, inclusive and environmentally responsible society.

In the realm of technological futures, Markauskaite et al. (2022) and Fawns (2022) provide valuable insights into preparing students for the challenges posed by evolving technologies through their examination of the relationship between technology and pedagogy. Markauskaite et al. (2022) focus on the capabilities necessary for active participation in an AI-driven world, emphasising skills like self-regulated learning, understanding diverse perspectives mediated by AI, and engaging with distributed systems of humans and AI. They

argue that these capabilities are essential for students to navigate evolving work environments and enhance their employability – a viewpoint this thesis supports. Fawns' (2022) entangled pedagogy model further contributes to the discussion by highlighting the interdependence of technology and pedagogy in complex educational activities. Collectively, these studies emphasise the importance of purposefully integrating technology and pedagogy to support students in developing their employability for careers in a rapidly changing technological landscape. In the context of this thesis, I encouraged academics to consider making greater use of technologies in their teaching practices, particularly when incorporating the relational employability framework (which itself refers to relations with technologies and, thus, presents an opportunity to highlight the role of technology in employability development and career futures). Moreover, I used various information communication technologies to share my early ideas about relational employability (e.g., via a Microsoft Sway and SharePoint site, which are both introduced in Chapter 4).

Carvalho et al. (2022) add that educators and students should co-design for learning in an AI world by employing pedagogical strategies, such as speculative pedagogies and AI scenarios, which would assist in students' preparation for future uncertainties. These utopian ideas align with the goals of the relational employability framework developed and tested in this thesis.

To summarise, in this chapter, I presented my published narrative review, which supports the movement toward relational employability as the focus of this thesis. I also addressed specific review questions (relating to the research questions of this thesis) to explore the perceptions and perspectives of students, academics, careers and employability researchers, and employers regarding employability as it is currently defined, and current approaches and future possibilities for intra-curricular employability as the other specific focus of this thesis, which seeks to support the integration a relational employability

framework into units of study. As such, this literature review chapter has provided a solid foundation for the study presented in this thesis. The next chapter elaborates on the key concepts that form the conceptual framework of the thesis.

Chapter 3: Conceptual framework

How can higher education theory and practice continue responding to global social, technological, and ecological crises, and at the same time, counter the uncaring, individualistic, and competition-driven values that are engulfing global universities as neoliberal marketplaces? (Lacković & Olteanu, 2024, p. 3)

In this chapter, I define and explain the two foundational components of the conceptual framework of this thesis: relational higher education and a relational graduate employability paradigm. The two concepts go hand-in-hand, with relational higher education both creating and necessitating a relational employability paradigm to build a strong and sustainable higher education for all people who care to make a difference in the world, whether that be within a university or across careers (life and work).

Relational higher education

Relational higher education, as proposed by Lacković and Olteanu (2024), offers an educational theory and teaching-learning approach that revolves around cultivating a deep sense of *relational awareness* among students and educators. The approach is grounded in recognising the intricate connections that shape education and its broader impact on society and environments. My understanding of relational higher education is that it seeks to provide a holistic, inclusive, caring and meaningful educational experience for all who wish to learn, serve and evolve in, alongside, through and beyond a university education. Relational higher education encompasses three “interpermeating relationality modalities or dimensions” of knowledge and its enactment and exploration in the curriculum (Lacković & Olteanu, 2024, p. 3). These modalities include:

- human society;

- environment/more-than-humans; and
- digitalisation.

The following sections explain each of these modalities in the context of higher education.

Interaction with human society

At the heart of relational higher education is the dimension that focuses on interactions with human society. It goes beyond the mere transmission of knowledge and delves into the transformative power of compassionate engagement. Students are encouraged to understand that knowledge creation is not an isolated endeavour, but a collaborative process that thrives on interactions with fellow humans as part of our humanity. This relationality perspective highlights the socio-emotional and cultural interdependences that shapes individuals and communities. It challenges the prevalent notion of isolated individualism, advocating for a holistic perspective that considers the wellbeing of all humans and our planet. Thus, this dimension underscores the idea that the self is inherently connected to others and to the broader human experience, making competition-driven approaches appear counterproductive within the context of higher education's market-driven landscape.

Engagement with the environment and more-than-human entities

Relational higher education extends its scope beyond human interactions to encompass engagement with the environment and more-than-human entities. This dimension acknowledges that knowledge creation is intricately tied to the world we inhabit. It challenges human exceptionalism, and urges students and academics to recognise their place within a vast ecological web. The interactions between individuals and the environment, whether natural, built, material or technological, hold profound implications for knowledge construction. This dimension also delves into the role of our bodies as both material

representations and extensions of the mind. It highlights the concept that our bodily interactions with our surroundings shape our knowledge and understandings. This relational perspective urges all people in universities to consider their role as stewards of the environment and as contributors to the broader ecosystem.

Integration of digitalisation

In the contemporary educational landscape, digitalisation plays a pivotal role in shaping learning experiences. The digital relationality dimension underscores the significance of various digital media in supporting collaborative learning and expanding awareness. This dimension involves critically investigating the connections between the physical and digital realms, and how digital media serve as representations of real-world experiences. Postdigital education principles resonate within this dimension, exploring the integration of virtual and non-virtual aspects. Furthermore, this dimension addresses the evolving role of online learning platforms and their potential to facilitate meaningful interactions. It encourages students to critically engage with digital tools, recognising their role in shaping learning experiences, and enabling or disabling global connections.

What theoretical perspectives inform a relational higher education paradigm?

The proposed relational higher education draws from various theoretical approaches rooted in Lacković and Olteanu's (2024, p. 34) reading of Peirce's (1931-1958) semiotics, which emphasises the need to understand "things-beings-events as relational" or interdependent (as signalled by the hyphen). The semiotic contribution is, therefore, about understanding that the mind (and the Self) emerges "through relations to alterity" (or distinction), while being "intrinsically relational" (Lacković & Olteanu, 2024, p. 34).

Within this framework of understanding, several key concepts are intertwined, including biosemiotics, embodied cognition, global semiotics (which embraces 'otherness' and advocates for global connections by exploring the creation, interpretation and co-creation

of meanings in relation to socio-cultural values, as discussed by Petrilli in 2004), relational sociology (explored by Dépelteau in 2018, and Burkitt in 2014 and 2016), and sociomateriality (e.g., Fenwick, 2015). These represent only a selection of the diverse perspectives woven into the relational paradigm of higher education in Lacković and Olteanu's (2024) work.

Lacković and Olteanu (2024) provide an argument that a relational ontology can also be pragmatic (following Peirce's perspective) as the core of Peirce's definition of the sign (the fundamental unit of any communicative act) is relational. This means that interpretation and, thus, education, is an interpretative act at the intersection of what the mind perceives/senses, interprets, and how the perceived or sensed exists or manifests in any real or imaginary world. In greater detail, the Peircean sign operates on a triadic model, distinguishing it from the dyadic de Saussurean sign, which comprises only the signifier (form) and the signified (interpretation), lacking the crucial third element. In Peirce's triad, the additional third element represents what the form signifies, relates to or represents, and it can differ from the actual reality of what is happening or existing, as everything that transpires is subject to interpretation. So, in Peirce's triad, there is form, representation and interpretation.

This semiotic theory informs relational education in at least a few ways: 1) that the physical environmental reality is not separate from social or human interpretation and development; i.e., they effect each other; 2) that the role of interpretation in knowledge and skills growth is often obscured in education as if all the teachers and all the students would interpret the same 'input' (form/sense, be it a text or image or sound) in the same way, which is one of the challenges of standardised practices aiming for 'one size fits all' solutions; and 3) that what is interpreted may not be what it seems to an interpreter (hence the distinction between a) the interpretation and b) the source of interpretation, its object). The relevance of

this philosophical and logical position on the sign to the relational employability paradigm and practice is in acknowledging the plurality of meanings (what a particular employment experience means to different students) and that it is difficult to provide ready-made rules and advice in terms of what works and how to develop this or that skill.

Lacković and Olteanu (2024) also propose an approach to relational analysis that begins by considering concepts and phenomena as both ‘abstract’ and ‘material’. This initial step precedes the exploration of how these elements interrelate in practice and meaning-making. Commonly, relational approaches, such as sociomaterial or posthuman analyses, rely on thick, ethnographic descriptions that attempt to encompass the interpretation and feeling of an event, phenomena or action, holistically, as a socio-material assemblage. While Lacković and Olteanu (2024) support this approach, they also argue that it may be valuable, and even advisable, to initially identify distinct material or conceptual elements and interpretations before examining how they become entangled. This approach to analysis helps to emphasise the distinction between verbal concepts and sensory experiences, which pervades Western societies (unlike, for example, Indigenous Knowledges systems), to underscore their intrinsic interdependence and enmeshing. The key idea here is that material, ideational and practical aspects converge in events, experiences and actions, yet it remains essential to recognise their individual characteristics. Otherwise, we would be unable to understand how these elements come together without first acknowledging their individual meanings.

Human interpretation shapes sociomaterial encounters and descriptions when viewed from a human perspective. Thus, in relational education, the focus is not on debating the individuation or entanglement of elements. Rather, what relational education is interested in, including associated relational pedagogies, is a relational mindset and awareness that can be

fostered among learners. Relational mindset and awareness means *to be deeply aware of interdependencies among people, materiality and digital media*.

Overall, relational higher education emphasises that knowledge creation and dissemination are not isolated activities but are woven into the fabric of interconnectedness with our world. In other words, relationality is about how humans exist, interact and contribute as individuals with other humans, species, environments, materials and technologies. Relationality includes and goes beyond individuality. A relational approach encourages students to become *relational agents* (Lacković & Olteanu, 2024) with a heightened awareness of their relationships with human society, the environment and digital media. This relational awareness fosters a conscious sense of responsibility, urging students to consider their impact on local and global scales. A relational approach also promotes the development and exploration of multifaceted characteristics or identities within and outside selves, which Lacković and Olteanu refer to as ‘identity+’ or ‘multimodal identity’, thus underscoring the idea that the self can be observed as multimodal in its representation and realisation.

By prioritising relationality, universities may be better able to cultivate graduates who are not only ‘equipped’ with skills, but also grow an understanding of their role in shaping a more just, interconnected and sustainable world. The means by which we can focus on employability in a relational higher education sector is through the other relational component of the conceptual framework, which is discussed next, as well as the choice to adopt an inquiry graphics pedagogy in one of the units of study, because it is an example of relational pedagogy.

A relational graduate employability paradigm

Lacković’s (2019) graduate employability paradigm provides a suitable grounding for this study because, as discussed in Chapter 2, it was the most relational employability model

of those I reviewed *and* is specifically designed for intra-curricular use. However, to my knowledge, this paradigm has not been applied in universities outside the present study. As previously discussed, Lacković's (2019) relational graduate employability paradigm (Figure 1) comprises three equally important and interconnected 'meta-layers', which provide a strong foundation for development and testing in this thesis for the following reasons.

Firstly, the paradigm focuses on supporting individual's recruitment through relationships with others, which, in turn, 'boosts' their various capitals, skills, competences and attributes for personal success and the success of their employing organisations, which, in turn, benefits humans, society and economies at large. This first 'need' is well attended to by the sector and is represented by many of the models I reviewed, particularly that by Donald et al. (2023), which is the most current model to date. However, the main difference, if compared to other classical skills and attributes approaches, is that the relations are foregrounded from the start, at individual recruitment level, evident in the term 'relational recruitability' (Lacković, 2019).

Secondly, the paradigm recognises and embraces the vital more-than-human aspects of human careers (whereby 'careers' refers to 'life and work'). These more-than-human aspects are the diverse beings (species and ecologies) and objects (materials and technologies) with which humans engage and rely upon to flourish. In other words, relational employability embraces 'otherness' (Petrilli, 2004) and represents a holistic, responsible, contributory and caring conceptualisation of employability development and careers – quite distinct from the current employability paradigm and no easy feat. Only Lacković's (2019) paradigm attended to this aspect as well as the goal to get recruited. Recognising the detrimental impact of neoliberal forces and ideologies on students, academics, universities, societies and wider, I aim to build on Lacković's work to develop and test a new relational

employability teaching-learning framework at ECU, taking the necessary first step (working from the ground-up).

Like Lacković (2019), I view employability as an opportunity for combining individual and collective (workforce and university) efforts in an educational response toward tackling pressing social, environmental and technological issues and challenges. These are the outward-facing and relational aspects, which are represented by the socio-emotional and eco-technological components of Lacković's (2019) paradigm. The relational recruitability component acknowledges the inward-facing and individualistic aspects of employability, building on: (a) careers support, management for graduate recruitment and transitions to work (i.e., Holmes' (2013) processual approach); and (b) development of graduate capitals (i.e., Tomlinson (2017) and Holmes' (2013) possessive approach) but it argues that these need to expand. As stated above, even the first layer is observed as relational, termed 'relational recruitability', as it is about the interactions and relations a student develops through building skills and competencies toward being recruited, hence the onus here is also on relationality. This is how the base of this model differs from a sole focus on attributes and skills building.

I believe that viewing employability as relational in these three ways more accurately represents the supercomplexity (Barnett, 2000a; 2000b) of the concept within the world, which is relational and is where we live and work (experience and generate careers). Therefore, the premise of relational employability in this thesis is that students and graduates, in thinking-imagining and acting relationally about employability and careers, would be better prepared for whatever their career futures may bring and better enabled to contribute toward positive local-global and workforce change. Being grounded in these three meta-layers, relational employability may also better align with university missions that work to transform, impact, innovate, sustain, empower and grow individuals, societies and beyond. In other words, from my perspective, relational employability aligns with the educational

purpose of higher education as articulated by Ashwin (2020), which is to enable students to see the world in new ways and gain an understanding of knowledge that transforms their sense of self, the world and their capacity to act within it.

Lacković's (2019) paradigm is non-dualist in its philosophy, meaning that it views the mentioned aspects of employability as one interconnected whole, rather than as many separate, disconnected parts. It is a holistic view of living, learning and working. The paradigm, therefore, requires a relational, interconnected, holistic and inquiry-based intra-curricular teaching-learning approach to facilitate critical awareness, as well as responsive and meaningful considerations of careers and employability by academics and students. In her book chapter, Lacković (2019) mentions that she designed the paradigm for academics who use dialogic pedagogies, so that they can fairly easily adapt their teaching to such a paradigm by including questions and tasks about relationality and relations. It seemed to me that the paradigm had the potential for integration within existing curricula to expand and diversify what is already part of that curriculum. With my experience in career development learning and educational design, I thought I could effectively use the paradigm to enhance academic engagement in employability (to contradict previously discussed negative associations with the word), *while* bringing to the fore a new relational way to think and act on "employability" and its development in students. Building on the notion of relational higher education, and Lacković's graduate employability paradigm, this thesis presents a possible way forward for intra-curricular relational employability and a way to promote the idea of a relational higher education sector.

Other related concepts considered

As part of my intention in developing the proposed relational employability framework, I aimed to promote more socially just ways of living and working. Drawing inspiration from Walker and Fongwa's (2017) book, which envisions universities as

institutions emphasising the interrelationships between personal, social-external and social-university factors for students, academics and society, I found valuable insights. Their work seeks to guide universities in reinventing themselves to empower students, academics and the institution itself to address public concerns related to social justice, poverty and inequities. Walker and Fongwa (2017) depict students as evolving into globally aware contributors who can make informed judgements and choices “about the life they have reason to value [including but] not reduced to economic opportunities and action” (p. 217). They highlight the role of universities in nurturing agency and wellbeing, and encompassing capabilities and functioning. These ideas resonate with, and would be attended to via, the proposed relational employability framework, which, by fostering a holistic understanding of employability, aligns with the goal of enabling individuals to engage in meaningful, socially just careers that extend beyond mere economic considerations.

In addition, I considered the concept of global citizenship as it rightly emphasises critical thinking, justice-oriented agency, ethical reasoning and social responsibility through transformative learning and reflection (Hill, et al., 2018). The skills, values and perspectives of a global citizen are crucial to navigating and dealing with supercomplex, interconnected challenges in a world that is increasingly digitised and interdependent. UNESCO (2021^a, n.p.) refers to critical global citizenship as Global Citizenship Education in Target 4.7 of the Sustainable Development Goals (SDG4 on Education), which aim to “instil in learners the values, attitudes and behaviours that support responsible global citizenship: creativity, innovation, and commitment to peace, human rights and sustainable development”. However, I felt that the concept, itself, was not needed to understand, develop or test relational employability. Rather, I intend to refer to critical global citizenship as one outcome of embodying relational employability. By promoting critical global citizenship, through relational employability, universities may be better able to achieve Target 4.7 of the SDGs.

I also considered the Systems Theory Framework (STF; McMahon & Patton, 1995; Patton & McMahon, 1999, 2006, 2014), which is a metatheoretical framework of career development constructed using general systems theory (von Bertalanffy, 1968, 1972). The STF comprises the intrapersonal system of the individual, the social system and the environmental-societal system, with each system including “influences” as summarised in Table 5 (see also, McMahon & Patton, 2018, p. 232). These systems are inseparable and work through interactions within and between them, subject to change over time and chance occurrences.

Table 5: Systems and their influences within the Systems Theory Framework

System	Influences
Intrapersonal	Gender, age, self-concept, health, ability, disability, physical attributes, beliefs, personality, interests, values, aptitudes, skills, world-of-work knowledge, sexual orientation and ethnicity.
Social	Peers, family, media, community groups, workplace and education institutions.
Environmental-societal	Political decisions, historical trends, globalisation, socioeconomic status, employment market and geographical location.

The careers and employability experts interviewed in my study, and many others outside of ECU, value and use the STF to guide their practice. As such, and because I wanted to connect and respect both employability and careers (as concepts, phenomena and disciplinary fields), I felt it was important for me to engage with and consider this theory, if not to at least understand how the STF and relational employability relate. I soon realised they are distinct as, while the STF describes the influences on and of career development in the context of systems (to mainly aid those focused on understanding how careers work in reality, e.g., careers practitioners), the relational employability framework will be a tool that can be used by academics and students to consider their development and identities, and their

interactions and contributions with and toward others (human and more-than-human) in the context of careers and employability as relevant to the curriculum.

Weaknesses of the adopted relational employability paradigm

Finally, it was important that I reflect on the potential weaknesses of the adopted relational employability paradigm, including the possible challenge of introducing relational thinking within a field strongly driven by skills discourses, and practices aiming to build CVs and boost capitals. A relational approach to employability may be seen as too ‘meta’, conceptual and/or impractical; and a change of practice, regardless of the envisaged ease of adaptation or adoption, is always hard. Academics are already burdened, and many may feel that their curricula and teaching is already sufficient and ‘packed’. Ultimately, it would be up to educators to determine whether and how they might apply the relational employability paradigm. Further collaborations and dialogue between professionals in employability services and academics, perhaps also involving students in partnership, would be desirable.

Chapter 4: Methodological framework

In this chapter, I define, detail, explain and justify the design research methodological framework of the study, which incorporated various data collection and analysis techniques across three phases. This chapter also includes an outline of the ethical considerations, and the methods used to generate insights, develop and test the new relational employability framework in five units of study at ECU. In addition, I describe my pragmatist research philosophy, which underpinned how I conceptualised and conducted this research.

Why, and what is, “design research”?

Design research is neither a methodology nor method, but a methodological framework. As Bakker (2019, p. 7) articulates:

It is a genre of flexibly using existing research approaches for the purpose of gaining design based insights and research-based designs. For example, it is possible that within a design study (a design research project) you first use a survey to do a problem or needs analysis, do a case study of a teacher using your design, and use evaluation to identify learning effects.

In the context of education, design research is distinct from design-based research (traditionally called DBR) because, while DBR typically aims to improve *existing* educational practice by designing and testing interventions in real-world settings (e.g., Hoadley et al., 2002; Hoadley & Campos, 2022; Scott et al., 2020), design research can *start from a broader perspective* by first examining educational practices and systems *to identify new possibilities*, and then *developing innovative solutions and new practices to enhance teaching-learning* (e.g., Bakker, 2019; McKenney & Reeves, 2012). The boundaries between these two approaches can be blurred as they can overlap and be used in combination.

Furthermore, both approaches aim to develop practical solutions that improve educational outcomes and address real-world problems.

So, why was design research the most appropriate methodological framework for this study? My interest in graduate employability and career development research and practice has been long-standing, since 2017, when I was employed at James Cook University as a Career Development Learning Designer. Therefore, prior to commencing my doctoral studies with Lancaster University, I had accumulated knowledge and expertise in these fields, specifically in the context of higher education (as that sector is where I have been employed since 2017). Later, I was employed as an Educational Designer at University of Southern Queensland, supporting academics to innovate curricula, particularly in online learning and, while doing this full-time, I was engaged in employability research. Therefore, I had the potential to both *identify new possibilities* and *develop innovative solutions and new practices to enhance teaching-learning*. That is, I am a designer and researcher at heart, as well as an educator and scientist (my qualifications are BSc, MTeach).

When I commenced the coursework component of the PhD, my perspectives and knowledge about higher education grew and I was exposed to new ideas, including Lacković's (2019) notion of graduate employability as relational. This concept excited and inspired me as I could see how going beyond 'individualistic employability' could have wide-ranging benefits for students, academics, universities and, more broadly, help foster positive benefits for dealing with societal and environmental issues and concerns from an educational stance; thus, tentatively contributing toward resolving these mindfully and with purpose. I also felt that I had the skills, knowledge, expertise and required persistence to bring Lacković's (2019) graduate employability paradigm shift to life and knew, from my experiences and wide reading, that no one else had yet done this. So, I decided to build on Lacković's work for my thesis project.

To ensure my thesis would be a novel contribution, that I understood the gap and to determine my focus for the project, I reviewed higher education and careers literatures on the topic of graduate employability, considering existing models and their applications in curricula (Cook, 2022). This means that I started *from a broader perspective by first examining educational practices and systems* – a key feature of design research.

Reviewing these literatures (and keeping up with them to this day) confirmed that, to my knowledge, nothing practical had been done to develop and test relational employability in curricula with academics. So, I decided to develop a new relational employability teaching-learning framework, building on the relational paradigm first posited by Lacković (2019). The *initial design* of the relational employability teaching-learning framework (called the *prototype* in this study) needed to be applied and evaluated in practice, which required a design research methodological framework. This is because, in order to *bring Lacković's graduate employability paradigm shift to life*, I needed to develop *innovative solutions and new practices* in real-time with academics and students. As a designer, critical thinker and innovator, a design research methodological framework made perfect epistemological sense to me.

Since this thesis is situated in the context of higher education, I saw no need to refer to it as *educational design research*, even though some scholars (e.g., McKenney & Reeves, 2019) call it that. In this thesis, I use the terms *design study* and *design research* interchangeably. However, I use *design study* more often as a noun (e.g., 'this design study') and *design research* more often as a verb (e.g., 'doing design research'). Design research is distinct from other forms of educational research because it focuses on what education could or should be, as opposed to what it is or was (Bakker, 2019) – the approach innovates educational practices by research *and* design, hence the name. Other key features of design research include that the researcher is reflective and makes predictions both prior to (as

explained above) and while undertaking ‘real work’, via a process of prescriptive, cyclical and iterative intervention (Bakker, 2004; 2019). Bakker (2004, p. 38) adds that:

Design research is evaluated against the metrics of innovation and usefulness, and its strength comes from its explanatory power and grounding in experience. Moreover, it often leads to products that are useful in educational practice because they have been developed in practice.

I love this quote as it exemplifies why and how the research questions and chosen methodological framework of my study aligned to enable a pathway for innovation. In other words, I went from proof of concept (via literature reviews and establishing a conceptual framework), to prototype development and testing (noting only one cycle of implementation is presented in this thesis as the research is ongoing – a limitation of this study). Moreover, the process began when developing the research questions of the study and, at that time, I was highly attuned to the metrics of innovation and usefulness. This meant that, when implementing the study over the course of one semester, I utilised specific methods and purposefully designed interview questions to gather data from student and academic participants who had experienced the framework. I then analysed this data to explore the potential of relational employability as an intra-curricular framework. My goal, in doing so, was to understand whether and how the relational employability paradigm through the new framework may help to address at least some of the needs and challenges of employability in higher education, as discussed previously, including, for example, empowering academics with respect to meeting ‘employability expectations’ and preparing students for a rapidly changing workforce in a warming world. Throughout this process, I also aimed to uncover insights that would contribute to wider conversations about the relevance of current employability approaches, while also starting to build an evidence-base upon which further

developments could occur, in order to support positive changes within the field of higher education (see Chapter 2).

Although Jen, Moon and Samarapungavan (2015) say there is modest scope for generalisation in DBR (though not the same as design research, DBR is, in this regard, very similar), generalisability in largely qualitative research happens through good, clear and simple design, explained in sufficient detail and grounded in theory, making it often applicable in, or at least transferable to, different contexts. In addition, effective collaboration, which is how I inherently work, can maximise the generalisability and outcomes of interventions. “Being sensitive to contextual factors and working systematically can enable researchers to make cautious inferences, and propose theories to explain their observations” (McKenney & Reeves, 2019, p. 20). Beyond this thesis, work is already underway to expand the use of relational employability across the academic disciplines at my university, and at a university in the UK. This replication, both within and across contexts, will boost the generalisability and evidence the transferability of relational employability (Bakker, 2004; McKenney & Reeves, 2019).

What I like the most about design research is the ability for the researcher to invent and develop new possibilities for education and education futures in situ. My attraction to this feature may derive from my Bachelor of Science degree studies (although, I do not hold positivist beliefs about research with human participants), as well as my background in educational design. As Bakker (2019, p. 3) highlights:

design researchers want to solve a problem; they see the potential of new technology for teaching and learning, or argue for the need to help learners prepare for skills increasingly needed in the future. The type of learning they envision cannot yet be

observed in naturalistic settings; hence new settings have to be engineered in which the intended learning processes can be researched and improved.

Note that, in the above description, the use of new technologies is the imagined solution to an educational problem. However, in this study, the imagined and developed ‘solution’ is a new framework, designed to transform intra-curricular employability education – from solely individualistic to relational – with academics. Therefore, in this study, technology was used as a *vehicle* for collaborating with participants and implementing the approach, not as a solution.

Weaknesses of design research

While design research offers valuable insights and benefits, it is important to acknowledge its potential weaknesses. One significant limitation lies in the complexity and time-intensive nature of the process. Design research often requires substantial time and resources, which can be challenging for researchers, particularly those working with limited budgets or tight schedules. In this regard, the present study is limited in that it reports only one (the initial) iteration of the continuing design research project. Additionally, as described above, the outcomes of design research can sometimes be difficult to generalise across broader contexts as they may be highly specific to a particular design problem or setting under investigation. Furthermore, the subjectivity inherent in design decisions and interpretations can introduce a level of bias or inconsistency in findings. This means that I needed to be as explicit as possible to ensure the robustness of this study.

Before elaborating on the finer details of the methodological framework of this study, it is important to articulate my philosophical beliefs about knowledge and practice.

Research philosophy

Throughout my doctoral studies, I have come to identify strongly as a pragmatist, and these philosophical beliefs are at the core of my identity as a designer-researcher and as a human being. They do not just shape my worldview; they influence every aspect of my work, including the research presented here. I have noticed that, when I am true to my philosophical beliefs, my employability, career outcomes and wellbeing are improved, compared with times when work has conflicted with my beliefs. In other words, when my actions align with my pragmatic beliefs – when my values and moral compass are in harmony with my goals – good things have tended to happen, and I have been able to flourish and contribute more, than when my mental compass is out of sync with my reality. This realisation holds true, not just for me, but extends to students and academics as well. In our pursuit of thriving in an ever-changing world, staying true to our identity and core values is paramount. This is precisely why the concept of relational employability is so significant to me; it offers a pathway for individuals to navigate and actively engage in positive career futures.

In exploring pragmatism, I find parallels with the philosophy of Charles Peirce (1931-1958), whose work underpins a relational higher education paradigm (see Chapter 3). While Peirce acknowledges the existence of an external reality that can be interpreted (which some might align with objectivism), his pragmatism places interpretation at the very centre of our understanding (Burke, 2001). In essence, pragmatism operates in the space between a world defined by interpretation and one defined by objective reality. According to Peirce, this objective reality remains elusive; hence, he developed the ‘doctrine’ of *synechism* (Esposito, 2005). This doctrine posits that everything is in constant growth and development, and knowledge is continually evolving. While we strive for ultimate truth (or, a final objective reality) our roles as interpreters ensure that such absolute truth remains elusive; and that is the crux of the matter in pragmatism.

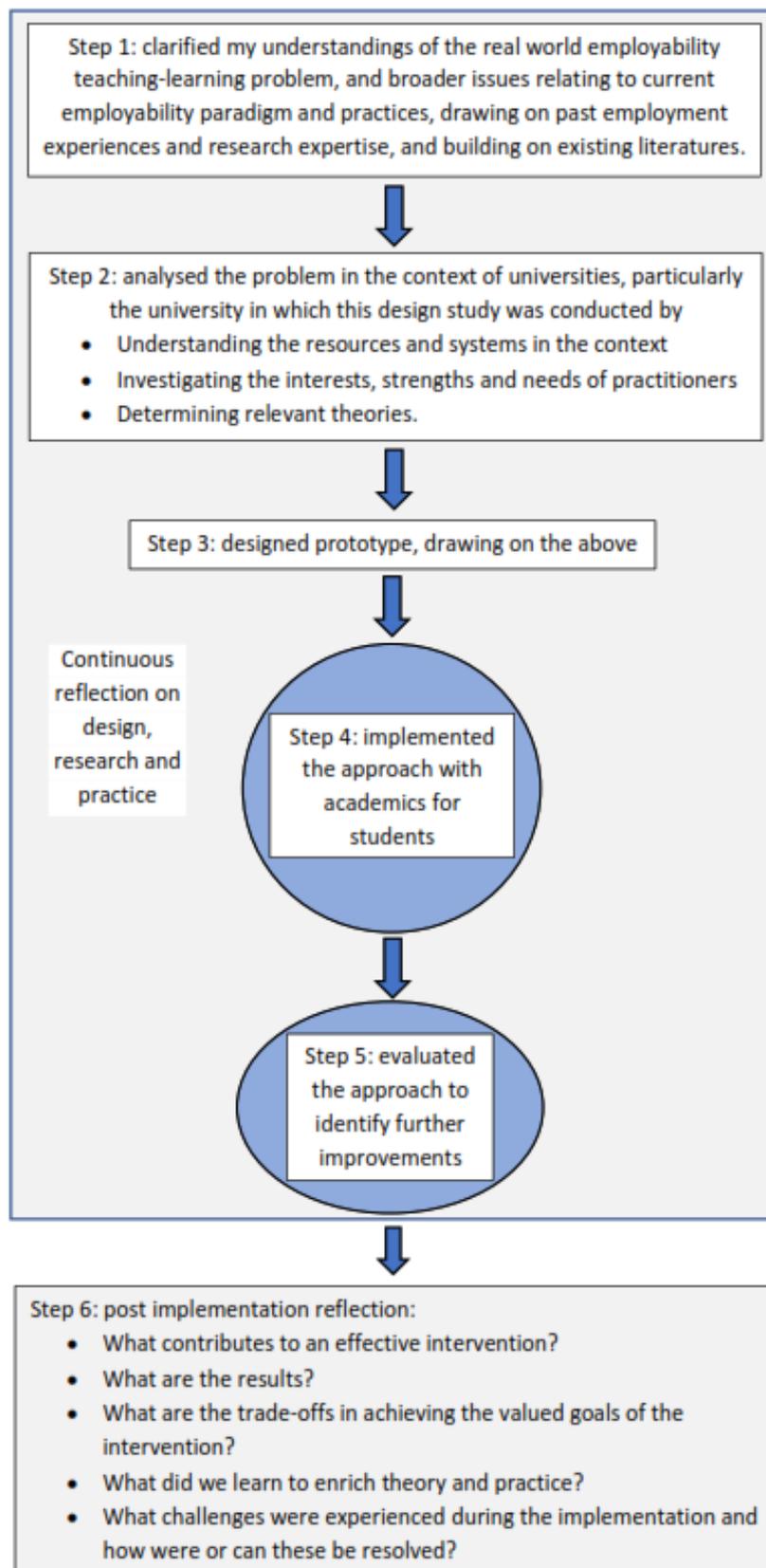
With these philosophical underpinnings, I conducted and enacted this design study from a pragmatist perspective. In this research, I recognised ‘reality’ within the study’s context as a dynamic interplay of diverse meanings, each constructed by participants based on their unique experiences and the objects within their existence. This perspective acknowledges that reality is in constant flux, influenced by various viewpoints. Yet, my pragmatism guides me to approach these perspectives pragmatically, enabling me to present them accurately and succinctly in my research. Being pragmatic, I can make *useful* sense of what I see and hear, building on what I know. My pragmatism enables me to plan and strategise and, in this study, proved invaluable in making sense of a complex and ever-changing university landscape. By embracing this mindset, I aimed to facilitate the transformation of employability toward relationality in units of study at my university, making it more relevant, useful and meaningful for academics and students who live and work in a supercomplex and dynamic relational world.

In this design study, my reasoning was largely deductive (i.e., confirmatory) as I developed, tested and began to evaluate the new framework, building on my prior knowledge and experiences, and an existing paradigm (Lacković, 2019), which formed an important part of the conceptual framework (see Chapter 3). I was strategic in my approach, using exploratory insights gained from the participants to identify specific aspects of their experiences that could inform refinement of the prototype and, in turn, academics’ implementation of the framework. Although some may view the data as inductively derived, my purpose was to use it as a deliberate strategy to improve the framework and its use, in order to reach a better outcome in the end.

Design research methodological framework used in this study

Like most design research (Bakker, 2019; McKenney & Reeves, 2019), this study was an intervention process (see Figure 3; adapted from Jen, et al., 2015) involving the design of

a new framework, its integration in curricula, including (re)designed resources, provision of training and support for academics, and, ultimately, use of the framework in units of study. Student and academic perspectives and experiences on implementation, and the framework itself, were analysed to begin evaluation (see Step 5, Figure 3). This included ongoing critical reflection to establish a set of recommendations as a key output of the study (see Step 6, Figure 3).

Figure 3: Intervention process of this study

As explained earlier, the study focused on the design and initial testing of a new relational employability teaching-learning framework at ECU over the course of one 13-week semester. The research objectives were to:

- (1) Develop a new relational employability teaching-learning framework that includes not only individuals' employment-related skills and outcomes, but also interactions with, and contributions to, other individuals, beings and entities; thus, including humans, ecologies, materials and technologies in the concept.
- (2) In collaboration with academics at ECU, test the new framework with students in units of study over the course of one semester.
- (3) Collect and analyse data to assess the framework's practical application and value for academics and students; and establish the basis for ongoing evaluation using institutional data.
- (4) Document the use of the new relational employability teaching-learning framework at ECU to: i) emphasise its practical application and value; and ii) begin to build evidence of the impact.

The objectives focused on putting knowledge and theory into action, aligning with my pragmatist philosophy and that of design research (Bakker, 2019). The second objective required the development of new instructional materials and educational environments (to support teaching-learning and professional development), which is a key characteristic of design research (Bakker, 2019). The third and fourth objectives focused on establishing a solid evidence-base to increase the chance that others at ECU, and beyond, may one day also use the new relational employability framework.

Using a design research methodological framework in this study enabled me to expand existing knowledge while co-creating a new relational employability framework. Through design research, I was able to demonstrate what employability *can do* (as

knowledge, practice and theory for students and academics) *when done differently*. As a designer-researcher, I could develop, test and refine the new framework, while ensuring that associated practices were actionable, transformative, responsive to change, futures-oriented, informed by research and integrated in the curriculum (see Chapters 1 and 2 to understand why this is important).

In order to effectively disseminate the findings of this research (post-PhD), I planned to employ Gribble and Beckmann's (2023) 4Cs (classroom, corridors, campus and community) strategy, which outlines a process for achieving broader impact via effectiveness testing, mainstreaming and dissemination. Importantly, the 4Cs strategy recognises and encourages the organic spread of innovations through a ripple effect. It acknowledges that adopters of innovations often become innovators themselves as they adapt practices to fit their own specific needs. This means that innovations have the potential to evolve, and be refined, *as they are embraced* by different individuals and contexts, leading to a *continuous cycle of improvement and adaptation* – again, a feature of design research.

Study design

I developed a design research methodological framework that incorporated data collection and analysis across three phases. This was important to ensure that the design study could provide:

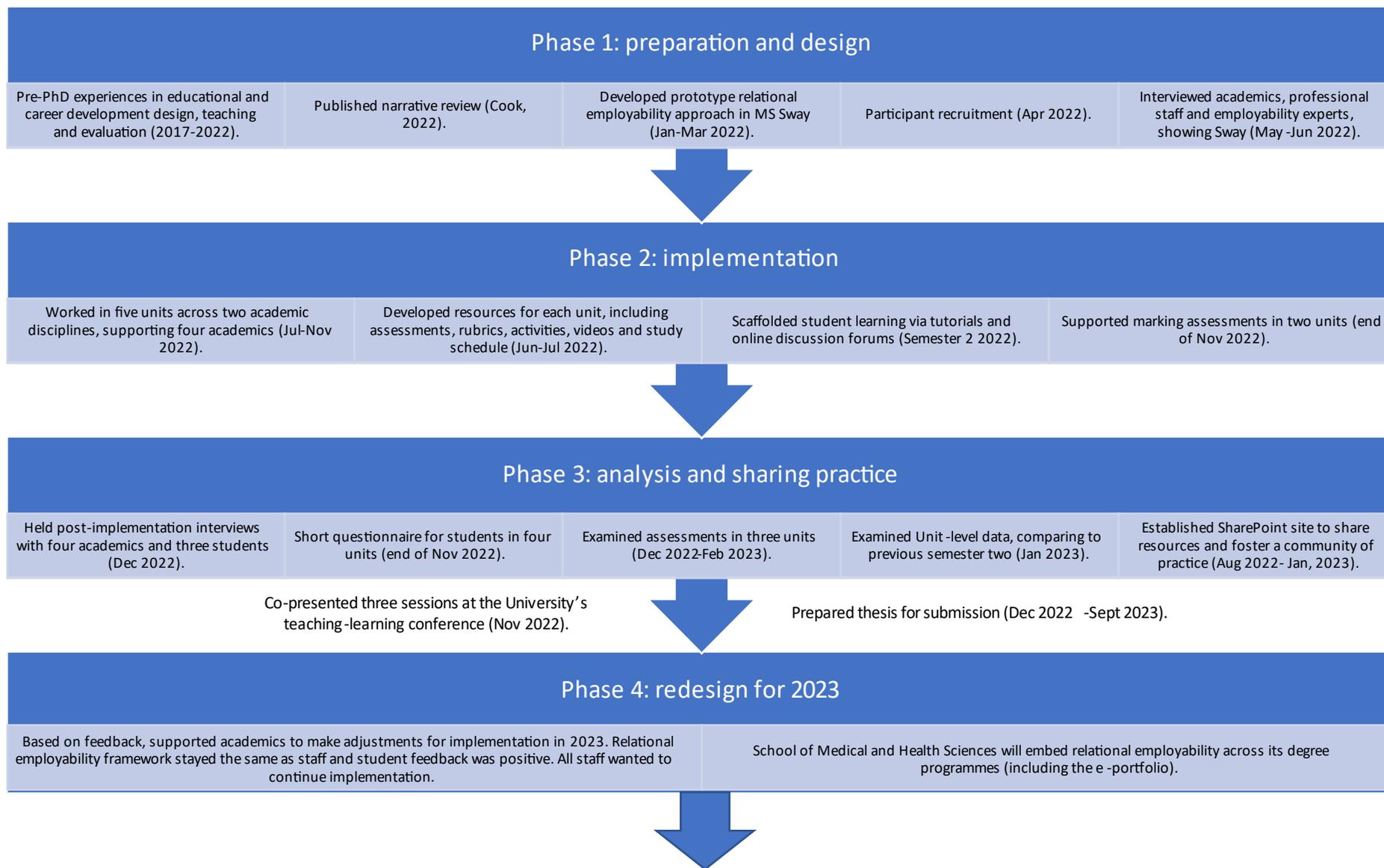
1. useful insights for academics involved in using the new framework within the context of my university (i.e., to assist with their current and future practice); and
2. solid evidence to support wider use of the framework in different higher education settings; thus, demonstrating broader significance as a new contribution to knowledge, while also shifting mindsets from individualistic to relational employability.

Both qualitative and quantitative data were needed to meet these objectives and produce credible findings. Hence, I used various methods, including interview and questionnaire

techniques. In addition, I was personally motivated to be known as someone who can effectively apply a range of methods in research to get to the heart of a problem; as having an array of skills may enhance my employability and, thus, benefit my future career.

Whereas Figure 3 outlined the design intervention process, Figure 4 (overleaf) details the research design, which was rapid and longitudinal to examine the academic's perspectives across two time points (pre and post implementation). Phases 1-3 of the research design are the focus of this thesis, although this research is ongoing (as indicated by the inclusion of a phase 4 in the figure).

Figure 4: Research design



The study was carried out in the second semester of the university's academic calendar in 2022, as shown in Figure 5.

Figure 5: Timeline of Phase 2 – implementation

18 Jul	22 Jul	ORIENTATION	18 Jul
25 Jul	29 Jul	1	
1 Aug	5 Aug	2	
8 Aug	12 Aug	3	
15 Aug	19 Aug	4	
22 Aug	26 Aug	5	
29 Aug	2 Sep	6	
5 Sep	9 Sep	7	
12 Sep	16 Sep	8	
19 Sep	23 Sep	9	23 Sep
26 Sep	30 Sep	MID SEMESTER BREAK	
3 Oct	7 Oct	10	
10 Oct	14 Oct	11	10 Oct
17 Oct	21 Oct	12	
24 Oct	28 Oct	13	
31 Oct	4 Nov	STUDY WEEK	
7 Nov	11 Nov	EXAMS	
14 Nov	18 Nov		
21 Nov	25 Nov		
28 Nov	2 Dec		
5 Dec	9 Dec	DEFERRED EXAMS	
12 Dec	16 Dec		15 Dec
19 Dec	23 Dec		
26 Dec	30 Dec		

Study context

As previously mentioned, the site of this study was my workplace (one university – or one ‘case’), which, upon reflection, was an advantage because, as a Senior Analyst, Strategy and Performance, I have a strong understanding of my university's vision, purposes and values; strategy, practices and performance (including available sources of data); demographic profile; and contexts (local, national and global).

ECU is young (est. 1991) and progressive¹, with a strong reputation for teaching excellence underpinned by a values-led leadership framework². The University is committed to societal issues, such as: reconciliation with, and opportunities and support for, Indigenous

¹ <https://www.ecu.edu.au/about-ecu/welcome-to-ecu>

² <https://www.ecu.edu.au/about-ecu/welcome-to-ecu/strategic-goals>

people³; support and opportunities for people who experience disadvantage⁴; and gender equality⁵. ECU celebrates a diverse student profile⁶ and is strongly committed to transforming lives through its work.

Year-on-year, ECU has achieved high endorsement for teaching quality in national rankings⁷ (e.g., the Good Universities Guide and the Quality Indicators for Learning and Teaching). The [Strategic Plan 2022-2026](#) is aimed at enabling the university to continue to empower its graduates to succeed (Goal 1, Priority 3). ECU has long believed “that all students should be equipped with career knowledge and employability skills when they graduate from their degree” and emphasises the importance of providing learning experiences that “help students make, understand, and articulate connections between learning, life-wide experiences, and work.” Given these foci, ECU was, admittedly, a ripe environment for the recruitment of academics willing to participate in my doctoral research and to assist in the achievement of this study’s aims and objectives.

ECU is based in Perth, Western Australia (WA), where I am also situated, and offers a range of on campus and online courses at undergraduate and postgraduate levels, as well as enabling programs and Vocational Education and Training (VET). ECU has three campuses in Australia (one of these is regional), one campus in Sri Lanka, and multiple longstanding transnational education partnerships (overseas). I work at the main campus in Joondalup, Perth.

In 2022, 6% of the university’s domestic undergraduates were from low socioeconomic status postcodes, 14% were from regional or remote locations (based on

³ <https://www.ecu.edu.au/about-ecu/indigenous-matters>

⁴ <https://www.ecu.edu.au/about-ecu/commitment-to-equality-and-diversity/equity-diversity-and-inclusion>

⁵ <https://www.ecu.edu.au/about-ecu/commitment-to-equality-and-diversity/gender-equality>

⁶ https://www.ecu.edu.au/_data/assets/pdf_file/0004/1027678/ECU-Annual-Report-2022.pdf

⁷ <https://www.ecu.edu.au/about-ecu/welcome-to-ecu/5star-experience>

residential postcodes), 47% were the first in their family to attend a university and 24% were studying part-time. Of the total undergraduate student population, 13% were international, 44% were mature aged and 56% of students were taking at least one unit online⁸.

Designer-researcher positionality

The role I hold at ECU, as a Senior Analyst in Strategy and Performance, places me at a distance from the daily operations of the curriculum, keeping me detached from direct collaboration with academics and students. In this capacity, I provide high-level advice to senior executives, contributing to strategic decision-making, and produce research-informed briefings and position papers. My role also supports planning and performance reporting, and the development of statutory reports and submissions to government agencies and other external bodies. This means that I was an outsider to the specific teaching-learning context of the study (not knowing people in that context and those people not knowing me), while, at the same time, I was an insider to the university. Similarly, in the past, I had worked at other universities as a professional member of staff supporting academics and curriculum development – so the experience of being an insider to the university while an outsider to the context of teaching-learning was very familiar to me and I had the necessary expertise.

Having spent several years as a member of professional staff, my research endeavours outside the academy were driven by passion, a love of learning and curiosity. However, despite my efforts, I often felt excluded from my university's research community. Therefore, this doctoral experience signified an important shift in my identity and confidence as a researcher – a transformation that I had not fully anticipated when I commenced the degree.

⁸ Demographic data was sourced from the institution's data warehouse in January 2023. Demographics are based on unique students enrolled as of Census at all campuses and online (within Australia). Domestic students are defined as those who qualify for Commonwealth Support, whilst onshore international students are full fee paying.

At the start of this project a sense of uncertainty clouded my confidence. As a researcher on the periphery of academia, I questioned whether academics would be willing to engage with me and trust my capabilities. In crafting the research proposal, I hesitated to include implementation aspects, sceptical that academics would allocate time to someone they did not know or take a chance on my unconventional approach. This hesitancy stemmed from a longstanding issue – a lack of identity as a researcher at my workplace. At times, I still grapple with the sense of being confined to a specific professional identity. Paradoxically, in international collaborations and within the field of employability research I am known as a researcher, which means that I have two distinct (and sometimes conflicting and confusing) identities, making this PhD a crucial catalyst for my personal and professional development and a gradual ‘bringing together’ of identities.

According to Labaree (2002, p. 117) the extent to which I am an insider or an outsider can change “at any given moment in time and space”. However, I do not characterise myself as either insider or an outsider, echoing Mercer’s (2007) rejection of the need for exclusive identification. Instead, I see my role (and career purpose) as an ‘inbetweener’ – a term that signifies the unique and dynamic nature of my identity. While Mercer (2007) describes insider and outsider research as a continuous shift, back and forth, along a continuum, my ‘inbetween’ identity does not neatly align with this continuum. It is more about the shifting significance of my identities over time, their parallel development and the need to navigate between the insider and outsider roles, especially in my capacity as a designer-researcher in this study.

I can also draw parallels between my experience as a researcher outside the academic sphere and the lifelong feelings of being an outsider as an undiagnosed autistic person. Categorising myself as an “inbetweener”, I navigate neither fully fitting into the neurotypical world nor being recognised as an insider within the academic context. This in-between

positionality has been a consistent theme throughout my life, shaping my perspective as both a professional staff member engaging in research and as a late-diagnosed autistic person.

One poignant illustration of this “inbetween” status emerged during my employment at James Cook University as a Career Development Learning Designer. Situated above the campus library alongside other professional staff, including an academic developer and career practitioners, my work centred on supporting academic endeavours. In this role, I occupied a unique space – neither wholly an academic developer nor a career practitioner but an inbetweener. This position became pivotal as I recognised the need to bridge the gap between career development learning (career practitioner perspectives) and employability (academic perspectives) – a responsibility I wholeheartedly embraced (and it underpins this thesis).

My experience as an inbetweener has also proven instrumental in the success of this thesis research project. Mastering the art of straddling insider and outsider perspectives, I have become adept at serving as the bridge between these worlds – an aptitude honed over the course of my life.

Notably, while my initial uncertainties led me to exclude implementation from the research proposal, the pre-implementation interviews were a turning point as academics expressed excitement about my ideas and a keen interest in implementing them in the following semester. This was a significant moment in my development as a researcher within my university as the academics placed great trust in me. This affirmation bolstered my confidence and solidified my researcher identity in the university context.

From a more practical perspective, my knowledge and understandings of the site and its broader context (as a Senior Analyst) served me well during this research as I did not need to spend time getting to know the setting prior to conducting this study and could use my knowledge to gain deep insights into the findings.

Drawing on my past experiences (supporting academic work) I was able to build strong working relationships with the academics at my workplace without having known them before the study. Partly this was because I did not have pre-conceived biases about them, including their practices and experiences. This also meant that the academic participants (based at my workplace) were more likely to be honest with me about their practices and experiences because I was an outsider to them and their context. It worked the other way, too, in that I could be honest with the participants about my perspectives on workplace-related matters. For both these reasons, and many more related to my personality and professional reputation, I was able to build strong and productive working relationships with the participants in this study, which continue to this day. Upon reflection, I think my positionality, personality and reputation helped me to get buy-in from the participants employed at my institution and gave me the required knowledge and confidence to engage with 'experts' outside ECU (who know of me because of my published works).

It is also important to acknowledge my location (or physical position) with respect to this research. This study was conducted entirely online as I had to work from home throughout the Coronavirus pandemic based on health advice. While, from my perspective, there were no observable negative consequences for the research due to this arrangement, I acknowledge that other people's attitudes to technologies, and online interviews and engagements, vary, and this study would have played out differently had everything been done in person (face-to-face). I did ask both academic and student participants whether they perceived any limitations or negative effects from our solely online interactions, but none were disclosed to me, and many said, without coercion, that our online engagements worked well. A few also mentioned that the online nature of this research assisted their needs more by enabling flexibility and just-in-time support. There were times when I would have liked to

have attended in-person tutorials to meet the students and work with the academics face-to-face. However, this was not possible for me.

Overall, from my perspective, working from home strengthened my focus and afforded me more time to work on this study, while being full-time employed (i.e., less time spent travelling and getting ready for work, etc.). Furthermore, I was able to interact with greater confidence, freedom and efficiency with the participants at home, than would have been possible at work as I sit in an open plan office. For example, to conduct each interview, have meetings with academics and attend classes, ethically, I would have required an alternative quiet place to sit, which would have meant booking a room, moving to that room, etc., thus disrupting my workday unnecessarily. For the participants, particularly the academics from my university, knowing that I was working from home every day meant they could speak freely with me (without any danger of our conversations being overheard) and get in touch at any time without anybody knowing. Therefore, being at home, not only led to me being more 'myself' in the comfort of my home without worrying about my external environment but also enhanced my ability to form strong and trusting relationships with my participants.

Lastly, but not least, the role I played in this study was very similar to previous jobs I have had at different Australian universities (e.g., Educational Designer and Career Development Learning Designer), as previously described. However, in this situation, I had greater autonomy, control and creative rights as designer-researcher than ever before – and that was incredibly refreshing and exciting!

Data collection and analysis

My choice of techniques for data collection and analysis were informed by the study's research questions, which were:

1. How do participants (students, academics, careers practitioners and employability experts) understand and value relational employability?
2. How can a new relational employability teaching-learning framework be integrated in coursework across course levels?
3. What were the challenges, opportunities and enablers experienced by academics when using the framework in one semester?
4. How did students engage with the framework during the semester and how do they think the experience influenced their educational experience and employability?

The chosen set of data collection techniques and their alignment with the research questions were:

1. Literature reviews (RQ1, RQ2)
2. Interviews (RQ1, RQ2, RQ3, RQ4)
3. Implementation of the framework in units of study (RQ1, RQ2, RQ3, RQ4)
4. Student questionnaires (RQ1, RQ4)
5. Review of institutional data (RQ2, Objective 3)
6. Observation and note taking (RQ1, RQ2, RQ3, RQ4)

These techniques were applied during specific phases of the design and are described in depth after the next section.

Ethical considerations

Prior to commencing this research, I obtained ethics clearance from Lancaster University's Faculty of Arts and Social Sciences Human Research Ethics Committee. The ethics application included detailed articulation of how I managed, stored and used data ethically throughout the study. In addition to the application form, the ethics committee reviewed the participant information sheet and consent form (Appendix A), and the interview

scripts (Appendix B). The consent form included asking whether participants would agree to participate in future related research. The interview scripts asked questions that would derive responses directly relating to the research questions.

To fulfil my workplace obligations with respect to ethics, four additional actions were required: i) executive review of the approved project by the university's Research Ethics Team; ii) written approval by the Director, Human Resources to conduct interviews with staff; iii) written approval from the Director, Student Life to conduct research with students (including interacting with and observing students, and using student data in my research); and iv) written approval from the Manager, Learning Technologies and Innovation to access and use data from Cognos Analytics. In addition, I sought support from the Deputy Vice-Chancellor (Education) so she was aware of what I was doing and in case it would be helpful down the track to have her support.

It was important to give student participants the option to opt out of having their de-identified data included in this research. Therefore, in all units where implementation occurred, students were given access to a participant information sheet about this research, announcements were made in Canvas to inform students and students asked to opt out of this research (via email) if they wished. Students were informed that opting out would not impact their study or results in any way. No students opted out.

The techniques I applied in my design research project are elaborated below in the order they occurred across the three phases of the study.

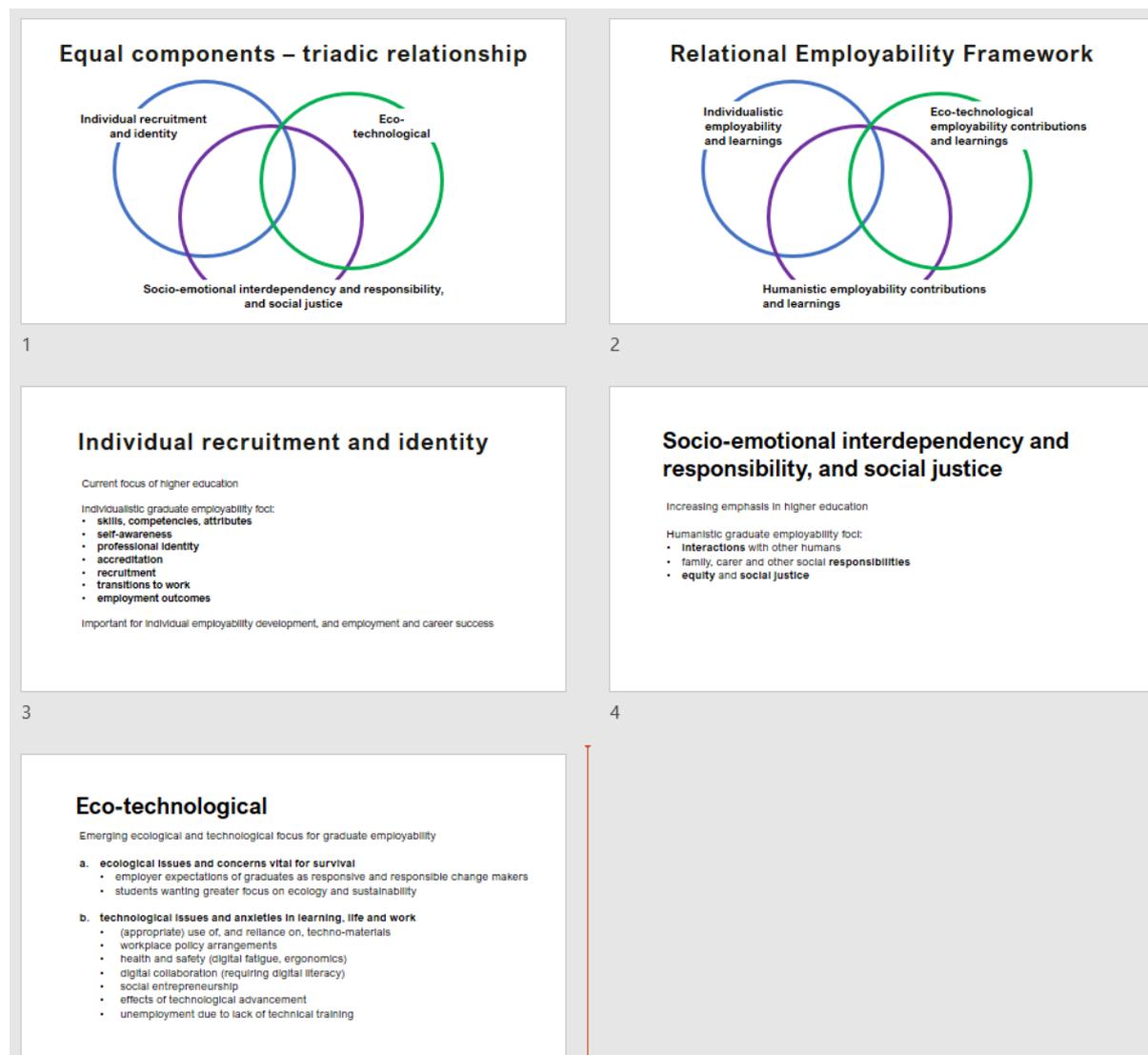
Phase 1 – Preparation and design

Reviews of literature and prototype development

To begin, I conducted two reviews of relevant higher education literatures and developed a prototype framework (Figure 6), which was described in a 'relational

employability tool’ in the form of a Microsoft Sway (herein called *The Sway*; see Appendix C – the original version evidences my early thinking at this stage).

Figure 6: The prototype relational employability framework



The first review is published – a narrative review of conceptual journal articles in which authors presented models of graduate employability (Cook, 2022). This review examined the extent to which authors described their employability models as related to teaching and curricula (see Chapter 2), and validated two of my long-held views: i) that employability hasn’t yet been, but could usefully be, properly integrated into university curricula to help students and academics understand the broader purposes and value of employability with respect to identity formation in a chosen discipline (with its specific

content knowledge and context); and ii) possible reasons as to why some academics may not understand the point of employability, despite the pressure they can feel to integrate it into the curriculum. What I mean with this second point is that employability has, to date, remained misunderstood because of how it is articulated and discussed by those in the field. As discussed in Chapters 1 and 2, employability discourse is commonly situated within a frame of individualistic identity development and success, as well as human capital theory, which many academics find off-putting as they view this rationale as overly economic and labour market-oriented (e.g., Sin, et al., 2019). As I explained in Chapter 2, my published review (Cook, 2022) found only one model that considered graduate employability as both individualistic and relational (Lacković, 2019). In particular, Lacković (2019) introduced the idea of graduate employability as extending across personal, environmental *and* digital aspects of relationality. This paradigm was adopted in the conceptual framework (see Chapter 3) and forms the basis upon which the new framework was adopted, developed and tested in this thesis. As explained previously (see Chapters 1 and 2), a relational employability framework is needed because academics are not career development experts and current approaches are not integrated into academic disciplines (with the exception of work-integrated learning) but, rather, are seen as the work of careers counsellors (separate from coursework).

The second review resulted in the remaining sections of Chapter 2, which seeks to explain current understandings and values of employability in higher education, how employability is currently integrated in university curricula and future possibilities for an intra-curricular relational employability.

The Sway (third output of this phase, see Appendix C) was the combined result of the aforementioned reviews of the literature and [several years' knowledge and practice](#) in professional work relating to career development learning, employability, educational design

and teaching. The design of the Sway is visual and verbal, including images, text, imagined practical examples, and a short explanatory video (<https://youtu.be/VcjGmq-vWA8>) to assist participants in understanding one imagined approach for academics' implementation of the prototype framework.

Sway, a Microsoft 360 product, is visually appealing, accessible and provides analytics. Downloads of the Sway could be prevented (although some interviewees described how they took screenshots to closely examine the approach prior to their interview), and the shared link could be set to expire. These features helped to protect my ideas (intellectual property), in addition to the consent form, which asked participants to agree not to use my ideas without acknowledgement. For all of these reasons, Sway was the best option compared to other tools that were considered, such as PebblePad and WordPress. The Sway was shared with each participant prior to their interview and participants were informed they would be asked questions relating to the Sway in the interview.

Participant sampling strategy

Non-random purposive sampling techniques (Onwuegbuzie & Collins, 2007) were used to sample defined groups of participants (i.e., from across disciplines and levels of expertise) for whom the research questions and outputs would be relevant and significant. The rationale for this sampling approach was to ensure participants would understand and provide valuable input into the development of the new framework (and associated resources), provide relevant feedback on the content of the Sway, and to assist me in finding academics employed at the study site who may be interested to implement (test) the framework in semester two 2022. Random sampling was simply not appropriate; a focused sampling frame was essential.

Participants and their recruitment

There was a process I had to follow to recruit academic participants at my workplace. I emailed the Associate Deans Research of each academic discipline (a total of seven Schools). These leaders acted as gatekeepers to prospective participants, forwarding my email to academic teaching staff/coordinators who may be interested to participate in my research. My email asked for at least two participants from each academic discipline and attached the participant information sheet and consent form. This sampling strategy resulted in a stratified purposeful sample of 15 academics spread across the seven distinct disciplines, which was an ideal number of participants for the pre-implementation interview stage as there was sufficient interview data to finalise the approach, get a sense of current practices and beliefs, and gather perspectives on relational employability (concept and framework) as per the research questions.

The recruitment of professional staff at my workplace was easier as I could email people directly. One academic interviewee keen to implement the approach suggested I interview the senior learning designer who supports their School. Therefore, recruiting that person happened via a snowball sampling technique. The recruitment of careers advisers, on the other hand, was a strategic decision to not only gain their support for the approach, but to incorporate their expertise into the approach if they had expertise to share. This was important to me as, in a previous role as a Career Development Learning Designer (at a different Australian university), I had learned of the importance of connecting careers and employability with curriculum approaches through inclusive strategy and collaboration.

In addition to the three careers staff members from my university, I conducted an interview with a friend and former colleague who had recently left the university sector to establish her own business as a career development consultant. Having known this participant for several years, her extensive experience in advising students about careers and integrating

careers education into the curriculum made her an ideal choice for this study. I was confident that she would provide an honest assessment of the framework and its potential, as well as offer valuable insights into current issues and trends in the field, both within and beyond the university context. From my perspective, obtaining feedback from this participant served as a crucial test to assess the viability of the framework within the curriculum and its relevance to career futures.

Recruiting academic experts in the field of employability was straightforward due to my familiarity with the published literature, and their recognition of my work and online presence. This mutual recognition facilitated the process of approaching and engaging with these experts. All three experts that I contacted via email willingly agreed to participate in this study.

A summary of the participants I interviewed in Phase 1 is shown in Table 6, overleaf. The shaded rows (in grey) identify the academics who also participated in Phase 2 (implementation) and most of these academics also participated in the Phase 3 interviews, except for one (indicated by an asterisk) who left ECU before I could interview her. Academics who were interviewed post-implementation are identified in the *participant type* column by the letter 'A' and an identification number. *Ages* are not provided as this information was not relevant. However, *years' experience* was relevant and is noted in the second column of Table 6.

Table 6: Demographics of interviewed participants (22 in total)

Participant type	Years' experience as type	Gender	Title	Workplace	Discipline / Service centre	Role description (at the time of this study)
Academic	12	Female	Dr.	Study site	Arts and Humanities	Lecturer and Major Coordinator
Academic	19	Female	Dr.	Study site	Arts and Humanities	Senior Lecturer, Researcher and Higher Degrees Supervisor
Academic	4	Female	Dr.	Study site	Business and Law	Lecturer
Academic	15	Female	Dr.	Study site	Education	Lecturer
Academic	39	Female	Ms.	Study site	Education	Lecturer and Academic Coordinator of Professional Experience
Academic	8	Female	Ms.	Study site	Education	Lecturer and Academic Coordinator of Professional Experience
Academic	27	Male	Dr.	Study site	Engineering	Senior Lecturer
Academic (A1)	12	Female	Dr.	Study site	Medical and Health Sciences	Senior Lecturer and Course Coordinator
Academic (A2)	13	Female	Ms.	Study site	Medical and Health Sciences	Lecturer
Academic (A3)	19	Female	Dr.	Study site	Medical and Health Sciences	Senior Lecturer
Academic	23	Female	Ms	Study site	Medical and Health Sciences	Senior Training Adviser, Social Performance
Academic	3	Female	Dr.	Study site	Nursing and Midwifery	Senior Lecturer and Course Coordinator

Participant type	Years' experience as type	Gender	Title	Workplace	Discipline / Service centre	Role description (at the time of this study)
Academic	12	Female	Dr.	Study site*	Nursing and Midwifery	Lecturer and Course Coordinator
Academic	7	Female	Dr.	Study site	Science	Senior Lecturer and Postgraduate Coordinator
Academic	20	Female	Dr.	Study site	Science	Lecturer and Work-Integrated Learning Coordinator
Professional	12	Female	Ms.	Study site	Centre for Learning and Teaching	Senior Learning Designer
Professional	18	Female	Mrs.	Study site	Careers and Employability	Counsellor
Professional	36	Female	Ms.	Study site	Careers and Employability	Manager
Academic and Expert	17	Female	Prof.	Study site	Business and Law Employability	Director of Work-Integrated Learning and Principal Fellow, Higher Education Academy. Very highly cited researcher.
External Expert	26	Female	Prof.	Other Australian university	Student experience Employability	Assistant Provost. Highly cited researcher.
External Expert	16	Female	Prof.	Other Australian university	Career development Employability	Executive Principal and Principal Fellow, Higher Education Academy. Highly cited researcher.
External Expert	13	Female	Ms.	Private business	Career development	Consultant in own business

Interviews (pre-implementation)

One-hour online interviews were held via Microsoft (MS) Teams with each of the 15 academics (across seven disciplines), three employability experts, two careers practitioners and one senior learning designer, individually. Using the interview script (see Appendix B), I asked open ended questions to gather information on the participant's role, their current employability-related work (at the level of institution and individual), their description and understandings of the current employability paradigm at their institution and in the Australian higher education context, their perceptions on the effectiveness of the current approach, and their thoughts, ideas and feedback relating to the Sway.

When talking about the Sway, I used the share screen function of MS Teams to show the Sway, which aimed to trigger participant responses and assist them to describe what they thought. This technique is called an inquiry graphics interview approach (see Lacković, 2020). At the end of each interview, I asked whether the participant would be interested to use or support the approach in their future practice, depending on their role and workplace.

When interviewing experts and career advisers, I asked for specific advice relating to, for example, getting support and buy in from sector leaders to disseminate the approach more broadly across higher education, and how best to include the work of careers teams alongside relational employability (not in conflict to). It was particularly encouraging that the careers advisers were keen to work with me to align parts of their work with the framework I was developing.

During each interview the MS Teams transcription feature was turned on to provide data in the form of text. Then, soon after each interview, I edited its transcript verbatim. I worked hard at this point to keep up with the interview schedule so as to absorb participant feedback and make slight, iterative adjustments to the prototype (see Figure 7 and Figure 8) as I conducted this data collection technique. This strategy helped me to think through, and

get feedback on, design changes during this data collection step (as opposed to later) and, therefore, enhanced my readiness for implementation (Phase 2).

Figure 7: Prototype framework No. 2 with adjustments made as a result of initial interviews

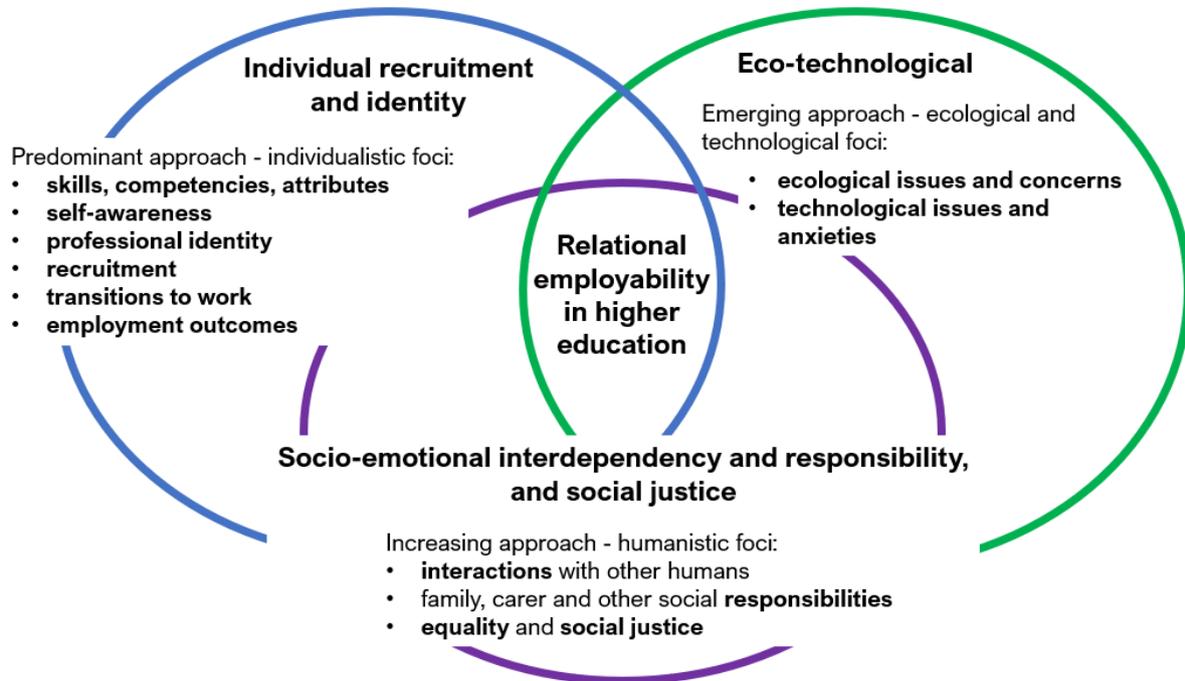
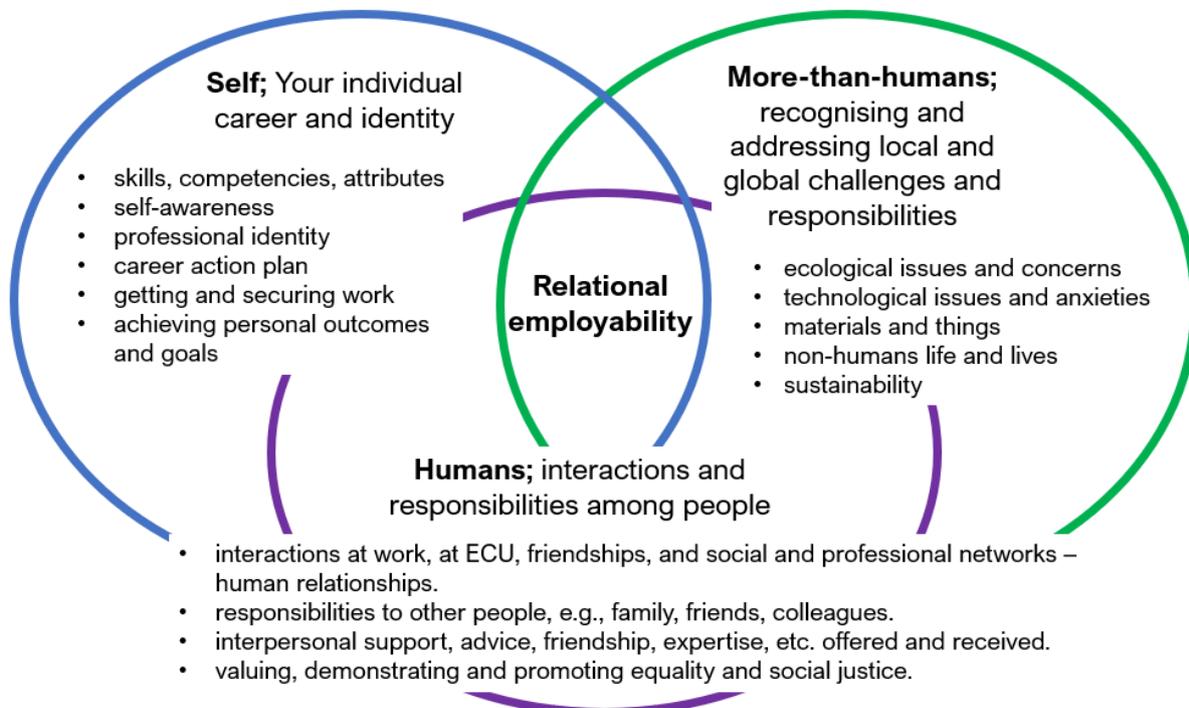


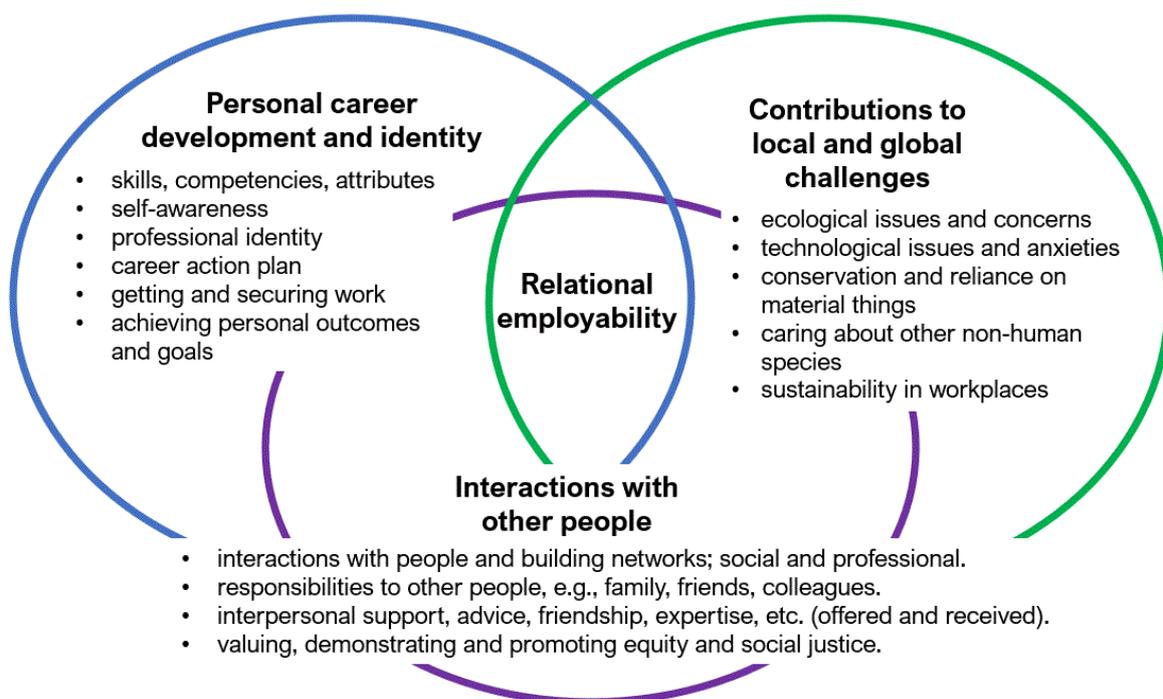
Figure 8: Prototype framework No. 3 as my ideas developed in the lead up to implementation



As noted above, most interviewees were employed at my workplace university (in WA), with the exception of two external employability experts (who are employed at different universities in the eastern states of Australia).

Following all the interviews, I reflected on the new insights, feedback and comments, to come up with the first finalised framework that would be used during implementation (Figure 9). I also wrote the initial conceptual framework of this study (not the version in this thesis; but as presented in the Sway), building on the works of Lacković (2019), Cook (2022), and Lacković and Olteanu (2024). Having the conceptual framework drafted at this phase provided a useful guide for what was to come.

Figure 9: Relational employability teaching-learning framework used in Phase 2



I uploaded all the edited interview transcripts to NVivo and then undertook qualitative analysis on the transcripts, using codebook thematic analysis (Braun & Clarke, 2021) via the following six-steps (Braun & Clarke, 2006):

1. familiarisation with the data
2. generation of initial codes (i.e., the codebook described in this study)

3. searching for themes
4. defining and naming themes
5. producing the report (i.e., this thesis).

Braun and Clarke's (2021, p. 333) "codebook" variation of thematic analysis was suitable for this study because it uses a:

structured coding framework for developing and documenting the analysis [and] consensus between coders and inter-rater reliability are not usually measures of quality. Themes are typically initially developed early on [and] can be refined or new themes can be developed through inductive data engagement and the analytic process.

I was surprised by the level of positive interest among the interviewees with respect to relational employability (more on this later). Four academics (employed at the study site) volunteered to test the framework in the upcoming semester (July-November 2022). They expressed interest to try something new, upskill and learn, with the hope of improving student experiences with respect to employability.

Phase 2 – Implementation

Design work

In individual discussions with each of the four academics who expressed their interest to implement (in the interviews), we identified suitable units of study to test the framework. In total, five units were identified that were taught by these academics. The units spanned two academic disciplines and all year levels from first year undergraduate through to postgraduate coursework (Masters). The concept of relational employability was integrated into existing learning and assessment (and, hence, disciplinary learning) by working in collaboration with each academic. This integration aimed to address the challenge faced by the sector in

incorporating employability and career development learning within disciplinary learning as part of the existing curriculum (Cook, 2022; Dean et al., 2022). It is important to note that this design study did not specifically examine the influence of employment experience in industry (related to the discipline) on the utilisation of the framework by academics.

Nevertheless, it raises an interesting question regarding whether academics with or without industry employment experience might face different challenges or have different perspectives on integrating employability concepts, let alone *relational* ones.

At the conclusion of the interviews with the four interested academics, I requested their assistance in providing me with:

1. access to the Canvas site for the upcoming semester for the unit(s) of study in which we would integrate relational employability. This was so I could see the unit design and any existing resources and, during implementation, work directly in the site. Each academic enrolled me in their unit(s) as a ‘teacher’.
2. former Blackboard site (the university was transitioning to Canvas in Semester two 2022). This was so that I could get a sense of a typical cohort in the unit, as well as how the teaching and learning had occurred previously.
3. Word documents that would help me to get started straight away (e.g., assessment tasks, study schedule).

Using the provided information, I collaborated with each academic to develop and redesign educational resources, as well as establish dedicated pages in Canvas for their review and feedback. This took about 1 day in total, and the resources included:

- a new short instructional video on relational employability for each unit (produced by using Panopto software).
- a redesigned existing assessment task and rubric (if assessment was agreed upon with the academic).

- an updated study schedule.
- conceptualisation and development of learning activities to scaffold learning.

I then worked in Canvas to upload, embed and provide detailed instructions for students regarding the framework, resources and assessments. Additionally, I established dedicated discussion forums for relational employability within each unit, aimed at fostering teaching-learning support and facilitating student development and experience. The task of working in Canvas, which included self-teaching my use of the platform as it was unfamiliar to me (having previously only used Blackboard and Moodle), consumed approximately 37 hours. This estimate was based on Canvas analytics and manually recorded into an Excel spreadsheet on the Saturday before Orientation week. All of this preparation was completed in the two weeks immediately before the teaching period commenced. Therefore, this was a rapid (re)design process (as outlined in Figure 10), involving a steep learning curve for everyone involved.

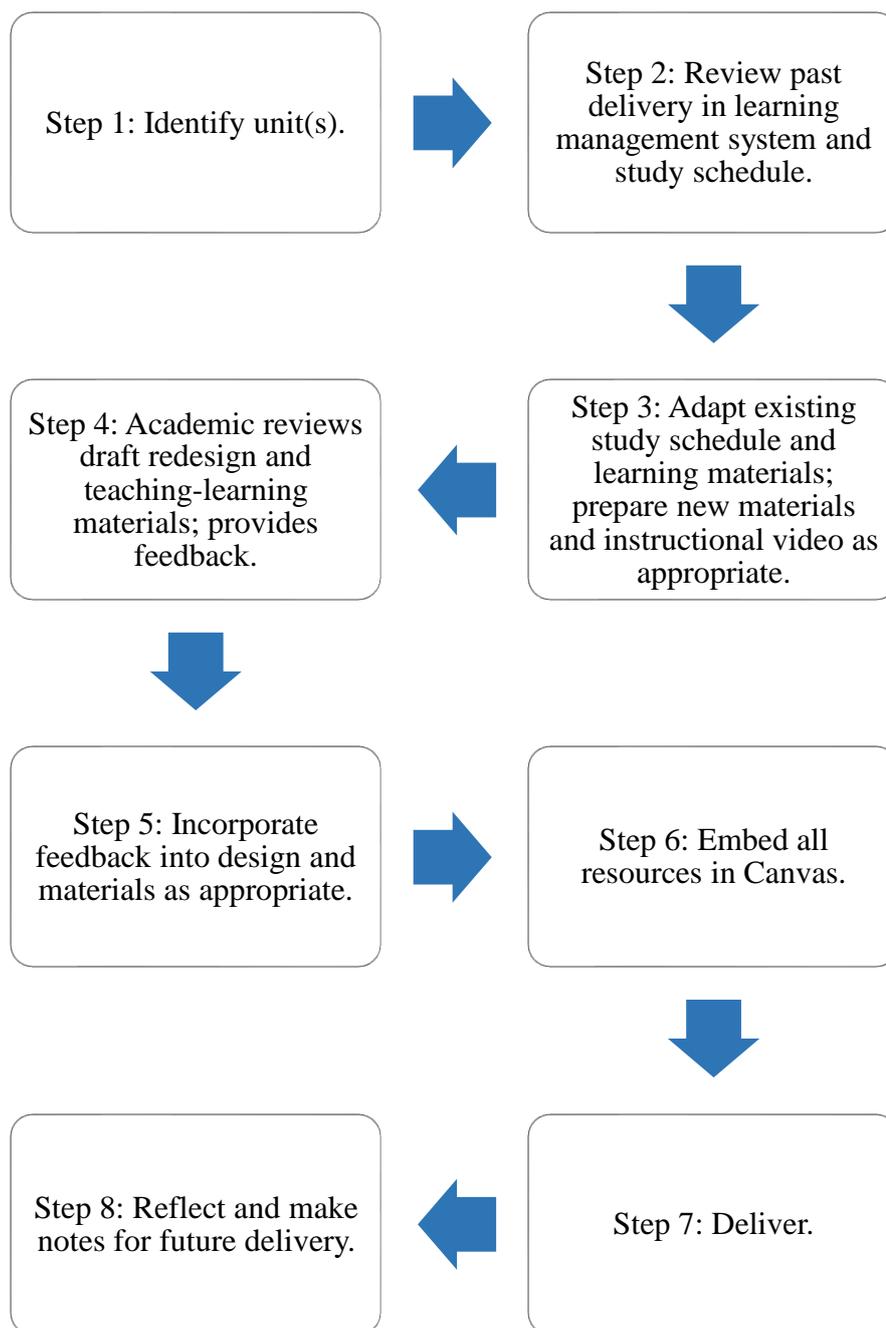
Figure 10: Process to integrate the new framework into units

Table 7, presented on the following page, provides a summary of the design work undertaken for each unit, offering insights into the processes that unfolded in relation to the integrated framework over the course of the semester.

Table 7: Unit design, Semester 2 2022

School	Study level	Unit No.	Formal instruction (week # excluding forums)	(Re)designed teaching-learning resources (Yes or No)					
				Video	Handout	Discussion forum	Learning activity (scaffolding)	Assessment (# – name)	Assessment tip sheet
Medical and Health Sciences	First year undergraduate	Unit 1	1, 5	Y	Y	Y	Y (icebreaker on goals and motivations)	N	N
	Second year undergraduate	Unit 2	1 – 7	Y	Y	Y	N (although, two Q&A sessions were held)	Y (A1 – Video rationale ‘pitch’)	N
	Third year undergraduate	Unit 3	2, 5, 6, 12, 13	Y	Y	Y	Y (modelling and practicing inquiry graphics “image-reflection”)	Y (A3 – Critical reflection)	Y
		Unit 4	1, 7, 11	Y	Y	Y	N	Y (A3 – Critical reflection)	Y
Nursing and Midwifery	Postgraduate (Masters)	Unit 5 ⁹	1 – 4	Y	N	Y	Y (peer review)	Y	N

⁹ The academic who taught this unit left ECU before I could interview her. Further explanation is provided below.

All the undergraduate units shown in Table 7 are offered in the Bachelor of Health Science course. This course offers a comprehensive range of units that equip students with core public health concepts, intervention strategies and specialised skills in majors such as Addiction Studies, Health Promotion, Nutrition, and Occupational and Environmental Health and Safety. The course includes a work placement in the final year, providing students with industry experience. Graduates of this course have diverse career opportunities in which they may have a positive impact on the lives and health of others. Since the academic who taught the postgraduate unit left ECU before I could interview her, I made the decision not to include this unit in the analysis and findings presented in Chapter 5 (see note at the bottom of Table 7).

To protect the privacy and anonymity of the academics involved, I have refrained from including the names of each unit in Table 7. Instead, I provide a summary of the essential details of each undergraduate unit below. This approach ensures that the necessary information is conveyed, while maintaining the confidentiality of the individuals involved.

Teaching-learning

Unit 1 explores the fundamental principles of food science and examines nutrition, environmental considerations and issues related to supply. In this unit, relational employability was introduced to students in Week 1. After learning about relational employability, students were encouraged to participate in an optional ice-breaker activity. The activity was conducted in a discussion forum where students were asked to post a brief reflection in response the following prompts while considering the framework:

1. Why are you motivated to learn about nutrition?
2. In one sentence describe your career/life goal.
3. What area are you hoping to impact the most, with your future expertise?

4. Are there certain people or groups of people you feel will be able to support these endeavours?

I suggested to students that they could include this reflection in their e-portfolio, which is embedded across the course, and responded to each student's post, providing personalised feedback and guidance. For example, I wrote the following to one student who had shared that she wanted to teach people about nutrition and health:

You've demonstrated a strong affinity with two of the circles in the Relational Employability framework (purple and green) as you have described how you care about other humans and the more-than-human aspects of the world (i.e., ecology and environmental sustainability). Being positive in your demeanour (blue circle) is a real strength when it comes to relational employability so keep your passion and energy flowing! To further develop yourself (blue circle), it might help to identify any skills or capabilities that support teaching, such as communication skills, problem-solving skills and being creative, and, subsequently, work out a strategy to get you there. And, like you say, you could get ahead by investigating (and later networking) with "organisations with an investment in nutrition and health".

Throughout the semester, and without my support, the academic found opportunities to integrate relational employability into conversations with her students, thus connecting relational employability with the course content, wider discipline and workforce. I visited the class again in Week 5 (virtually) to help the students to reflect on their relational employability development since Week 1. Relational employability was not integrated into any assessment task in this unit.

Unit 2 focuses on developing health promotion programs to address contemporary health issues. It covers planning, strategy selection, evaluation, community engagement and

persuasive argumentation. In this unit, relational employability was integrated into an existing assessment task (Assignment 1), which was originally a written rationale for a Health Promotion Plan. I transformed the assessment into a video rationale in which students were challenged to include a pitch for why, based on their relational employability/identity, the audience (e.g., a funding body) should consider and support their proposed Health Promotion Plan. Q&A sessions were held with students to support their understandings of the assessment task. Assignment 1 (the video rationale) was then used by students to inform the development of Assignment 2 (full Health Promotion Plan, including written rationale). Peer review was incorporated into the schedule to enable students to review each other's Assignment 1 videos and provide feedback, before finalising Assignment 2.

Unit 3 is a capstone that builds research skills by guiding students through the process of designing, implementing and reporting on the findings of a social health research project. This unit emphasises using contemporary methods (e.g., digital poster and a presentation of findings) to communicate research findings and aims to develop students' capacity to critically reflect on their employability. In this unit, we trialled using inquiry graphics (Lacković, 2020) to scaffold student learning and reflections on their relational employability as they learned about and conducted a research project. Inquiry graphics are visual media embedded in teaching and reflection in higher education for the purpose of in-depth, creative and analytical inquiry. The use of inquiry graphics in higher education aims to facilitate relational thinking in a non-linear and collaborative manner (Lacković, 2020). I thought that this feature of inquiry graphics would be useful to facilitate discussions and, thus, drew on Lacković's (2021) inquiry graphics method, combined with the principles of good learning design (i.e., going beyond 'acquisition'), namely the ABC design (Young & Perovic, 2016), to develop a learning activity for this unit (used in Week 6). In Week 1, students explored the concept of relational employability by engaging with a visual media representation (video)

and the teaching team introduced the inquiry graphics reflection activity, which would be an optional activity in Week 6 to scaffold learning in preparation for the assessment task, which required students to critically reflect on the process of conducting research as well as their relational employability. The Week 6 activity involved the use of visual media with text to practice reflecting on relational employability. To support students' understanding and engagement in the activity, each academic posted their own inquiry graphic reflection in a discussion forum (in Week 5), with explicit reference to the relational employability framework. In the same forum, in Week 6, the students posted their practice inquiry graphic reflections. They also used the forum to ask specific questions about the framework and the assessment task. I provided feedback in the discussion forum to all students in response to their practice inquiry graphic reflections to help scaffold their learning in preparation for the assignment.

Unit 4 focuses on conducting community needs assessments and creating educational programs to enhance nutrition awareness. Through a micro-placement experience, students acquire skills in working with a peer to plan an evidence-based food education program. They learn how to use digital media to promote healthy nutrition, and work toward addressing emerging community nutrition challenges through ethical and sustainable decision-making. In this unit, relational employability was integrated into the final assessment task, which required students to use Gibbs' Reflective Cycle (1988) to critically reflect on their micro-placement experience, their relational employability development and how effectively they worked with their peer. In Week 1, students explored relational employability by engaging with a visual media representation (video) and discussing their relational employability identity, career motivations and goals in a discussion forum (like how was done in Unit 1, during the ice-breaker activity). I mapped the relational employability framework to each stage of Gibbs' Reflective Cycle (1988) to develop an

assessment tip sheet that would help students to understand how to reflect on their relational employability at each stage of Gibbs' cycle. 15 minutes of class time was used to unpack these elements with students prior to their micro-placement experiences.

Unit 5 (not included in the analysis and findings of this study) provides education for employed nurses and nurse practitioners on cultural issues within the Australian context, emphasising respectful, ethical and culturally appropriate practices in contemporary workplaces. In this masters level unit, relational employability was integrated into the first assessment, which was a critical reflection on culture as it connects with professional practice. Peer review was incorporated to provide students with an opportunity to practice giving and receiving feedback, and to improve their final assessment prior to submission – we felt this was important as most of the students were international (English was their second language).

In summary, across all units during the semester, I engaged actively with students in the discussion forums, providing the highest quality feedback that I could, to support student (and academic) learning. I guided the students and academics to think broadly about the contributions they can, and do already, make toward others (not only humans) throughout their careers. I supported the academics with instructional guidance, problem solving and teaching assistance, including the marking of assessment tasks (in which the framework was integrated) and provided additional redesigned educational resources (learning activities, peer-review instructions). In some units I was engaged in team-teaching, while in others I was an adviser on the side. A key focus of mine was to teach the academic so they could implement the framework on their own in future.

Recruitment of student participants and demographics

As described previously (see Ethical considerations), students enrolled in the above units (Table 7) were automatically participating in this study. However, they were given information about this research and at least two reminders to ‘opt out’, which none did.

Table 8 shows the descriptive statistical demographic data (of students and academics) for each undergraduate unit during implementation. The postgraduate unit is excluded from this table because the academic, whose unit it was, left ECU before I could interview her about her experience of implementation (as noted earlier). Even though it was possible to integrate the framework into a postgraduate coursework unit, including in assessment, I chose not to include the data on this unit in the findings because it was an incomplete dataset. The lack of evidence on the effectiveness of the framework for postgraduate students is discussed in the limitations (Chapter 6).

Table 8: Descriptive statistics of student demographics for each undergraduate unit during implementation

Unit title	Students				Academics * (all female)	
	Distinct count	% Mature-aged	% Female	% International onshore	Distinct count	Years' teaching experience
Unit 1	81	42%	83%	23%	1^	13
Unit 2	53	53%	81%	13%	2	19
Unit 3	56	55%	82%	5%	2	12
Unit 4	19	42%	84%	21%	1^	13

Note. The data in this table was sourced from the institution's data warehouse on 11 April 2023.

* Academics includes tutors, excludes the researcher.

^ Same academic taught both these units.

Post-implementation data collection

I undertook the following data collection procedures with the students and academics who had experienced relational employability. The data from each of these procedures is presented in Chapter 5.

1. Short non-compulsory questionnaire for students constructed in MS Forms and released (late November 2022) either via a Canvas announcement or a direct email sent from Canvas. The questionnaire was released to the undergraduates in the three units that had relational employability integrated into assessment (i.e., the second- and third-year units) at a point in time when they had completed the assessment but had not yet received their results (as assessment moderation was occurring at that time). The last question in each questionnaire (one per unit) asked students to provide their email address if they consented to attend a 30-minute online interview via MS Teams. Only 10 students, across the three units, completed the questionnaire – a limitation of this study.
2. Interviewed three undergraduate students online via MS Teams (in December 2022). Their details are summarised in Table 9.

Table 9: Details of students who were interviewed post-implementation

Student identifier	Gender	Age	Part-time employed (Y/N)	Undergraduate year	Unit(s) in which they experienced relational employability	
S1	Female	25	Y	Third	Unit 4	-
S2	Male	45	Y	Third	Unit 3	-
S3	Female	29	Y	Third	Unit 3	Unit 4

Student ‘S1’ was interviewed alone, for 30 minutes. Students ‘S2’ and ‘S3’ were interviewed together (small focus group) for 60 minutes. The small focus group generated a lot of useful data, compared to S1s interview in which there was less ‘talk’ overall. Hence,

there are fewer quotes in Chapter 5 from S1, than both S2 and S3. That said, the comments from S1 aligned with those of S2 and S3.

3. Interviewed the three academics online via MS Teams (in December 2022). Their details are summarised in Table 10.

Table 10: Details of academics who were interviewed post-implementation

Academic identifier	Years' experience as type	Gender	Title	Previously interviewed (Y/N)	Unit(s) taught (in Phase 2)	Role (in Phase 2)
A1	12	Female	Dr.	Y	Unit 3	Senior Lecturer; Course Coordinator
A2	13	Female	Ms.	Y	Units 1 and 4	Lecturer
A3	19	Female	Dr.	Y	Unit 2	Senior Lecturer

All interviews (academic and student) were automatically transcribed by MS Teams, manually edited by me and then uploaded to NVivo as 'Files'. I placed the pre-implementation interview files into one folder (in NVivo) and the post-implementation interview files into another.

4. Gathered institutional data, as follows, with assistance from colleagues who specialise in the specific data requested: i) student demographic data, weighted average marks and success rates by unit over time; and ii) Unit Teaching Evaluation Instrument (UTEI) data (i.e., the institution's student evaluation of teaching survey) to compare the average scores of the units in this study with those of the discipline (School) and university. This institutional data was important for the ongoing monitoring and evaluation of relational employability at ECU to build evidence of the impact (i.e., Objective 4 of this study).

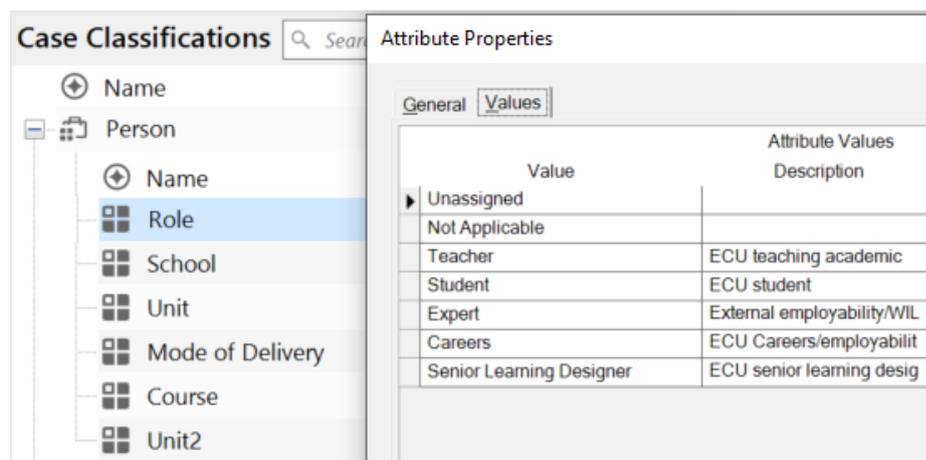
The next section details the analytical procedures I used on the data, and the events and developments that occurred in 2023 to share our practice and the findings from this study.

Phase 3 – Analysis and sharing practice

Pre-and-post implementation interview transcripts

To further organise the interview transcripts (a total of 26 files) in NVivo, I began by coding all files to a person (aka ‘case’ in NVivo) and created ‘case classifications’ to enable ‘attribute values’ to be assigned to each case (see Figure 11). This step ensured that important details about each person (e.g., what unit they taught/experienced, their role in the study, etc.) would be linked, as appropriate, for later reference. I then set up ‘Relationships’ in NVivo to associate the three interviewed students with the academic(s) who taught them.

Figure 11: Case classifications created in NVivo to add attribute values to each case



To analyse the transcript data, I used codebook thematic analysis (Braun & Clarke, 2021). This procedure was a suitable analytical technique for the 26 files (interview transcripts) because, before beginning analysis, I knew the kinds of codes I would need to generate to effectively answer the research questions, and I did not need to gain consensus among coders or achieve inter-rater reliability to prove the quality of my coding as latent themes were not required. I was coding on my own and needed a simple approach to sort passages of text into conceptual ‘buckets’ to generate semantic themes. This point relates to the pragmatist approach I took in this design research. The following steps detail the (largely deductive) analytical technique of codebook thematic analysis (Braun & Clarke, 2021) that I applied to the pre-and-post files:

1. Decided what the codes would be in order to meaningfully code the pre-and-post files (separately). This meant that I created a ‘codebook’ (which I considered to be like a data dictionary);
2. Refined some ‘pre’ codes as I worked through the folder by that name (as my knowledge of the data grew);
3. Repeated step 2 with the ‘post’ codes, on the files in the folder by that name;

4. Having completed coding, developed themes across all (pre-and-post) codes, at times merging codes;
5. Clustered themes by category (research question).

Figure 12 shows the codes that I generated in NVivo from the pre and post implementation interview transcripts.

Figure 12: Codes, produced in NVivo, from pre-and-post implementation interview transcripts

1 Pre				3 Post			
Name	Files	Referer	Name	Files	Referer		
Advantages+Opportunities	15	42	Academic experience	4	70		
Challenges+Solutions	16	41	ECSM-SAT	1	1		
CurrentApproachWorkingQ	16	20	Future delivery	6	56		
DescriptionOfMyApproach	18	49	Idea	8	43		
DisagreeConfused	7	17	Influence	6	48		
Expert background and role	6	12	SharePoint	4	13		
FuturePractice	12	32	Student experience	5	38		
FutureResearch	15	32	Understandings	5	35		
IndividualisticDominantEgs	6	12	Use in WIL	2	2		
InterestToImplemet	13	72	Value	6	82		
PolicyLeadershipStrategyNow	4	13	Worked well	6	57		
PositiveFeedback	18	124					
Researcher'sDescription	20	204					
SchoolCourseCurrentApproach	18	70					
SuggestionIdea	19	131					
TeachingPracticeNow	14	77					
TheoryParadigmQ	16	20					

Figure 13 shows the themes that I created for each research question by merging the pre and post codes.

Figure 13: Themes generated from codes in NVivo for each research question

Name	Files	Refere
Other	21	210
RQ1 - How do participants understand and value relational empl	22	160
Relational employability meaning	16	43
Understandings	5	35
Value	6	82
RQ2 - How can a new relational employability teaching-learning f	6	117
Future delivery	6	56
Influence	6	48
SharePoint	4	13
RQ3 - What were the challenges, opportunities and enablers expe	9	179
Academic experience	4	70
Idea	9	52
Worked well	6	57
RQ4 - How did students engage with the framework during the s	5	38
Student experience	5	38

I organised the themes into categories to make sense of them. Most themes could be aligned to a specific research question and the remaining themes were grouped into a separate category, which I called, “Other”. The “Other” themes were from the pre-implementation interviews and not directly related to any research question, but are relevant for a planned co-authored journal article with Dr Nataša Lacković. For this thesis, my analytical focus was on the themes categorised into each research question. The category, RQ1, included three similar themes, which were kept separate to help me to identify the interviewed cohorts for each theme. That is to say, the *relational employability meaning* theme was linked to a question, which I asked to all 22 Phase 1 participants, while the themes, *understandings* and *value*, related to the interviews with students and academics at the end of Phase 2 – Implementation.

To analyse the themes within each research question category, I used NVivo’s framework Matrix feature (within the ‘Create’ menu) to review all the text coded to a given theme and selected (specific) participant attributes (e.g., unit, role) that would aid my analysis of this data. I exported the framework matrix to Excel and saved this file in OneDrive as a backup. Then, working in NVivo, I viewed the ‘references’ and ‘text’ to select useful quotes,

which I used to create a table of sub-themes (in MS Word), with the demographic details of participants for each quote. Sometimes I needed to use the 'Text search query' function to find specific text about, for example, an *assessment* or *activity*.

I repeated the above analytical process for all the themes categorised by research question and used this analysis to develop a clear and logical narrative, which remained true to the data and research questions, while presenting the qualitative findings in creative ways (see Chapter 5).

Questionnaires

As only 10 students across the three undergraduate units completed the questionnaire, statistical data analysis was not required. Instead, key points could be drawn from the charts provided by Microsoft Forms. This de-identified data is presented and discussed in the next chapter. On reflection, it was fortunate that any students completed my questionnaire at all, as it was released after the students had already completed the Unit and Teaching Evaluation Instrument (UTEI) used by the university to assess units.

Institutional data

As mentioned above, quantitative institutional data on student success and unit evaluation was provided to me (in Excel files) by colleagues and is reported in Chapter 5.

Artefacts produced by students

After completion of this PhD, I plan to analyse the artefacts produced and shared by students in unit discussion forums and in assessments to examine how students conceptualised relational employability and used the framework to better understand their relational employability, identity and career goals. This data will be included in two co-authored journal articles with academics from two different units. One of these articles is underway and examines the relationship between Gibbs' (1988) reflective cycle and relational employability in student reflections on practice (as Gibbs' work provided the

framework of that assessment). The other article, co-authored with two students and two academics, will focus on Unit 3 as it is known in the present study. This article will describe the relational employability approach used in this unit and present the findings of qualitative thematic framework analysis (Braun & Clarke, 2021) on the student reflections, and interviews with academics and students, to highlight and discuss particular challenges and benefits of the approach in that unit.

Sharing practice: past and future

In addition to the mentioned publications, on 30 October 2022, I co-presented at my university's annual teaching and learning conference about three different activities being undertaken as part of this research. The notion of relational employability was introduced to the audience at each presentation. Two of the presentations focused on sharing how the new framework was integrated in units. The third presentation, a three-minute pitch, focused on sharing and gathering audience responses to a new SharePoint site, which I developed to facilitate a community of practice for any ECU staff, in which they can access the new framework and resources, including assessments (as exemplars), learn about relational employability, and get in touch with me and others in implementation and related research. This SharePoint site is now being used (see Appendix E) and has been advertised through the university's staff e-newsletter, as well as various academic and professional groups. I also received invitations to present about this research to academic schools, disciplines and research communities. These presentations have generated some interest in my research and the SharePoint site.

On 29 March 2023, the Centre for Higher Education Research & Evaluation at Lancaster University's *Higher Education Researcher* podcast launched an [episode](#) in which Dr Janja Komljenovic interviewed me about the framework and its implementation.

Following this doctoral research, while working on publishing the aforementioned journal articles, I will be involved in the development of an open website on relational higher education, coordinated by Dr Nataša Lacković, and have been asked to lead the relational employability strand. I will use this website to broadly share what has been learned and produced through this design research project, and plan to engage in ongoing collaborations with Lancaster University and other universities internationally.

Summary

This chapter described the ‘what, why, how and who’ of this design study to support its transparency, trustworthiness and legitimacy, and to justify the decisions I made throughout this research. My pragmatist research philosophy, the design research methodological framework and the ethical considerations of this study were elaborated in depth. The next chapter presents the data and findings of this research.

Chapter 5: Data presentation and findings

This chapter presents the pre- and post-implementation data and findings relating to the new framework at ECU. In particular, this chapter explores how the participants understood and valued relational employability pre- and post-implementation, while also establishing a solid basis for ongoing monitoring and evaluation of the framework at ECU. Data collection and analysis followed the methodological framework described in Chapter 4. This chapter is structured to provide insights from both the qualitative and quantitative data obtained via participant interviews, student questionnaire responses and institutional data. By examining all of this data, I aim to provide a comprehensive understanding of the outputs and outcomes of this study, while attending to the research aims and objectives outlined in Chapter 1.

Qualitative data insights – RQ1

This section presents the qualitative data and findings pertaining to RQ1 (at times, as noted in subheadings, also relevant to other RQs). RQ1 asked how participants (students, academics, careers practitioners and employability experts) understand and value relational employability. The data in this section were predominately derived from a combined total of 28 participant interviews conducted in Phases 1 and 2, and the analysis was supplemented with research notes.

In Phase 1, a total of 22 pre-implementation interviews were conducted, involving 15 ECU academics from seven disciplines, three employability experts (including one from ECU), three careers practitioners (including two from ECU), and one ECU senior learning designer. The qualitative analysis of this data identified one main theme – *relational employability meaning* – which largely indicated participants' recognition of the positive potential of the framework before its implementation.

Furthermore, at the conclusion of Phase 2, six post-implementation interviews were conducted, involving three academics and three students. The qualitative analysis of this data identified two main themes – *value of relational employability* and *future delivery*. The findings in this section demonstrated that, following implementation, all three academics and all three students understood and appreciated having relational employability as part of their teaching and learning experience.

Relational employability meaning

I identified several themes across the findings from the Phase 1 participant groups, which I grouped into two categories: broad and focused. The four themes within the broad category were: *holistic*; *systems thinking*; *shift in focus*; and *links to career development*. The six themes within the focused category were: *inform career choices and add value*; *identity formation and transfer*; *reflection and engagement*; *deep learning*; *connections and connectivity*; and *collaboration and building relationships*. All themes are presented in Table 11 and are supported by quotations from ECU academic and professional staff, as well as external experts from both academic and careers/employability backgrounds. These quotations help to provide insights into my understandings of each theme, as well as the diverse perspectives across the participant groups regarding *relational employability meaning*.

Table 11 also provides an overview of the number of quotes per participant group for each theme, highlighting the variation in perspectives among these Phase 1 participants. These ‘clusters’ serve as a framework for organising my observations of how the Phase 1 participant groups perceived *relational employability meaning* differently. In other words, this table is to show how the key terms map onto the participants who identified them.

Table 11: Number of quotes per participant group for each broad and focused category within 'relational employability meaning'

	Theme	Participant group		
		ECU academic	ECU careers	External expert
Broad category	Holistic	3	1	1 (academic)
	Systems thinking	1	1	1 (careers)
	Shift in focus	2	1	
	Links to career development		1	2 (careers)
Focused category	Inform career choices and add value	1		
	Identity formation and transfer		1	
	Reflection and engagement	1	1	
	Deep learning	1		
	Connections and connectivity	3	1	1 (academic)
	Collaboration and building relationships		1	

The following narrative and tables present my analysis of the broad and focused categories of themes, respectively, including quotations to substantiate the findings I derived from the data.

Broad category of themes

The **shift in focus** was clear to most, if not all 22, participants. However, even within the ECU academic community, there were different perspectives. For example, a Lecturer and Academic Coordinator of Professional Experience in Education thought in terms of the

workforce, “it's about taking the focus away from the individual and moving it into the interactional world that we live in as teachers”, whereas a Senior Lecturer and Course Coordinator in Medical and Health Sciences thought in terms of her teaching practice:

if [students] are collaborating, they're going to be taking into account that it's not just all about me. It's not just focusing on them and their learning experience, they are considering others' needs and others' experiences. I suppose that's one aspect, thinking outside the individual. With the technology [and] the eco aspect, that might depend on a student's research topic [in the assessment].

For the Manager, Careers and Employability, **shift in focus** was different again, and about “inspiring [students] to think what's possible ... going from that individualistic perspective to a collective perspective.”

Links (of the framework) **to career development** were signalled by two careers professionals, as follows:

Employability is not the same thing as career development. Employability is very driven by government reportable data and jobs outcomes, point in time, snapshots stuff, with an external focus where everybody is assessing the value of the student. [Whereas] career development is the student at the centre of the concept and it's their career that's moving forward – this is definitely there [in the framework] ... there's also the green guidance movement within careers, which is very much talking about how you incorporate climate change into careers. (External Career Development Consultant)

Within [the Australian Career Development Blueprint] there's a real clear focus on developing students as the citizens of the future. This framework would fit very well

in [that] because it's very futures thinking. Very future oriented [and] that's important as you're future proofing it. (Careers and Employability Counsellor)

In addition, the concept of *global citizenship* was raised by the External Career Development Consultant who identified that, through the implementation of the relational employability teaching-learning framework, I was “trying to make sure that everyone's capturing that they are needing to look at the global citizen aspects of students' careers, not just the immediate aspect of getting a job. Those things are important to the longevity of a career.”

Systems thinking, another concept that has been considered by scholars in the context of careers (see Chapter 3, p. 61), was demonstrated by an academic who saw similarities between the framework and those used in her discipline:

[The framework] reminds me of the Ottawa Charter for [Unit 2] and the health promotion school model that we use ... and obviously there's a sweet point in the middle where [the rings] all interconnect and you're getting that triadic relationship. It's similar, with the three domains, and you hit that sweet spot where you're getting a whole setting approach, and you're achieving this across the whole system. (Senior Lecturer and Course Coordinator, Medical and Health Sciences)

Whereas, for an ECU Careers and Employability Counsellor, **systems thinking** was considered with respect to government versus the people (students) she counsels:

I don't think governments have the capacity to think bigger beyond self or beyond what they're trying to achieve ... [whereas the framework] actually goes beyond just a job. It goes to, 'how can what I do make a difference for me and also predominantly for my community?' And people want to make a difference. It's not

anymore, just about me, me, me and money, money, money. It's actually about the broader community because we see all these awful things happening in the world, whether it's Ukraine or the floods or really awful illegal decisions being made in this state about women's rights. We all can see these things happen, and in media, and they drive people to want to make a difference; and they can!

The External Career Development Consultant drew associations between **systems thinking** and concerns for equity and social justice, referring to the work of Sultana (e.g., 2020) as relevant and similar to this work:

the narrative has been really strongly dominated, over the last decade, around life design, which assumes choice. Whereas Sultana is flipping that and saying not everyone has choice, which is something that I was really pleased to hear because it's definitely evident when your students are walking through the doors. They don't all have the same choices because they have different social networks ... So, the systems aspect is an important one that Sultana is trying to get across as well [as you].

The framework was recognised by all participant groups as **holistic**, but in various ways, as summarised in Table 12.

Table 12: How Phase 1 participant groups viewed the framework as 'holistic'

Participant	Quote	My interpretation of what this quote reveals about the framework
ECU Lecturer and Major Coordinator, Arts and Humanities	Obviously, it's a holistic approach that coordinates the self with society, which is something that we don't tend to think about consciously. Well, I haven't tended to think about it necessarily consciously. I think, because I'm a cultural studies academic, I do typically and sort of organically put cultural sensitivities into the unit and I do try to make sure that we come from a place of social justice, but I haven't formalised it in any way, so I think this is a holistic way, and it's articulated.	Perceived as helpful for this academic as it brings into awareness what she wants to achieve through her teaching.
ECU Senior Lecturer and Course Coordinator, Nursing and Midwifery	we should be influencing their employability through the learning that they're having and ... thinking about it holistically. So, thinking about industry's involvement, the student's own situation like, from a social aspect, a lot of my graduate students are mothers, I've got children and they're working full time as well. So, thinking about that when you're even designing your course or your units as, like, is this something that's achievable? And so, it's that whole package of realistically looking at the end goal: we want our students to get a job in what we're teaching them in, and how do we get them there.	Perceived as a helpful reminder of broader contexts when designing curricula.
External Academic Expert	I really like this because you talk about individual and global and social. [At] my university, we have three graduate attributes – capable individual, effective collaborator and global citizen – which is different to universities I've worked at before, where I've argued that we shouldn't bother having graduate attributes because they're all pretty much the same.	Perceived as a more appropriate and relevant way to consider graduate attributes.
ECU Careers and Employability Counsellor	It's a much more holistic way to talk about [employability]. And it's a less confronting way to talk about it.	Perceived as less confronting than the traditional individualistic graduate employability paradigm.

Focused category of themes

Table 13 provides illustrative examples of the focused themes for *relational employability meaning* as expressed by Phase 1 participants in relation to the framework. The data demonstrates that, even before the implementation of the framework, participants recognised numerous potential positive benefits associated with the possible incorporation of relational employability into their professional practice.

Table 13: Focused themes for ‘relational employability meaning’ as told by the Phase 1 participants with respect to the framework

Participant	Quote	My interpretation of what this quote reveals about the framework (themes)
Lecturer, Business and Law	I believe it is about developing your understanding and capability of taking care of others [and] being more emotionally intelligent. We wanna produce students as a better human beings, not only know how to do the job. It’s through daily communication when we actually demonstrate our care of the environment and the Earth. I think it adds value into our life and would motivate us to be better, to do a better job and conduct ourselves better. Students [already] understand the importance of taking care of others and Earth, but [they] don’t think about it. I think it’s important to actually apply and behave in a way that reflects the values that you hold ... So, it’s not only about capabilities but about career choice.	Perceived as having the potential inform career choices and add value to life, work and learning.
Careers and Employability Counsellor	That relational employability, when I gain these skills at work, I’ve now been able to pass them on to my child, who’s passed them on to our school. So, it’s that transferring identity, like transferring skills. It’s like being able to transfer that identity, depending on the context that you’re in. I think that’s how you should explain to the students, around relational graduate employment or relational employability, [that] it’s about social change.	Potential of the framework to support identity formation and transfer and, through that, support positive change.
Careers and Employability Counsellor	It’s about finding your way to make that meaningful change within your community, and it’s about that self-reflection on who you are and how you perceive to see yourself in the future.	Potential of the framework to support reflection and purposeful engagement .
Lecturer and Major Coordinator, Arts and Humanities	It just gives extra steps in the process that you can get students to articulate their experience, and, through that, you generate activities, you generate new ideas, they have a more meaningful experience because they’re stopping to reflect on what they’ve done.	

Participant	Quote	My interpretation of what this quote reveals about the framework (themes)
Senior Lecturer and Postgraduate Coordinator, Science	It's always good to make students think about things a bit more deeply and some of this stuff is obvious when someone presents it to you, but it's probably not something that you just would actually kind of come up with. So, I think it would be a benefit.	Potential of the framework as a teaching tool and a reminder to facilitate deep learning with respect to careers.
Careers and Employability Counsellor	What you're looking at is more community connections and connections with culture and connections with self. [And] you're bringing in ... the ecological side of it. So, sustainability and how we care about our world. Not just about social justice [and] not from a privileged point of view, but as a community point of view and how we could all make a difference, together. Togetherness is what [the framework] promotes.	Potential of the framework to emphasise connections and its ease of connectivity with respect to disciplinary learning and curricula.
Senior Lecturer and Postgraduate Coordinator, Science	Relational means not just pure discipline knowledge. It's adding in those factors about relationships, communication, moral issues around respecting equality and sustainability. There's a bit of crossover with their discipline knowledge and the eco-technological space because they're actually working on social and environmental issues ... Talking to you is making me realise that we probably are missing out some of this pedagogy and part of this framework. It also provides background theory. And we could probably really easily add it in.	
Careers and Employability Counsellor	I love the collaboration [aspect]. [Getting people to think] how do I share that? How do I promote that? So, collaboration and sharing, that relates to things like networking.	Potential of the framework to promote collaboration, building relationships and shared experiences.
Senior Lecturer, Researcher and Higher Degrees	It looks more at the relationships. The relationship for the self, the relationship for others that you are interacting with, the relationship with the environment. The relationships that you have beyond the individual. Looking outwards rather than looking inwards and seeing your role, not just in going and doing what you paid for, but the impact that has on the	

Participant	Quote	My interpretation of what this quote reveals about the framework (themes)
Supervisor, Arts and Humanities	people around you, the environment around you, where you actually make a difference outside of just what you're paid to do. We spend more time at work, with the people we work with, than anybody else in our lives, so anything else you can make a positive impact on the people around you, so they enjoy coming to work [is a good thing]. Or you can create a toxic environment that makes it a horrible place to be, and that's what I tell my students all the time. Do you want to be the person who makes everybody else not want to come to work? Have you recognised that? How do you make sure you're not that?	

In summary, the meaning of relational employability varied among participants based on their individual perspectives, knowledges and experiences. This characteristic could be seen as a strength of the framework because it means that individuals can understand the concept in ways that are meaningful for them and their practice, within their specific context and discipline. In other words, there are multiple valid ways to understand the framework, and no definitive ‘right’ answer or perspective on relational employability. The key requirement for learning and development using the framework is to remain open to new ideas and clearly articulate, explain and, if assessed, provide evidence of how the framework has been applied to specific thoughts or actions within a given context. In the next sections, I present the remaining data relating to RQ1 – *understandings and valuations of relational employability* and *future delivery* – drawing on the data from the Phase 2 interviews with the academics and students who experienced intra-curricular relational employability.

Understandings and perceived value of relational employability

Academics – also RQ3

Three academics, who had implemented the framework, were interviewed at the end of the teaching period. They all demonstrated more complex understandings of relational employability than they had demonstrated prior to implementation and could articulate how it worked for them to support student learning/relational employability development.

The framework was seen as a strength-based approach that supported self-confidence and intrinsic motivation among students. For example:

It’s about giving them this global perspective of how they fit into the world of work, and who they are cannot be separated from where they work and how [they work].

That is a strength-based approach. It supports students developing their own professional identity and helping them feel confident that they can take that with

them into work. They see growth opportunities from their relational interactions. It helps them discover themselves from a values-based language and that is an intrinsic motivator. And, if you're wanting productivity out of people, if you're wanting purposeful contribution, it has to come from a values position. It's only through exploring that, that students are able to identify where they nest in values and how that drives their actions and focus for the tasks that they will do. (A2, Medical and Health Sciences)

These academics expressed a belief that students benefited from learning about relational employability, but they acknowledged that the level of student learning was contingent upon the level of their engagement. They emphasised the importance of scaffolding as a means to foster student engagement.

One academic also saw value in using the framework to promote gratitude and mindfulness, which can have positive effects on mental health:

It's a more in depth look at themselves, but in relation to what's going on around them, in the world they live in, and having a newfound appreciation for the resources that they've got at their fingertips. Practicing gratitude is one of the new mental health strategies that's bubbling out there, along with mindfulness. (A1, Medical and Health Sciences)

Each academic recognised the value of using the framework to facilitate deeper student reflections on learning and practice, particularly as related to work in their chosen discipline. They acknowledged that the framework had the potential to enhance students' ability to critically evaluate their own experiences and draw meaningful insights from them:

I definitely think it was more robust and more challenging than what we did last year – challenging the students out of their comfort zone. They have written reflections before, they know Rolf and Gibbs’ reflective cycle inside out, so [we were] challenging them with something new. For those that really engage with it, I think they would have got a great deal out of it.

The academics all saw value in incorporating the framework across the entire degree as a means of scaffolding students’ learning and relational employability development. In this regard, two academics specifically mentioned the e-portfolio as the ideal space for students to record, capture, reflect on and evaluate their learning and development. The academics recognised that using the framework in this manner could effectively support their students with their academic studies, while enabling them to track their progress, reflect on their experiences and continuously develop their employability skills. For example:

I certainly see the relational employability framework as something that could be embedded throughout the e-portfolio and it’s a perfect learning tool for them to be reflecting on what they’ve done and how that’s gonna change moving forward across the course. (A1, Medical and Health Sciences)

In contrast to the other two academics in her discipline, A3 had limited time to fully grasp the framework and felt less confident in her understanding. A3 and I both recognised that there was still work to be done in integrating the framework effectively within her unit, considering the constraints of our limited planning time. However, A3 had the valuable opportunity to observe the transformative impact of the learning experience on students and expressed enthusiasm for incorporating the framework further in her teaching practice, highlighting her commitment to ongoing implementation and improvement:

I think the fact the fact that we've brought this in, and it's a bit of a new layer to me, is an improvement because it's ultimately gonna translate planning skills, which they absolutely need in [Unit 2]. That's really one of their fundamental skills that they absolutely need. [Students] had those little moments where they've found it stressful and challenging. But when they came through it [and] they were like, "wow, that made me see things." It was a light bulb moment for them where they thought, "Oh, this is actually important." So, if I can better connect this planning thing that I teach them, to this employability thing, then I can see definite improvement. I don't think it detracted, but it was a new layer that is pointing us in the right direction, but we're probably not there yet ... they were more engaged because it was about them.

Students – also RQ4

At the end of the semester, three third-year students were interviewed to gather their perspectives on their experiences with the framework. They each recommended that academics introduce the framework to students at the beginning of their degree studies and integrate it consistently throughout the entire program. This suggestion means that the students', themselves, recognised the value and potential impact of the framework on their learning and development. It also shows that they perceive early exposure and ongoing integration as important for helping them to achieve their best outcomes. The following is how S2 (male) explained this point to me:

I think what you're doing is excellent. What might be helpful is if you introduce it earlier to newer students say, "hey, you're studying a degree", whether it be part-time or full-time, six-seven years or three years full-time, "let's start thinking about this now and let's unpack this model and see what it means to you." Then you can have smaller sessions across time to go, "OK, so what does this mean for you now?"

What does that look like? What's your interpretation of this? How does it apply to?

You don't have to have a job as you can [imagine] how it helps because the theory behind it is really special.

The students not only expressed an appreciation for learning about the framework but also demonstrated a surprising depth of understanding about its purpose and value for them and their experiences. They identified some further potential positive effects, for example, in supporting good mental health among students by either acknowledging that the framework played a role in enhancing their wellbeing during, what was a tough semester for them, or emphasising its importance in fostering a supportive learning environment that, for them, prioritised their mental health. These insights underscored the students' astute awareness of the broader benefits of the framework, beyond just employability skills, and highlighted its potential utility for promoting holistic development. The following quote exemplifies the depth of understanding demonstrated by the interviewed students:

when I was faced with this model, I just thought, most students are lost in this world ... they are not familiar with these concepts that they should have for purpose in their study and life. It's not just streamline living in a situation [where] we just study, then graduate and make a family. And that's why we find we are lost. In Australia, I can see high levels of depression and mental ill-health because people are not in touch with their emotions and emotional care of others. So, for me, it was like brainstorming with a model that's connected expertise to self-emotional awareness, to other emotions in workplaces, and the relationship between a workplace in society and the world. We should have this weblike connection always. It's not overwhelming, it has the opposite effect. It means, when you have this level of connection, you use the highest potential of your capability. Or, in opposite, if we

just go to university and graduate and don't think about the purpose of life in the real world, and connections with other parts of the world, other people in your society, you lose moments, you lose capacity and even your inner child will die. This model gives you a psychological awareness, mental awareness, alongside professional awareness. It's parallel. Everything is parallel. (S3 female)

S2 (male), who was in the interview with S3 when she expressed the above quote, responded: "just nodding because I completely agree with what you're saying".

To S3, the framework was also visually beautiful and supported strength-based views of herself:

the beauty of this model. It was simple, but at the core was very, very complex. It [promotes] real confidence, not fake, and it enhances self-esteem; when we have a good connections, we can be kind with ourselves ... How can I help others? That is another strength of this framework; that human quality is improved. That is important ... Visual things, and even this model, how you created the circles, it's like a camera lens. So, first I saw it, at the beginning of the semester, but, when I emersed myself, it was like [taking] a picture and looking at the details. And it was designed artistically. I think we need to bring art into all aspects of everything because art is most important to involve students in a learning process. Quality of personality, character, everything. It should be part of our life every day.

Two of the student participants revealed that they had extended their use of the framework beyond their university studies and expressed intentions to continue incorporating it into their ongoing reflections. This showcases their recognition of the framework's applicability and value beyond academic settings, indicating its potential as a valuable tool

for personal and professional development. Their proactive adoption of the framework outside of their formal studies signals that it may have longer lasting impact for them. The students appeared to articulate a personal commitment to use the framework to support their continued growth and self-reflection. For example:

I just constantly use this model. The problem sometimes for us as humans is we don't have a framework, so this model gave me a framework. [At] the beginning of the semester, [I thought] it looks OK, it is extra work, and you should work on assignment. But I immersed myself in this framework because I love it. The first time I looked at the model, I saw the humanistic employability contribution and thought, "this is different". Especially as a science student, we don't hear this much, even though it is really necessary to be human, real human, and even the next level of humanity to work in the health sector. So, that's why I immersed myself in this unit, and each day. And I am not exaggerating. Each moment we can involve this model. It is very dynamic. For me, it's like oxygen. (S3)

S3 also said the framework was a good reminder of the wider purposes of employment:

For student learning, this model gives a student a vision of the goals and the needs of the today's life and today's world and future world. So, it helps them to learn the purpose of employment, which is to have a source of income along with providing psychological and emotional needs of oneself and others, and using differences or diversity as a basis for constructive changes, being productive and innovative, [showing] initiative and having a sustainable approach to building a healthier relationship with other colleagues. And in team work ... thinking about solutions.

Qualitative data insights – RQ2

In this section, the qualitative data and findings related to RQ2 are presented, focusing on the integration of the new relational employability framework in coursework. The data for this analysis were obtained predominately from the six post-implementation interviews conducted at the conclusion of Phase 2, involving three academics and three students. However, there are some quotations included, as relevant, which were expressed by the experts interviewed in Phase 1. Supplementary research notes, such as email conversations and screenshots from the Canvas LMS, were also considered in the development of this section.

My qualitative analysis of this data identified two main themes – *value of inquiry graphics* and *considerations for future delivery of the framework*. These two themes shed light on the use of visual representations to help students to learn about the framework as done in Unit 3.

Value of inquiry graphics

The implementation of an inquiry graphics learning activity in Unit 3 was successful in providing effective scaffolding, and the students who were interviewed expressed appreciation of this innovative teaching method. They specifically valued the opportunity to share images and experiences with both academics and peers, highlighting the collaborative and interactive nature of the learning process. Personally, I also observed and experienced a warm and supportive learning environment, and this sentiment was echoed by some of the academics and students I interacted with. One student even described the experience as “magical”, while two academics expressed experiencing a sense of “warm fuzzies” throughout the semester. The following quotation exemplifies such feelings of support and deep engagement in learning, as experienced by S3:

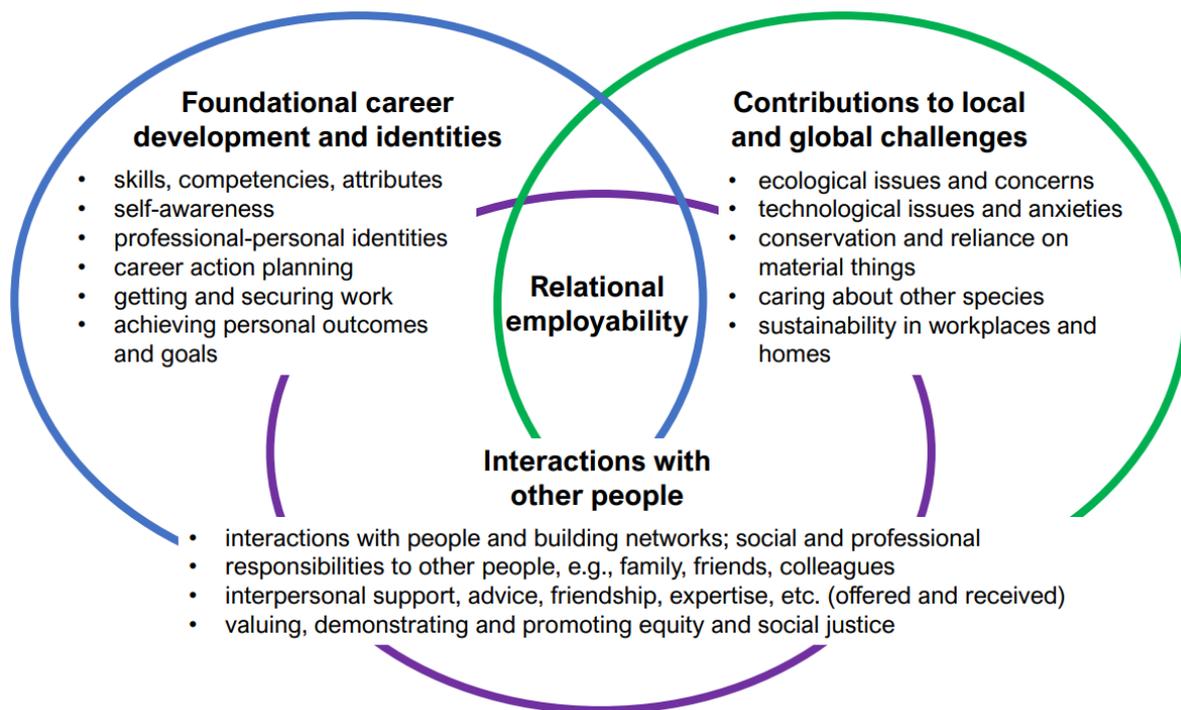
This unit gives me the modern way of education. We connected to each other [teachers and students]. We communicated at the highest level, and we enjoyed feedback [through the scaffolding] and we grow and learn through this process. It helps me emotionally [with] wellbeing and mentally I had a feeling of [being] fully supported, and that's why I can see that I have this strength to be resilient. To be honest, if the environment is not supportive enough, learning about skills is useless.

During a Phase 1 interview, an external expert in employability and career development research expressed her perspective on the use of inquiry graphics within the context of career development and employability in higher education. She acknowledged that the incorporation of inquiry graphics represented a novel contribution to research in this field. This recognition highlights the innovative nature of using visual representations as a means to enhance career development and employability outcomes within higher education, showcasing the potential significance and impact of this approach on advancing knowledge and practice in the field:

I think the only thing I've seen similar, with the graphics, is the work in teacher education around identity and imagery, and we've used the 'drawing right' technique within careers ... I've used [it] quite a lot to get people to visualise what career looks like and identity work and it's just so powerful. But no one's using it quite like you are. It's new. It's good. (External Academic Expert)

Before proceeding to the next theme, it is crucial to display the final [published](#) framework (see Figure 14), as it serves as a valuable visual reference for the forthcoming findings regarding considerations for the future delivery of the framework.

Figure 14: Relational employability teaching-learning framework (Cook, 2023)



Considerations for future delivery of the framework – also RQ3

This theme was developed to encapsulate the insights provided by the participants, aiming to support the future implementation of the framework in unit and course delivery by academics, as well as to guide its expansion across the broader university community. As no students from the second-year unit participated in the Phase 2 interviews, this section primarily relies on interview data from the first and third-year units taught by two academics and experienced by the three student participants who volunteered for the interviews. To maintain coherence, this section follows a structure based on the unit design elements outlined in Table 7, incorporating pertinent contextual and demographic details along with supporting quotations.

Relational employability video as an instructional tool

Each unit featured an introductory video (approximately 4 minutes in length) that provided an explanation of the framework, and its connection to learning and assessment

within that specific unit. While not all students watched the video (according to Panopto analytics), those who did reported that it was beneficial in enhancing their understanding:

It was very useful, and I liked it. I watched it more than five or six times during the semester ... please always have that video ... because, if I have doubts, I go back and visit the video. (S3)

The video also proved valuable for academics as they utilised it to familiarise themselves with the framework. One academic (A2) proposed the inclusion of additional examples in the video to demonstrate practical applications of the framework, beyond its connection to assessment. In response, I explained that, from a design standpoint, the video's length was considered optimal, and suggested that incorporating opportunities for students to practice using the framework in class, such as self-evaluation or critical reflection on their relational employability development, could potentially yield better outcomes. Interestingly, S1, who had taken A2's Unit 4, similarly suggested the implementation of scaffolding, as outlined below:

it would be good to have like, every week, a little bit to work on ... because you can apply [reflection] to a bunch of different tasks ... so, every week, with a different task in class or something like that. So that, when you get to the final [assessment], you know you've developed the skill.

When I asked S1 why they suggested scaffolding, they explained that having scaffolding would be beneficial because it would make the knowledge more concrete by allowing students to apply the theory in practical ways. S1 emphasised the importance of applying theories as a means of building knowledge and developing skills. They expressed

that the act of application is crucial for a deeper understanding and meaningful learning experiences:

To me, applying theories is very important. I need to apply to build that knowledge and that skill. (S1)

Scaffolding and modelling played a significant role in Unit 3 in which inquiry graphics were employed to facilitate student engagement in reflective practice. Despite the positive impact of these instructional approaches, students themselves recommended the inclusion of additional feedback opportunities throughout the semester (see also, the section on Assessment, p. 141).

[Discussion forum with inquiry graphics activity](#)

In each unit, a discussion forum was established, which I actively monitored to address student inquiries regarding relational employability, and its connection to the learning and assessment within the respective unit. In Unit 3, students were given the opportunity to practice engaging in reflective practice on their relational employability using inquiry graphics. The guidance I offered to students in this forum is shown in Figures 15 and 16.

Figure 15: Discussion forum instructions, Unit 3



Relational Employability

Elizabeth COOK (She / Her / Hers)

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Use this forum to ask Elizabeth questions about relational employability and discuss/consider how you might represent your relational employability using visual or multimedia for the Week 6 activity. **This activity is OPTIONAL but is designed to help to prepare you for Assignment 3.** It will also benefit your self-awareness and your relational employability.

Online students will be posting their artefacts here and Elizabeth will respond with feedback/support to help scaffold your learning in preparation for Assignment 3.

On campus students will be bringing their artefacts to class (whether shown on a device or in hand) and can also post their artefacts here if they wish to receive feedback/support from Elizabeth.

As the Relational Employability Framework is part of Elizabeth's PhD research, she has provided a [participant information sheet](#) ↓ (PIS) that explains her research project and gives you the option to opt out of her using your de-identified data in her analysis or publications. It also invites you to participate in a 30 min online interview as part of her research. **Please read the PIS carefully and email Elizabeth if you wish to opt out, or opt in for an interview.** You can also give Elizabeth feedback in the Relational Employability discussion forum or by email if you would prefer not to participate in an interview, but still wish to share your thoughts of her framework and your experience in using it to reflect.

This topic was locked Dec 12, 2022 at 23:59.

 [Relational Employability Framework for Students + IG Accessibility Checked.pdf](#)

Figure 16: Discussion forum instructions, Unit 3



Elizabeth COOK (She / Her / Hers)

Aug 23, 2022



Hi everyone!

[Here's my reflection with artefact](#) ↓ .

I wrote a lot more than you need to, but hopefully my colour-coding of the text helps you to build your knowledge/understandings of the framework and gives you some ideas for how you might like to use the framework to reflect on your relational employability.

Your text can be a few dot points.

My artefact is a photo I took with my mobile phone prior to writing my reflection. Before I took the photo I had to think about my relational employability, and my life and work/study - you'll need to do the same.

The artefact you choose/produce can be a drawing of your own, a referenced image sourced on the net, a photo you take – literally any visual representation created by you or found (created by someone else). If you source a visual representation created by someone else, you should reference the source as per APA 7th style (as should always be done when using or referring to something produced by someone else - it's part of being considerate and respectful of others/acknowledging their contributions, which is a purple circle aspect of your relational employability!).

Be reassured, there is no right and wrong way to represent your thoughts as they are your thoughts, not anyone else's – the challenge is knowing what you think – lots of people don't know that! So, by doing this activity, you're one step ahead of the game. :)

I hope you enjoy reflecting in this way and the opportunity to practice being creative (a key employability skill and part of developing your blue circle aspect of your relational employability).

Best wishes,

Elizabeth :)

Edited by Elizabeth COOK on Aug 23, 2022 at 17:50

(3 likes)

The discussion forum served as a practical demonstration to academics on how they could:

1. foster student learning of disciplinary content knowledge by incorporating the concept of relational employability;
2. guide students in the development of various aspects of their relational employability;
3. offer feedback on students' forum contributions to facilitate their practice with the framework; and/or
4. provide tips and feedback to students in preparation for using the framework in assessments.

When asked about the opportunity to engage in the discussion forum, S3 commented that:

the discussion forum was a great platform for effective communication and interaction [and you] encouraged me to use it differently by sharing thoughts and feedback. I had not had such experience, communicating at this level in the discussion board, at the university before.

It was interesting for me that people can openly share their thoughts and it was really a first time experience. We [all] shared pictures. Even [academics shared] some aspects of their personal life and it gives me the sense that maybe we have some things in common ... I really, firstly, enjoyed, and then [was] thankful said, WOW, we are all humans, we have similarities, and we should use it as a strength point for connection and that was really, really interesting and unique. (S3)

Figure 17 showcases a student's contribution to the discussion forum (shared with permission). In her reflection, the student utilised a photograph she had taken to illustrate her

understanding of relational employability. To enhance clarity and organisation, I suggested that students could colour-code their text to correspond with the three coloured components of the framework: blue, purple and green. In this particular example, the student opted to create three sub-headings, each aligned with a specific component of the framework.

Figure 17: Student's inquiry graphic reflection, Unit 3 discussion forum



Hi Everyone,

This is a photo of the breakfast my Son made me on the weekend. It doesn't necessarily represent my research journey (in relation to this unit), but rather symbolic of undergraduate studies throughout the past 4.5 years. My goal, as a future public health nutritionist, is to prevent diet related diseases by simplifying nutrition information so that healthy eating is accessible and achievable by all. 'Bear toast' is a regular in our home, created by my Son when given freedom to make his own dinner.

Blue: My undergraduate journey has allowed me to build upon many employability skills such as time management, communication and collaboration. More so, course work and volunteer opportunities have led to development of industry specific skills, strengthening my professional identity, resulting in employment within the field.

Green: The food itself is representative of my passion towards combating the global issue of obesity and associated chronic disease rates. Additionally, this signifies my drive to support local food systems, to ensure all have access to health food. I'm also grateful for the technology, both at home and ECU, that has allowed me to complete my studies through a hybrid on-campus/online arrangement, that works around my family/work/life.

Purple: Interactions with peers, academics and colleagues throughout the journey has been invaluable. It has allowed me to draw and learn from others experiences, reflect on my processes and develop a professional network. More so, this photo represents my connection with my family, the importance of 'meeting someone where they're at' (food skill wise) and empowering people to make healthy (and fun) food choices.

In Unit 3, the discussion forum served as a platform for both academics and students to actively engage in reflection. Academics provided modelling by sharing their own reflections, while students had the opportunity to practice and showcase their inquiry graphics in the forum. I personally provided individual responses to every student post, offering feedback and positive encouragement to support their learning and development of relational employability. This approach proved successful, as all students, regardless of their location (on campus or online), actively participated in sharing their inquiry graphics reflections in the forum, although some students took longer or required prompting to engage in this activity. This experience played a crucial role in building students' confidence in using the framework and prepared them for the final assessment, which required critical reflection. During the interview with A1, she expressed:

I think it went well. I have to admit I found [the framework] quite complex to start with ... [so] it was really important that [we, academics] developed our own reflections, to get our heads in the space that the students' heads were gonna be in ... [The] artifact activity in week five [when academics shared their image-reflections in the discussion forum] was essential for our own understanding and to demonstrate to the students that we're all in this together; it's not 'us and them' sort of thing.

I asked A1, if she thought the atmosphere in the unit changed as a result of this activity and she responded:

I do actually ... The activity that we ran in class, they did bring their artefacts with them and those that didn't, well, you're not getting away with it, you're still gonna participate, and they did! And that's often difficult cause it's quite a dry topic... I actually thought at the start of semester the on campus group were very quiet.

Usually there's one or two characters that you can use to bring the room to life, but they were all very quiet and reserved at the beginning of semester, and it took a little while for them to warm up. So, maybe that artifact activity in week six [when students shared their reflections in the discussion forum] helped generate a bit of a buzz because they certainly were more lively toward the end of semester ... I will keep doing that practice activity in week six. I think it was really important.

Assessment

Three out of the four undergraduate units included assessments that integrated relational employability. A1 reflected on the redesigned assessment in Unit 3, stating that it was:

a good leveller ... we always [have students who] do exceptionally well because they ... pay attention to detail, and they come to class ... but then asking them to do something where they're thinking more deeply, more altruistically, on a different level, that critical reflection, which is a bit of an art form those high performing students didn't do so well on that. So, it's a new skill that I hope we've instilled, you know, the need for reflective practice as an employability skill ... [and] that isn't as easy as it looks to be a deep and critical thinker, and to be able to apply that to what they'd just been doing for the last 13 weeks.

I received written feedback from S3, which indicated her uncertainty about using images to support her critical reflection in the assessment, despite the mention of this possibility in the discussion forum. During her interview, S3 explained that "I use visual things, but I thought final assessment is very formal ... so we can't colour-code". She saw images as "necessary for an effective tool for communication with students and in the

learning process". S3 also provided some suggestions for improvement in her written feedback, including:

- considering assigning a small percentage of the total mark for the artefact in week 6.
- introducing digital tools that can be used to create visual reflections or templates based on the framework.

During her interview, I sought clarification on S3's template idea, as I wanted to fully understand her suggestion. S3 explained that she envisioned an activity that would enable students to brainstorm their ideas on a digital worksheet with blank circles, similar to a Venn diagram, replicating the three rings of the framework. S2 similarly suggested staggering assessment and feedback opportunities throughout the unit, describing his experience as follows:

Look, I'd already passed the unit by the time we had the 20% to get [in the final assessment] ... Coaching's about learning, practice, feedback, learning, practice, feedback, little chunks and a big chain. And I think if you broke it up into 4 sections, 25% each. There's some units that I did where you do little tests along the way ... And you learn a little bit [more] each time ... feedback along that process rather than go bang at the end [with] a massive chunk of your mark ... Feedback and reflection is invaluable ... But give people a chance to learn that process.

In A2's unit, students used the framework (Cook, 2023) to reflect on their micro-placement experiences, which involved peer-groups working with a community organisation to design and deliver a health education program to its members (see Appendix F for an example student reflection for this assessment task). As part of this assessment, students were required to structure their critical reflections using Gibbs' reflective cycle (1988), which had

been used in previous iterations of the assessment in this unit. A2 said she believed that the redesigned assessment, incorporating relational employability, represented an improvement over the previous approach, as it:

increased the capacity for the students to explore relational employability concepts in a structured and real way ... allowed them to link all of those reflective elements [various activities that students completed to assess their learning and development], not as standalone pieces but how [they] contributed to this broader concept [of relational employability].

In particular, A2 noted that the redesigned assessment “differentiates the Bell curve of students”:

I could see [which students] had gone back and ... done an audit to actually look at the linking more, so they develop this richness in the overview that wasn't there in some of the students' [assessments], particularly those students who hadn't been attending classes. They were exploring those concepts because they really popped out weekly ... [And] there was those prompts that I was providing in class [on a weekly basis] as well.

By incorporating the concept of relational employability into this assessment, it provided a unique opportunity for students to showcase their individual strengths and abilities, thereby moving away from a focus solely on comparative performance and deficit view of employability skills that need to be developed. The redesigned assessment allowed students to demonstrate their understanding and application of relational employability in a way that was more personalised and reflective of their individual growth and development.

Assessment tip sheet

All three undergraduate units, which had relational employability incorporated into an assessment, had an assessment tip sheet. The tip sheets provided students with guidance on how to effectively use the framework in the assessment and incorporate it into their disciplinary content knowledge. Figure 18 displays the prompts – only those focused on the evaluation and analysis stages of Gibbs’ reflective cycle (1988), as one example of how this was done – that formed part of the tip sheet for Unit 4. The prompts guided students to effectively apply the framework and reflect on their experiences within the context of the assessment, specifically, in the below example, emphasising the evaluation and analysis aspects of their reflective process.

Figure 18: A section of the two-page assessment tip sheet used in Unit 4

Evaluation

This part requires you to evaluate both the event and your relational employability.

- What went well, what didn’t go so well, and why?
- What was challenging or easy for you/your group, and why?
- What aspects of your relational employability were appreciated by others based on evidence (e.g., agency evaluation, peer feedback, community feedback)?
- What aspects of your relational employability stood out to you based on your reflections above?

Analysis

Think critically about the evidence you have in front of you, including your ESCM-SAT results, the agency evaluation, and your observations and assumptions and summarise your analysis. You may wish to acknowledge any limitations you experienced, which may have impacted the results.

- What assumptions did you take into the session?
- Drawing on the evidence and referring to the framework (above), what can you say about your **overall developing relational employability**?
- **How did your past learning and experiences help prepare you for the event?**
- **How would you describe the client’s experience of the event?**
- **How would you describe your level of rapport/relationships?**
- **Was instruction and communication among stakeholders (agency/group/community) adequate and culturally competent to enable an effective contribution? If not, why not?**
- **Did technologies/materials/the environment support or hinder the results, and why?**

During A2's interview, she expressed her belief that, "without your checklist and support [provided] for their final assessment, I don't think you would have got the depth of understanding that you did."

In S3's interview, she mentioned that she appreciated the categorisation of concepts into the different stages of Gibbs' reflective cycle, in the tip sheet, and the accompanying questions that prompted her thinking. She said, "it helped me to understand the concepts."

According to S2, the visual colour coding in the tip sheet was particularly helpful, as it allowed him to vividly visualise the framework, and he had no criticism regarding this aspect. He said, "anything visually colour coding is helpful ... that's the only reason why I can still picture the [framework]."

In summary, the insights from the interviewed participants seem to indicate that the teaching methods and tools employed to enhance students' comprehension and engagement with the framework, largely did what they were intended to do. The academics and students who used/experienced inquiry graphics in their teaching/learning recognised its value, and all interviewed participants conveyed an appreciation of the framework as integrated into their experience. The academics identified some positive effects of relational employability on student engagement, the quality of students' written/discussed reflections, and the development of important skills, such as critical thinking. Both student and academic perspectives indicated that incorporating relational employability into coursework was a positive move for potentially enhancing educational outcomes.

The next two sections provide insights from quantitative data, comprising student questionnaire responses and institutional data. These data sources complement the findings from the interviews, provide further insights relating to RQ3, and play a crucial role in ongoing monitoring and evaluation. Establishing institutional data was particularly important to effectively implement relational employability across additional units and courses at ECU

after the launch of the SharePoint site. By incorporating both qualitative and quantitative data, a more comprehensive understanding of the impact and effectiveness of the framework can be obtained, contributing to evidence-based decision-making and continuous improvement over time.

Student questionnaire responses – RQ4

Table 14 presents the results of the closed-ended items of the student questionnaire. Although only 10 students completed the questionnaire, their responses were useful because they provided further insights into the perceptions of students with respect to learning about relational employability. All 10 students (across three units) who completed the questionnaire agreed or strongly agreed with Item 1, *I appreciated the opportunity to think more broadly about my employability*. Most agreed or strongly agreed that learning about relational employability helped them to: *identify strengths and areas for improvement* (Item 2); and *better understand the broader effects of behaviours and actions throughout careers* (Item 6). Similarly, most students felt that *future ECU students should learn about relational employability* (Item 5).

Table 14: Student responses to six Likert-scale closed-ended items in the questionnaire

Student No.	Unit title (Year level)	1. I appreciated the opportunity to think more broadly about my employability	2. Learning about relational employability has helped me to identify my strengths and areas for improvement	3. Using images helped me to reflect on my relational employability	4. Learning about relational employability has helped me to identify my professional identity	5. I think future ECU students should learn about relational employability	6. Learning about relational employability helped me to better understand the broader effects of behaviours and actions throughout careers
1	Unit 2 (Second year)	Strongly agree	Strongly agree	n/a	Agree	Strongly agree	Agree
2		Agree	Agree	n/a	Agree	Agree	Agree
3		Strongly agree	Agree	n/a	Neither agree nor disagree	Strongly agree	Strongly agree
4	Unit 4 (Third year)	Strongly agree	Strongly agree	n/a	Strongly agree	Strongly agree	Strongly agree
5	Unit 3 (Third year)	Agree	Agree	Strongly agree	n/a	Agree	Agree
6		Strongly agree	Strongly agree	Agree	n/a	Strongly agree	Strongly agree
7		Agree	Strongly agree	Strongly agree	n/a	Agree	Neither agree nor disagree
8		Agree	Agree	Disagree	n/a	Neither agree nor disagree	Neither agree nor disagree
9		Agree	Neither agree nor disagree	Disagree	n/a	Agree	Agree
10		Strongly agree	Agree	Neither agree nor disagree	n/a	Agree	Agree

In contrast to the positive views expressed by the three student interviewees, it is notable that half of the surveyed students, who had experienced inquiry graphics, did not agree that using images helped them to reflect on their relational employability (Item 3). This finding is a reminder of the need to always be aware that students have their own specific needs and preferences. However, it should be noted that the inquiry graphics activity was optional, not mandatory; students could choose not to engage in the activity if they really didn't want to. The contrasting views regarding the effectiveness of using images in reflection with the relational employability framework, as identified through this student questionnaire, will be further explored in Chapter 6.

Student responses to the two open-ended items are presented in the following tables. Table 15 displays students' explanations of their agreement with appreciating the opportunity to broaden their perspectives on employability, whereas Table 16 shows student feedback on what they found challenging or useful when using the framework. The responses are largely positive with respect to the learning process, employability development and the framework.

Table 15: Why students appreciated the opportunity to think more broadly about their employability

Unit assessment details	Student No.	Student response (raw data)	Key points
Video rationale ‘pitch’ about student’s proposed health promotion plan, incorporating the framework. Students peer reviewed each other’s videos before final submission.	1	We all live a busy life, and often we don’t stop to reflect. We keep pushing through to get things done. The Relational Employability assessment allowed me to reflect on my skills and analyse the areas that need improvement.	Focused time and attention on relational employability in assessment was valued.
	2	I didn’t choose “strongly agree” because of my age, experience and position in the workforce and current career. I understand there are always opportunities for learning but for these reasons it wasn’t a major focus for me.	Did not disagree so they must have seen value in what was learned for others, if not for themselves. Perhaps evidence of concerns for others, which the framework promotes?
	3	This assignment helped me to identify some gaps in my employability skill set and set goals to improve them.	Difficult to interpret. But perhaps the video pitch was a challenge for this student and, therefore, helped them to identify ways to improve, e.g., their presentation or communication skills.
Critical reflection on group work and programme delivery, incorporating the framework and using Gibbs’ reflective cycle.	4	I find self-reflection to be a great tool for myself in life and career, has helped me improve who I am across the board, so I appreciated having this framework to consider it in a more focused sense.	Framework helped focus reflection – provided a useful framing.

Unit assessment details	Student No.	Student response (raw data)	Key points
Critical reflection on the research process and their developing relational employability.	5	I appreciated the opportunity to think more broadly about my employability, and I liked how it was included in the ECU unit. The framework has helped me to identify my strengths and weaknesses by making me think about not only myself but also how my actions impact my environment. I personally did not like using images but that is because I am a person who likes to have a 'correct' answer; hence I find reflections difficult. The framework may be useful for students to get them to think about how they impact their environment as many reflections only get you to focus on yourself.	Framework was a useful reminder of the implications of actions on others, including environments. Having to reflect was difficult for this student – this is good feedback as we want students to be challenged out of their comfort zones in order to learn and grow!
	6	I have been in the workforce for a number of years so do understand employability skills and I feel I am already aware of my strengths and weaknesses through working in a corporate, team environment and from undertaking my degree. I think it is important for people to learn about these types of skills as it helps understanding the ever-changing work environment.	Saw value in the learning even though it wasn't something they felt they needed. Perhaps, again, evidence of concerns for others, which the framework promotes.

Unit assessment details	Student No.	Student response (raw data)	Key points
	7	It was helpful to reflect on what we did and what skills were actually used to do the tasks. It helped pinpoint the skills we were improving.	Framework structured reflection, which helped this student to identify that they had achieved and how they had developed.
	8	Made me more aware of what I can bring to an employer other than just a degree.	Strength-based approach was appreciated. The framework helped them to identify their strengths and how these could be translated to others.
	9	As I am already in the workforce, it gave me the opportunity to think how I would have to improve should I want to apply for another job opportunity.	Helped this student to identify areas for improvement for the next step in their career.
	10	I think employability is one of the most important factors but often forgotten at university. I loved thinking and reflecting on it – made me more aware.	Valued the opportunity, within ordinary learning, to consider their employability and be aware.

Table 16: What students found challenging or useful about relational employability

Student No.	Student response (raw data)	Key points
1	My challenge was to reflect on my skills. However, how the skills were broken down into different areas helped with my reflection.	Reflection was a challenge for this student. The framework helped structure reflection – so it was seen as useful.
2	Seeing it categorised.	Framework provided structure, which was seen as useful for this student.
3	The assignment was new, and a positive challenge and it was useful as it was a practice for the reflection skill which helps to improve other skills.	Understands the purposes of the assessment and found it a positive experience.
4	I found it a little challenging to understand the different pieces at first but once I understood more the connections, I found it useful to guide my thinking.	Once connections were understood, the framework was a useful guide.
5	I liked how the relational employability framework got us to think about areas that make up our employability and how it got us to think not just about ourselves but how we impact our environment. I did struggle with the image side of the relational employability framework as I prefer a ‘correct’ answer/response, but it was interesting to see how people interpret images and what certain images mean to them.	Liked the paradigm shift. Didn’t like being creatively challenged. However, they appreciated seeing how others perceive things.
6	I found using the image challenging so did not really enjoy this activity. It was useful to understand the three circles and how they overlap.	Didn’t like being creatively challenged. Framework supported comprehension of the concept and its connections.

Student No.	Student response (raw data)	Key points
7	Breaking down the sections and trying to find something for each category was challenging, though was also useful and made it easier to tie everything together.	Students weren't required to find something for each component of the framework – it was emphasised as optional. Framework helped organise thinking and identify connections.
8	Useful – was own encouragement to trust what I know and my skills.	Framework possibly supported self-confidence.
9	It was challenging for me to constructively think about my own relational employability.	Difficult to interpret. Use of the word <i>constructive</i> possibly indicates this student is self-critical? If that is the case, then more strength-based learning may be needed.
10	It's a question not asked on a daily basis, and it requires lots of self-reflection and being truthful to ourselves.	Liked being challenged in new ways and encouraged to be true to self.

In general, the student questionnaire findings indicate that students valued the opportunity to expand their thinking about employability and that they recognised the importance of the learning process and the framework for their learning and development. They acknowledged the value of reflection and self-assessment in developing their skills and gaining self-awareness. While some students faced challenges in areas, such as reflection and image creation and interpretation, their feedback provides useful insights into how we might improve the delivery of the framework at ECU in order to enhance student engagement and learning experiences in future delivery.

The next section of this chapter is focused on the institutional data collected, which will be used for continuous monitoring and evaluation of the implementation of relational employability at ECU.

Tracking institutional data – objective 3

This section presents my analysis of the institutional data provided to me on the three units that incorporated relational employability into an assessment. While this data does not directly measure the impact of the study (it, rather, provides valuable insights into the overall performance of each unit), it is important to track these measures over time as part of standard practice at ECU. It is encouraging to note that the changes made in this study did not have a negative impact on these measures. The monitoring and evaluation of these measures will be an ongoing process and will expand to include other units as more ECU academics implement relational employability in their teaching practice.

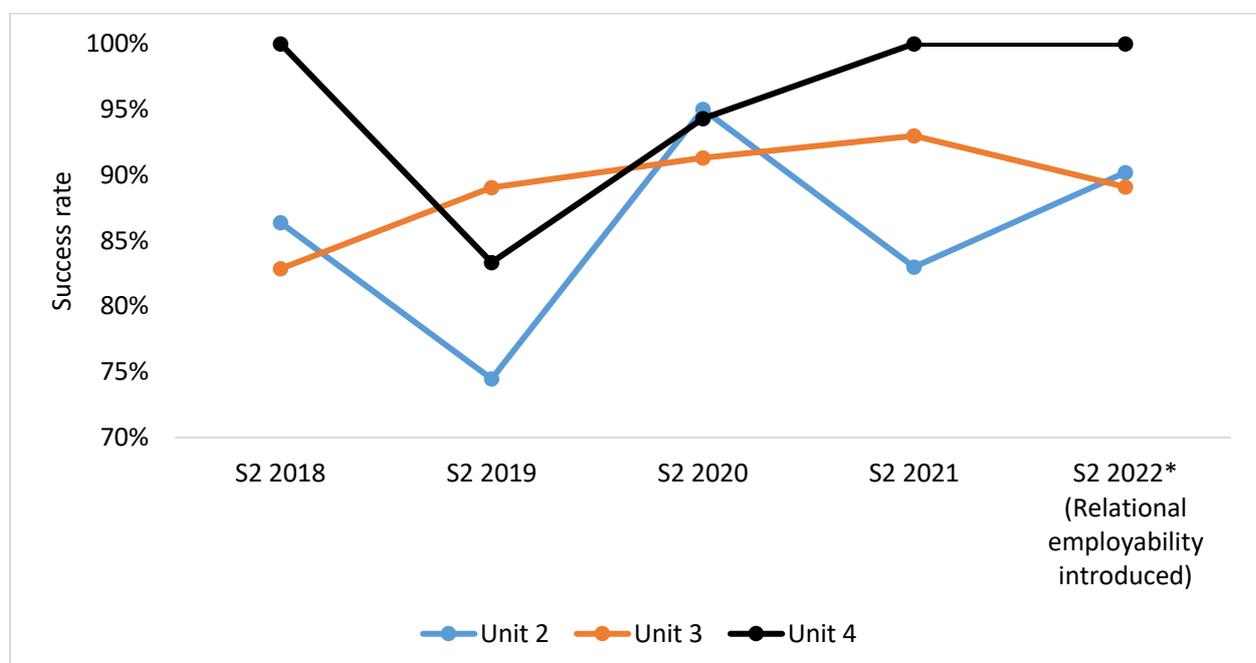
Student success

At ECU, student success is evaluated using two key measures: the success (pass) rate (as shown in Figure 19); and the mean weighted average mark (WAM; as shown in Figure 20), which represents the average grade achieved in a unit of study. These measures provide insights into the overall performance of students in specific units at the university. It is

important to note that the data provided for these measures does not directly assess the impact of relational employability on student success. This is because each unit had multiple assessment tasks and relational employability was integrated into only one of these.

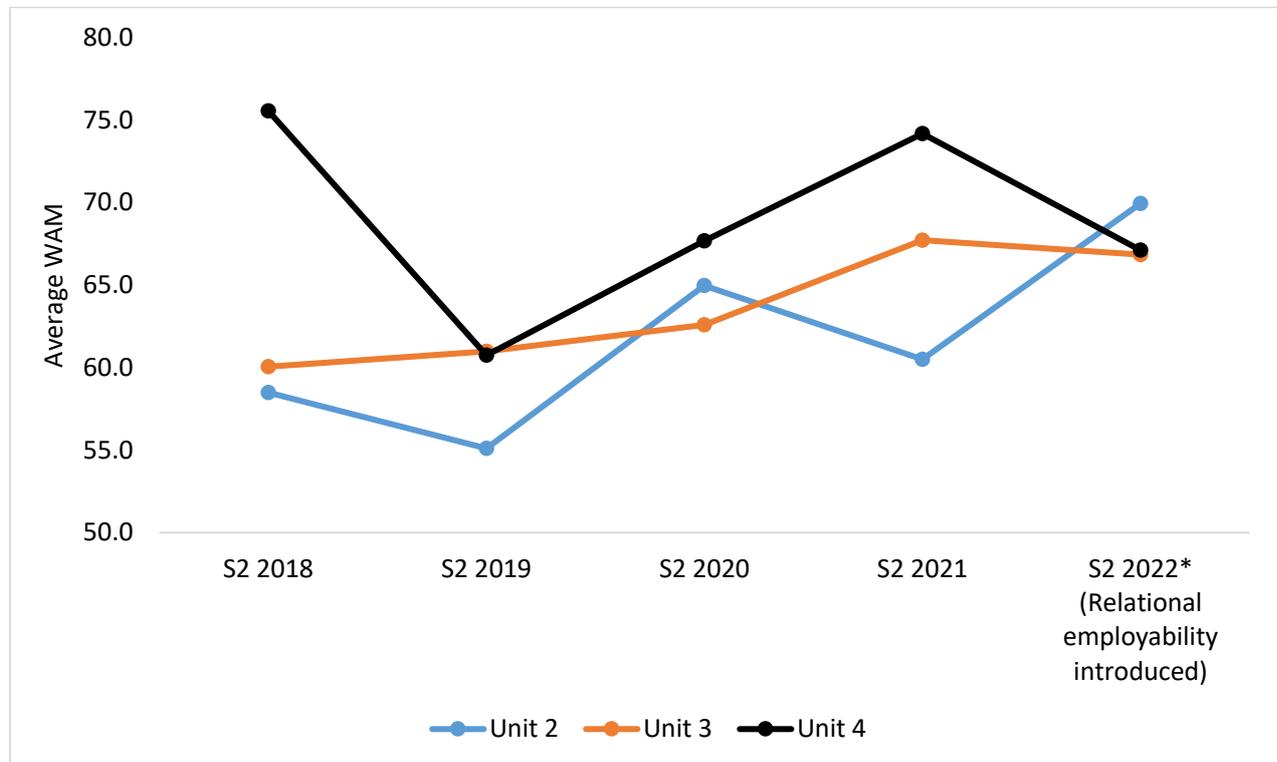
The figures below show that the integration of relational employability in the participating units coincided with overall improvements over time in semester two for both measures. Only semester two data is shown as this study was conducted during that specific semester in 2022. Figure 19 illustrates that the average success rate for Unit 4 remained high at 100% upon the introduction of the relational employability approach. For Unit 2, the average success rate improved by seven percentage points, whereas, for Unit 3, the average success rate declined slightly by four percentage points (Figure 19). While this does not evidence that the improvement is directly (or at all) linked to the introduction of the relational employability approach – I cannot claim that, nor do I wish to – it was an interesting coincidence that provides a possibility of that being the case.

Figure 19: Timeseries of unit success rates – with framework embedded in assessment, S2 2022



A similar trend is shown in Figure 20, which illustrates that, upon the introduction of relational employability, the average student grade improved for Unit 2, remained stable for Unit 3 and declined slightly for Unit 4.

Figure 20: Timeseries of unit average WAM – with framework embedded in assessment, S2 2022



Student evaluation of teaching

The Unit Teaching and Evaluation Instrument (UTEI) is a centrally administered survey that asks students to evaluate the units they complete. UTEI data is used to enhance unit design and inform teaching practice. Appendix G lists the full set of items in this survey and provides my reasons for selecting two of the closed-ended items for this study – 6 – *the unit challenged my thinking*; and 8 – *I am satisfied with this unit*. These items are scored on a five-point Likert agreement scale with a not applicable option.

Table 17 presents the five-year (semester two) UTEI results for the specified items across different units, delivery modes, and School and ECU averages for comparison. The results indicate that, with the introduction of relational employability in 2022, for:

- Units 2 and 3, the majority of online students agreed *the unit challenged their thinking*;
- Units 2 and 3, a greater proportion of online students were *satisfied with the unit*, compared to previous years;
- all units except Unit 3, an equal or greater proportion of on campus students agreed *the unit challenged their thinking* and were *satisfied with the unit*;
- Item 6 – *the unit changed my thinking* – all units and modes (except for Unit 3 on campus mode) achieved a higher percentage agreement score than both the School and ECU. Unit 3 on campus mode achieved the same percentage agreement score as the School.
- Item 8 – *I am satisfied with this unit* – all units and modes (except for Unit 3 on campus mode) increased in percentage agreement score compared to the previous year, and all units except Unit 1 achieved above both the School and ECU average.

Overall, the quantitative findings indicate that relational employability may have had a positive influence on students' perceptions of the units in this study, although variations were observed across units and delivery modes. The next chapter will further explore the quantitative and qualitative findings, considering the research questions, the literature and the conceptual framework of this study.

Table 17: Five-year timeseries of semester two UTEI items 6 and 8 percentage agree scores for units in this study, and School and University averages

Unit title	Mode	S2 2018		S2 2019		S2 2020		S2 2021		S2 2022*	
		No. Responses	% Agree								
Item 6 - The unit challenged my thinking											
Unit 2	Online	11	82%	10	70%	11	73%	12	83%	10	90%
	On campus	6	100%	5	100%	12	100%	4	100%	5	100%
Unit 3	Online	14	71%	15	80%	16	81%	6	100%	16	94%
	On campus	18	89%	15	67%	12	92%	10	100%	6	83%
Unit 1	On campus	38	92%	33	76%	29	90%	26	81%	22	95%
Unit 4	On campus	13	69%	6	67%	10	70%	10	80%	7	86%
	<i>School average</i>	<i>2,722</i>	<i>84%</i>	<i>2,127</i>	<i>85%</i>	<i>2,411</i>	<i>86%</i>	<i>2,146</i>	<i>86%</i>	<i>2,081</i>	<i>83%</i>
	<i>University average</i>	<i>23,385</i>	<i>84%</i>	<i>19,066</i>	<i>84%</i>	<i>21,894</i>	<i>86%</i>	<i>18,121</i>	<i>85%</i>	<i>18,745</i>	<i>85%</i>
Item 8 - I am satisfied with this unit											
Unit 2	Online	11	91%	10	70%	11	82%	12	42%	10	90%
	On campus	6	83%	5	100%	12	92%	4	100%	5	100%
Unit 3	Online	14	57%	15	87%	16	81%	6	83%	16	94%
	On campus	18	72%	15	67%	12	92%	10	90%	6	83%
Unit 1	On campus	38	92%	33	91%	29	90%	26	62%	22	91%
Unit 4	On campus	13	77%	6	33%	10	80%	10	50%	7	57%
	<i>School average</i>	<i>2,724</i>	<i>77%</i>	<i>2,130</i>	<i>78%</i>	<i>2,413</i>	<i>80%</i>	<i>2,144</i>	<i>77%</i>	<i>2,083</i>	<i>74%</i>
	<i>University average</i>	<i>23,385</i>	<i>78%</i>	<i>19,067</i>	<i>78%</i>	<i>21,929</i>	<i>80%</i>	<i>18,133</i>	<i>78%</i>	<i>18,751</i>	<i>78%</i>

Note: % Agree represents the proportion of responses that were “Agree” or “Strongly Agree”. *Relational employability introduced.

Chapter 6: Discussion

In this chapter, I examine the findings (presented in Chapter 5) in relation to the reviewed literature (Chapter 2) and conceptual framework (Chapter 3) to address the research questions, which are aligned to the aims and objectives of this thesis. I also acknowledge and discuss the limitations of the study to enhance the validity and generalisability of the findings. It is worth noting that the findings discussed in this chapter have already influenced ongoing implementation of the relational employability framework at ECU and at a university in the north-west of the UK.

To recap on the purpose of this research, my thesis is based on the premise that a paradigm shift in graduate employability is both necessary and desired. The overarching goal is to demonstrate how individuals within a university, particularly academics and students, can initiate the enactment of relational employability, aligning with a relational higher education paradigm. By empowering academics and engaging students, I aim to support the reshaping of the prevailing employability paradigm over time, moving beyond individual and organisational outcomes and emphasising the importance of holistic considerations and contributions throughout careers to positively impact our world. A design research methodological framework (see Chapter 4) guided my approach to this study, and I focused on four research objectives:

- (1) Develop a new relational employability teaching-learning framework that includes not only individuals' employment-related skills and outcomes, but also interactions with, and contributions to, other individuals, beings and entities; thus, including humans, ecologies, materials and technologies in the concept – achieved.

- (2) In collaboration with academics at ECU, test the new framework with students in units of study over the course of one semester – achieved.
- (3) Collect and analyse data to assess the framework’s practical application and value for academics and students; and establish the basis for ongoing evaluation using institutional data – achieved.
- (4) Document the use of the new relational employability teaching-learning framework at ECU to: i) emphasise its practical application and value; and ii) begin to build evidence of the impact – achieved for this thesis (and ongoing).

The various data collection and analysis techniques I employed in this research were guided by the following research questions:

1. How do participants (students, academics, careers practitioners and employability experts) understand and value relational employability?
2. How can a new relational employability teaching-learning framework be integrated in coursework across course levels?
3. What were the challenges, opportunities and enablers experienced by academics when using the framework in one semester?
4. How did students engage with the framework during the semester and how do they think the experience influenced their educational experience and employability?

In the subsequent sections of this chapter, I delve into each research question in detail, providing comprehensive insights into the participants’ understandings, values, perspectives and experiences related to the relational employability framework and its implementation at ECU. Furthermore, I articulate the strengths and limitations of this study to ensure robust evaluation of the findings in preparation for the concluding chapter.

Research question 1: Perceptions about relational employability as a new paradigm

The study findings (from the Phase 1 interviews), demonstrated that, even prior to implementation, academics, careers practitioners and employability experts recognised the potential benefits of the relational employability paradigm for enhancing intra-curricular employability practices within universities. While the precise interpretation of relational employability (as a new paradigm) varied among participants, this inherent flexibility was perceived as a strength because, during implementation, the framework could be understood and applied in various ways, and tailored to the unique needs of individuals, participant groups and disciplinary contexts (albeit limited to two disciplines in this study). This implies that the relational employability paradigm may be able to be embraced and used by people in different educational contexts and disciplines outside the bounds of this study.

Moreover, if the framework can be flexibly adopted and applied then it may also be able to help foster interdisciplinary collaborations within and between higher education and workplaces, aligning with Römgens et al.'s (2020) call for integrating employability approaches to establish unified perspectives and practices across multiple social practice domains. By fostering an approach that values and integrates diverse perspectives, knowledges and skillsets, the relational employability paradigm aligns with the demands of contemporary professional environments. What I mean is that, as workplaces become increasingly interconnected and complex, practitioners are required to navigate intricate challenges that often transcend traditional disciplinary boundaries. The inherent adaptability and interconnectedness of the relational employability paradigm offers a potential platform for holistic problem-solving, drawing on insights from different fields to address multifaceted issues. Therefore, in addition to its potential benefits within academia, the concept of relational employability offers a potential solution for addressing the dynamic challenges that characterise contemporary professional environments. As workplaces and industries evolve at

an unprecedented pace, professionals are confronted with intricate challenges that often require a multi-dimensional approach, requiring relational thinking and awareness.

The existence of various valid approaches to utilising and applying relational employability, without a definitive ‘right’ answer or perspective, would enhance the generalisability and transferability of the relational employability paradigm across diverse work and learning contexts; and aligns with the anticipated nature of relational employability, which is rooted in the principles of relational higher education (Lacković & Olteanu, 2024). As explained previously, relational higher education views knowledge practices as intertwined with social, more-than-human and digital/virtual life and circumstances. Relational employability’s inherent malleability, adaptability, transformative nature and interconnectedness, *because it is relational, therefore*, suggests its applicability to a wide range of career contexts and individuals in the contemporary world. By encouraging individuals to view their careers through a holistic lens, as the academics did with their students in this study, the framework helps to promote mindsets that acknowledge and value interconnectedness, which may, in turn, encourage professionals (in the workforce) to draw up insights from various disciplines and perspectives to inform their practice. In the context of teaching-learning, such interconnectedness, or, perhaps, more appropriately, *relational awareness and thinking* (Lacković & Olteanu, 2024), may help students to embody critical global citizenship (Hill et al., 2018) – a kind of *relational becoming*. As practitioners (graduates and educators) engage with the triadic dimensions of relational employability, they should become better equipped to tackle challenges from multiple angles. That is, they should become better at thinking creatively and solving problems, which are two of the six ‘essential employability skills’ identified in Dickerson et al.’s (2023) study as needed in the world of work, both in the past and, even more so, into the future.

Another finding of this study was the participants' appreciation for the shift in focus from the traditional notion of employability, which primarily emphasises individualistic and organisational outcomes and success, to a more inclusive approach encompassing wider concerns about the world around us and contributions to society through relational employability. This finding is particularly noteworthy as it aligns with the arguments put forth by scholars advocating for a holistic approach to employability that considers social justice, equity, inclusion and the complex challenges confronting society (Blustein et al., 2005; Hooley & Sultana, 2016; Hooley et al., 2017; Lacković, 2019; Carosin et al., 2022; Cook, 2022). Furthermore, the participants' strong comprehension, and positive reception, of the relational employability framework in this study signifies their *readiness* for a paradigm shift, which holds the potential for a ripple effect that may permeate the broader higher education sector. The challenges identified in Chapter 2 – such as academic resistance, competing priorities and difficulty embedding, typically associated with the traditional employability paradigm (Speight et al., 2013; Osborne & Grant-Smith, 2017; Sloane & Mavromaras, 2020) – and concerns regarding the role of universities in promoting employability (Sin et al., 2019), did not appear to hinder the acceptance, nor implementation, of relational employability in the context of this study. This finding serves as an encouraging sign and inspires me to continue advocating for, and disseminating, the principles and practices of relational employability across ECU and, in time, more broadly across the higher education sector. Of course (as it's how I work), this will be done alongside and in collaboration with the participants who were involved in this study. At this point, it is important to note that perhaps the context of the study, and my part in it, was biased toward success. What I mean is (and as previously noted in Chapter 4), the participants at my university (and those I interviewed from outside ECU) may have already been primed or were 'ready' for an employability paradigm shift (without my intervention). Further testing,

in contexts outside of ECU and Australia, is warranted to properly assess any changes in attitudes toward employability due to the framework.

Another important finding of this study is the recognition and appreciation of relational employability by academics, employability experts and careers practitioners alike. This finding suggests there may be potential for the relational employability framework to help bridge the current and seemingly persistent gap between theory and practice in these fields of expertise/perspectives, as identified by Healy et al. (2022) and Römgens et al. (2020) (and discussed in Chapter 2). On the one hand, this study demonstrated the successful integration of relational employability into academic curricula, providing a practical application within specific disciplines. On the other hand, both academics and careers practitioners acknowledged the value of relational employability in cultivating systems thinking skills among students. The alignment with systems thinking – in accordance with the Systems Theory Framework (STF) (McMahon & Patton, 1995, 2018; Patton & McMahon, 1999, 2006, 2014), which is often referenced by careers counsellors – also suggests that relational employability can complement existing career frameworks and support *their* practice, particularly when working with academics to embed career development learning in the curriculum. This unique characteristic of relational employability presents an opportunity for its wider, and potentially wide-scale, adoption within and across universities, including encompassing strategic and operational planning, and, most importantly, both within, alongside and outside the curriculum (Cook, 2022). In current practice, strategic planning relating to employability usually revolves solely around graduate employment outcomes, which serve as proxy metrics (Jackson & Bridgstock, 2021). Consequently, operational employability actions undertaken by universities *indirectly* relate to the overarching strategic objective – and this is not ideal. By incorporating relational employability into both strategic and operational planning, a more comprehensive framework across, and up and down, an

institution, can be established that goes beyond the narrow focus on employment outcomes. This may, in turn, enable more meaningful engagement with ‘employability strategy’ and, beyond that, facilitate better outcomes overall. Such a strategic approach could promote deeper understandings, and improved evaluation, of employability within higher education, while still adhering to the governmental focus on employment outcomes – potentially a win-win.

Therefore, by recognising the potential of relational employability to bridge theoretical and practical gaps, and by integrating it into strategic and operational planning, and teaching practices, universities could advance their efforts to enhance student employability. This inclusive and comprehensive approach could also contribute to more meaningful and effective preparation for students for their future careers, while attending to necessary societal and political dimensions.

If relational employability indeed promotes systems thinking among its users, as preliminary indications suggest, it may help to fulfil Almond’s (2022) vision of nurturing students’ exploration of deeper existential questions and purposes. This potential outcome holds implications for students’ personal and intellectual development as they engage with broader societal, technological and environmental issues and concerns, thereby enriching their educational experience and fostering a deeper sense of purpose.

Students in the study expressed surprisingly accurate and solid understandings of the framework, and recognised some positive effects on their learning, self-confidence and development. They also acknowledged its potential benefits beyond employability skills, such as promoting good mental health and creating a supportive learning environment. Students, thus, may have developed a heightened sense of self and a more *relational awareness as relational agents* in and for the world (Lacković & Olteanu, 2024). They were also developing a multimodal identity, or an Identity +, which is an awareness of identities as

always relational to ‘others’, including in employment (Lacković & Olteanu, 2024). Such a *relational perspective of identity* may help students to see their own positionality in the world and their future work, beyond just earning money and toward relations and relationships, as central to their continual growth, and in the spirit of lifelong learning. The fact that some students reported they have continued to use the framework beyond their university studies speaks to its applicability and possible enduring value for personal and professional development and lifelong learning.

Another characteristic of this relational and multimodal identity is its connection to ‘intersectionality’ (Corlett & Mavin, 2014; Hernández-Saca et al., 2018; Nichols & Stahl, 2019), which highlights how students can think about their positionality, both in terms of their own identity characteristics and the identities of others, and how these might ‘manifest’ in work contexts (Brown, 2015; Follmer et al., 2020). Whereas this was not the focus of the study, it is worth mentioning that future research and practice can explore the element of multimodal identity (or identity+), which highlights, simply, how our individual identities are not monolithic but, rather, develop in relation to various ideational, biological and material identity characteristics.

One of the three employability experts involved in the study expressed the view that relational employability is more relevant than solely focusing on graduate attributes. This perspective suggests that shifting the emphasis from attributes alone to encompassing broader considerations is a healthier approach to graduate development (Lacković, 2019). It also suggests that relational employability holds promise for addressing issues associated with the traditional skills-focused employability paradigm (or the performative function of employability within universities), which can undermine human flourishing and the educational purpose of universities (Boden & Nedeva, 2010; Cook, 2022; Wheelahan et al., 2022). However, further investigation is required to fully comprehend the broader

applicability and impact of relational employability for the higher education sector, particularly the degree to which students and academics perceive and apply the different components of the triadic relational employability paradigm (i.e., social, environmental and technological relational thinking).

It is noteworthy that both the academics and employability experts in this study perceived relational employability as less confrontational compared to the prevailing employability paradigm. This perception may arise from the recognition that relational employability operates from a strengths-based and relationships perspective. When implemented in teaching-learning, relational employability allowed students to realise and leverage their existing employability potential, rather than solely focusing on their deficiencies and skills gaps in order to ‘boost’ or build it (a deficit view). By adopting relational employability as a framework for teaching-learning, instead of the prevailing employability paradigm, academics and students may be better equipped to address existing inequities (Hooley et al., 2019; Hooley, 2020), while also alleviating some of the concerns expressed by students regarding career ambiguity (Niska, 2023).

According to the feedback from academics in this study, the relational employability framework was regarded as a valuable tool for various purposes in teaching. It was seen as a means to raise awareness of teaching objectives and consider the broader context of curriculum design. Moreover, academics found that the framework facilitated reflection and promoted higher order thinking among students regarding their employability and future career prospects. This perception aligns with existing knowledge about effective teaching practices for employability (Pegg et al., 2012). Furthermore, academics highlighted that relational employability underscored the significance of connections, collaboration, relationship building and shared learning experiences. These aspects are in line with the work of Bridgstock (2020) and correspond to the concept of social capital (Tomlinson, 2017;

Donald et al., 2023). The emphasis on fostering social connections and capital through relational employability supports the idea that networks, relationships and collaborative experiences play a crucial role in students' career development and success.

It was also the case that, by incorporating relational employability into their teaching practice, the academics in this study enhanced their instructional approach and created more meaningful learning experiences for their students, according to them. This was because the framework provided a comprehensive and nuanced perspective, and a framing for thinking and planning out their teaching practice, that aligns with the principles of good teaching practice and acknowledges the importance of social connections and capital in career development.

In summary, the study findings, with respect to RQ1, demonstrated that academics, careers practitioners and employability experts recognised the potential benefits of relational employability for enhancing intra-curricular employability practices within universities. The flexibility and nuanced understanding of relational employability were seen as strengths, allowing for tailored applications to individual and disciplinary contexts. This suggests that relational employability has the potential for broader adoption and interdisciplinary collaboration within higher education and workplaces. Additionally, the shift from a sole focus on attributes to a more inclusive and holistic approach was perceived as a healthier way to develop graduates, potentially addressing issues associated with the traditional skills-focused employability paradigm. The strength-based nature of relational employability was viewed as less confrontational and more empowering for students who could then leverage their existing employability potential. Overall, these findings support the adoption and dissemination of relational employability principles and practices in the higher education sector.

Research question 2: Intra-curricular relational employability

In the study, academics discovered that integrating relational employability into curricula was not only feasible but also enhanced the meaningfulness of employability activities for students in terms of their learning experiences and assessment. This finding aligns with the recommendations of Pegg et al. (2012), emphasising the importance of assessment in motivating and engaging students in their employability development. Pegg et al. (2012) advocated for realistic, disciplinary-specific assessment tasks and opportunities for self- and peer assessment to evaluate employability development. By integrating relational employability into existing assessment methods, it has the potential to reach students across all disciplines, potentially addressing the lack of familiarity and recognition of employability purposes observed among certain student groups, as noted by Higdon (2016). Furthermore, the integration of relational employability into disciplinary learning and assessment methods may address the issue identified by Gedye and Beaumont (2018) – wherein students’ definitions of employability lacked a discernible disciplinary dimension – by fostering the development of nuanced disciplinary perspectives and enhancing students’ understanding of employability within their specific fields. However, further research is needed to substantiate these points.

The successful implementation of the framework by academics, some without assistance in the classroom, and its positive reception by students, suggests that the pressure on academics to integrate employability, which they resist (see Majid, et al., 2022), might be alleviated through the opportunities offered by relational employability, particularly when supported by effective educational design. Innovative methods were employed to integrate relational employability into the curricula, such as Lacković’s (2020) inquiry graphics pedagogy, authentic community-based projects, peer-to-peer collaboration and review, video production and critical reflective assessment. Some students expressed a desire for more

multimodality in their higher education, recognising the potential of multimodal learning for employability and engagement, in line with the arguments of Kress and Selander (2012), Lacković (2020), and Lacković and Olteanu (2024) on the value of multimodal learning in contemporary higher education and society. Communication skills, critical inquiry, creativity, agility and resourcefulness are deemed essential in today's relational world. Or, at least *toward* the world with mutually fulfilling and transformational relations, saturated with social media and complex problems, both for realising transformative higher education (Ashwin, 2020; Lacković & Olteanu, 2024) and career success (Cheng et al., 2022; Dickenson et al., 2023; Leadbeatter et al., 2023). In this study, the online discussions in the forums proved to be an effective teaching practice for facilitating learning and reflection on relational employability identities, meeting many of Pegg et al.'s (2012) recommendations, including creating a shared community of learning and facilitating two-way collaboration between academics and students.

Both academics and students in the study demonstrated a shared perspective on the importance of integrating the framework of relational employability consistently throughout the entire degree, commencing from the first year and persisting until graduation, in line with the course-wide approach advocated by Sambell et al. (2021). Academics emphasised this course-wide approach, suggesting the use of scaffolded activities, such as inquiry graphics, to prepare students for assessment in line with the recommendations of Pegg et al. (2012) and Spagnoli et al. (2023). They recognised that consistent integration within units and across the course would enhance students' understandings of the broader purposes of employability activities, enabling them to articulate their employability through reflection, while fostering self-confidence and evolving their understandings of employability (Pegg et al., 2012; Tymon, 2013; Ingleby, 2015). Students further reinforced the significance of early introduction and consistent integration of the framework, underscoring the need to establish a

solid foundation for employability development and future careers (Sambell et al., 2021).

This alignment between academics and students suggests the value of integrating the framework from the start of the course, ensuring its continuous presence throughout students' studies, and supporting the holistic development of relational employability.

The suggestion by academics to incorporate the framework within e-portfolios, as a means for students to track their progress and reflect on their experiences throughout the degree, is noteworthy. Given that e-portfolios play a significant role in employability work in many universities (Carter, 2021), the relevance of relational employability for e-portfolios may make it appealing and transferable to institutions using this tool.

Overall, the findings relating to RQ2 support the utility of the strategies we employed to integrate relational employability into curricula, including community-based projects, collaboration and reflective practice. These strategies align with existing literature on multimodal learning, shared communities of learning, and the significance of early and consistent integration. The consistent integration of the framework throughout a course or program holds potential for fostering global citizenship, facilitating reflection and developing employability skills. By implementing the framework within e-portfolios, embedding it into assessment and introducing it early in students' degree studies, universities may enhance students' learning experiences and better prepare them for their future careers.

Research question 3: Challenges, opportunities and enablers experienced by academics

In the study, one academic highlighted the challenge of time constraints in fully grasping the framework. From this insight, it became clear that, for academics to be able to effectively integrate the framework into their practice (to support students' learning about relational employability), they first needed to fully understand all components in the triad and how each component relates to their discipline. That said, this academic, despite not having

had time for adequate preparation, could see the transformative potential of the framework for students and expressed her enthusiasm to continue integrating it into her teaching practice.

After implementing the framework, academics demonstrated deeper understandings of relational employability (than they had previously) and recognised its role in supporting strength-based teaching approaches, which may also support student wellbeing. They hypothesised that the framework could assist them with developing critical global citizenship, self-confidence, intrinsic motivation and gratitude among students. This finding is important as it suggests that relational employability may offer educators an opportunity to contribute to transformative education by promoting justice-oriented agency, ethical reasoning and social responsibility among students (Hill et al., 2018; UNESCO, 2021^a). For example, one academic noted that embedding relational employability into assessment may raise students' awareness of global citizenship (Spagnoli et al., 2023).

Academics also acknowledged the utility of relational employability in assessing critical thinking, aligning with the principles of critical pedagogy emphasised by Lambert, Parker and Neary (2007) and the need to address critical thinking in employability assessment (Spagnoli et al., 2023). These aspects, when fostered, would better equip students with the skills, perspectives and agency needed to thrive and contribute to positive change in our interconnected world.

Additionally, the study findings suggest that the framework may provide an opportunity for academics to establish connections between technological considerations and the concept of employability. The framework itself features technology among the more-than-human considerations, contributions and collaborations humans have throughout careers. This feature of the framework resonates with the work of Markauskaite et al. (2022) and Fawns (2022), who both highlight the relationship between technology and pedagogy in preparing students for future careers in technology-driven contexts. Having technology as

part of the relational employability teaching-learning framework is, therefore, a benefit, and should also enable academics to utilise pedagogical strategies, such as speculative pedagogies and AI scenarios, which may help to prepare students for future uncertainties (Carvalho et al., 2022).

In summary, the study's findings with respect to RQ3 shed light on minimal challenges and several opportunities and enablers that may support and encourage academics to continue, or begin, to learn and apply the framework in their practice. These insights also indicate that the framework may have the potential to enhance student learning, career development and their readiness for future career contexts.

Research question 4: Student engagement, experiences and outcomes

The incorporation of the relational employability framework in units of study at ECU received largely positive feedback from the student participants who appeared to value its effects on their learning/experiences. Students appreciated the opportunity to think more broadly about their employability, identify strengths and areas for improvement, and understand the wider effects of their behaviours and actions for, in and, hopefully, throughout their careers. Most students agreed on the importance of introducing future students to relational employability, emphasising its perceived significance for their education and future careers.

However, it is worth noting that some students did not agree that using images helped them to reflect on their relational employability. This difference of opinion highlights the divergence in perspectives among students regarding the effectiveness of visual aids in the reflection process. It is important to consider individual differences and preferences when implementing teaching methods and tools, as what works for some students may not work for others (Tomlinson & Jarvis, 2021). Nonetheless, challenging students at a higher order level

of thinking is vital for learning, even if it may cause temporary discomfort, such as cognitive disequilibrium (Lodge et al., 2018).

The positive attitude expressed by students in the open-ended responses further reinforces their understanding and appreciation of the value and benefits of relational employability. They acknowledged a positive impact on their general growth, including increased confidence, self-esteem and aesthetic appreciation, perhaps underscoring the potential of relational employability to improve students' learning experiences, mental wellbeing and employability development.

In the context of health science and nursing disciplines, Leadbeatter et al.'s (2023) scoping review emphasised the need for stronger connections between employability, acquiring a professional job and sustaining employment in difficult working environments. They presented an opportunity for researchers to shift their focus toward how universities can better prepare graduates for future labour market changes and turbulent conditions. In this regard, the findings from the present study signal that relational employability may be one effective strategy to help students and graduates identify and foster conditions for thriving during periods of disruption, particularly if safe spaces for disruption can be created through, for example, the use of images (as some students found that experience disruptive).

I also examined institutional data to establish a basis for ongoing evaluation of the impact of relational employability on student outcomes over time (beyond my PhD studies). This analysis revealed that the changes to unit delivery (and student experience) made in this study did not have a negative impact on the university's measures of student success. The pass rates and average grades for each unit remained largely consistent, suggesting that the incorporation of relational employability did not have a significant negative impact on students' academic performance. However, it is important to note that further monitoring and evaluation, over time, is required to confirm this finding. Continued assessment of student

outcomes, along with additional data collection and analysis, will provide a more comprehensive understanding of the longer-term effects of integrating relational employability practices on academic performance. Ongoing evaluation will be important to ensure that future implementation of relational employability does not result in undesired consequences or hinder students' academic progress in any negative way. My future research will aim to establish whether relational employability can effect graduate outcomes and have a positive influence in workplaces (by interviewing graduates, including those who were involved in this study, and their employers).

Additionally, students' evaluations of teaching in the units with relational employability showed no significant decline. This finding suggests that integrating relational employability in teaching and assessment did not adversely affect students' perception of the quality of teaching in those units. Again, continued monitoring and evaluation of these measures, as well as expansion to other units, will provide further insights into the longer-term effects of intra-curricular relational employability on student experiences.

With respect to RQ4 specifically, this study suggests that intra-curricular relational employability does not harm student success and satisfaction and may even have positive effects. Overall, the findings from this study have provided valuable insights into the potential benefits of relational employability for enhancing students' employability experiences, and academics' teaching practices, in ways that are seen as needed for the future workforce (Dickerson et al., 2023). Further exploration of the quantitative and qualitative findings, alongside contemporary research literatures, will contribute to uncover deeper insights into the implications of relational employability for students, academics, educational institutions and employers.

The limitations of this design study

This study had a narrow focus, so caution must be exercised when considering the findings and applying the recommendations to other contexts, such as schools with younger learners and universities with different population demographics. Moreover, as this study was conducted in one university setting (one ‘case’), the specific cultural and institutional context of ECU should be considered. Having conducted the study in my workplace university, ECU, and drawing on my expertise as a Senior Analyst in higher education, I possess a comprehensive understanding of the specific situations in which the framework may be beneficial not only for ECU, but for the sector. As ECU has a diverse student body with a high proportion of underrepresented groups, the framework is likely to be transferable to similar contexts, and this is particularly timely given the Australian Government’s current focus on achieving parity for equity group student populations by 2030 (see [Australian Universities Accord](#)).

Second, the sample size was small and, given the limited disciplinary scope, was restricted to two academic disciplines. This means that the generalisability of the findings and recommendations may be limited. However, as the study’s findings have shown, the framework can be understood and applied in a variety of ways, which will support its generalisability.

Third, tutors were not interviewed, their perspectives could have offered valuable insights into the effectiveness of the framework. This limitation serves as a motivation for future research to explore the perspectives of tutors and their role in implementing the framework. In addition, the departure of one academic from ECU restricted my availability to gather evidence regarding the effectiveness of the framework when used with postgraduates in the School of Nursing and Midwifery – another opportunity for future research.

Fourth, the extent to which students and academics considered and applied the different components of the relational employability framework (i.e., social, environmental and technological relational thinking), as well as their thoughts on how this could be done in the future, was not explored in this study. This will be explored in future research (e.g., to uncover how students talk about the different triadic layers, and what this means for the broadening of student understandings of employability/career concepts). One paper is already underway, which analysed how students' understood and applied the framework in an assessment.

Fifth, another limitation of this study that I want to acknowledge is related to the extent of my engagement with relational ontology and pedagogy. While my primary focus was not on this aspect, it is important to note that some readers or reviewers may expect a deeper exploration of these theoretical foundations. I should clarify that the extensive work of theorising and conceptualising relational higher education has already been undertaken and documented in the book on relational higher education. Nevertheless, there may still be questions or challenges regarding the theoretical underpinnings and their further exploration in this specific study.

Finally, I acknowledge that, due to my enthusiasm, optimism and faith in the success of this design study (due to my detailed planning and intense focus), I may have influenced the participants' perspectives and level of trust in me and, thus, unintentionally affected the study's findings. Moreover, as this is my doctoral research project and, thus, an assessment of my ability to conduct research as a student, I alone analysed and reported the findings of this study. The raw data, and my analysis of it, was not scrutinised by another researcher (as would usually be the case in any robust and sizeable research project). However, despite this and the other limitations, I worked hard to ensure methodological rigor throughout the project

and have been as transparent as I can (within the word limit) to present and discuss the methodological framework and findings as clearly as possible.

By openly and comprehensively addressing the study's procedures, techniques, outputs and findings, I aimed to enhance the credibility and trustworthiness of my research. Such an approach promotes transparency and invites further scrutiny and dialogue, which can be used to inform ongoing robust evaluation of the study's findings. Consequently, this research provides valuable first-person insights into the experiences of students and academic staff at ECU, serving as a solid foundation for future research and the broader application of the framework in diverse educational settings. Moreover, this study's contributions signal promising avenues for future research.

In Chapter 4, I acknowledged my own positionality with respect to this study (as an employee at ECU) and the potential influence this may have had on how the participants disclosed information about their experiences in the interviews. As the researcher, I believe that sharing the Sway presentation and analytical findings with academic participants was a crucial step in enhancing the reliability and trustworthiness of this study. By doing so, I was able to receive valuable feedback on the developed prototype, which I considered as data to refine and improve the framework. The feedback from the academic participants helped me to ensure that the final version of the framework was effective and feasible to implement in practice. In addition, my use of member checking, through close collaboration with the academic participants, staff presentations and publications, contributed to the credibility, trustworthiness and transparency of this study.

When I began this research, I considered different methodologies, including action research and developmental evaluation. Ultimately, I chose design research as the most suitable approach because it allowed me to collaborate with participants to develop new practices and products, which aligned with the aims of my research. In contrast, action

research focuses on improving *existing* practices and systems, and developmental evaluation emphasises evaluation and adaptation of complex interventions and programs in real-time (e.g., see Boyle & Cook, 2023), which was not feasible due to the limited time available for this study.

Reflection and next steps

To guide the dissemination of the findings from this research, I have already progressed through the Classroom and Corridors phases of Gribble and Beckmann's (2023) 4Cs strategy, and I have also started to make headway in the Campus phase. The process will continue to unfold in these phases while simultaneously moving forward. In the Classroom phase, I focused on addressing the needs of students and academics by implementing and evaluating the application of the relational employability teaching-learning framework (Cook, 2023). This phase involved working with academics to monitor the effects of introduced changes on student learning and experiences; and will continue.

Transitioning to the Corridors phase, I engaged in informal conversations, interactions and presentations with colleagues to share successful practices derived from the framework, providing them with detailed evidence and encouraging them to consider adopting the framework in their own teaching. This phase will also continue.

As the dissemination process progresses, I will increasingly emphasise the Campus phase, in which I will expand the reach of the framework within the context of ECU. This will involve leveraging institution-wide communities of practice, teaching development programs, showcases, and other mechanisms to disseminate the framework's innovative practices across various disciplines. In this phase, my aim is to foster ownership among academics and facilitate change by actively engaging them in the adoption and, where necessary, adaptation of the framework. Central to this effort is creating an environment that nurtures collaborative learning and supports educators in integrating the framework into their

teaching practice. In doing so, I intend to cultivate trust, encourage organic and open dissemination, and inspire colleagues to become innovators in how they use and adapt the framework, and their practices, to suit their, and their students', specific needs within their own contexts.

Concurrently, the process of dissemination will also advance to the Community phase, in which I will continue to participate in activities, such as conference presentations, workshops, social media engagement and scholarly publications. These endeavours will enable me to reach a broader audience beyond the confines of ECU and validate the framework's applicability through collaborations and diverse presentation avenues. By following the 4Cs strategy and traversing through the Campus and Corridors phases, I am committed to ensuring the effective dissemination of the research findings, fostering a culture of relational employability teaching-learning and research, and, ultimately, facilitating the organic and impactful spread of the framework across more areas of higher education – as I believe this work is worth doing.

Chapter 7: Conclusion

In this concluding chapter, I summarise the key contributions and impact of this design research project, drawing meaningful conclusions based on the study's findings. I highlight the implications of the study for theory, research and practice, including the potential future influence of the research for policy decision-making. Finally, I offer recommendations to build upon this study's foundation and suggest directions for future research.

This study aimed to address the need for a paradigm shift in graduate employability by developing and implementing a new relational employability teaching-learning framework (Cook, 2023) at ECU, building on the work of Lacković (2019), my own published work (Cook, 2022) and contributing to the notion of relational higher education (Lacković & Olteanu, 2024). The research objectives were:

- (1) Develop a new relational employability teaching-learning framework that includes not only individuals' employment-related skills and outcomes, but also interactions with, and contributions to, other individuals, beings and entities; thus, including humans, ecologies, materials and technologies in the concept.
- (2) In collaboration with academics at ECU, test the new framework with students in units of study over the course of one semester.
- (3) Collect and analyse data to assess the framework's practical application and value for academics and students; and establish the basis for ongoing evaluation using institutional data.
- (4) Document the use of the new relational employability teaching-learning framework at ECU to: i) emphasise its practical application and value; and ii) begin to build evidence of the impact.

These objectives were achieved.

Table 18 provides an overview of the study's impact and contributions to date, serving as a tool for ongoing monitoring and evaluation as this design research continues. I developed this table, using a logic model provided by the [Research Impact Academy](#) (RAI) during a workshop I was fortunate to attend online through my university. The RAI's model was developed in 2021 based on the Kellogg Logic Model (W. K. Kellogg Foundation, 2004), which is a program logic model designed to support program planning, implementation and the dissemination of findings. The RAI's model resonated with me because I have used logic models in evaluation work and have written about their use for evaluating work-integrated learning (Cook, 2021).

The first column of Table 18 lists the key outputs and activities of the study (i.e., what I did and delivered). The second column identifies the users (or consumers) of each output and activity (i.e., to whom I delivered). The third column details the outcomes or early impact achieved (i.e., the changes that have happened because of the uptake and adoption of the activities and outputs produced through this research). Note that the difference between an output and an outcome is the *user* (i.e., an outcome can only happen if an output is used). To elaborate, an output represents a completed action or item, whereas an outcome signifies the early effects or differences brought about by the output. The fourth column details the impact or measurable change (i.e., consequences) that occurred due to the use and adoption of the outputs and activities. The fifth column shows how I have and will continue to evidence the impact of each output and activity over time as the study progresses.

Table 18: Tracking relational employability research impact

Note: This table was adapted from a template provided by the [Research Impact Academy](#).

OUTPUTS / ACTIVITIES	USERS	OUTCOMES / EARLY IMPACT	IMPACT	EVIDENCE
New relational employability teaching-learning framework (conceptual and practical contribution)	Academics and students.	Relational employability integrated at ECU in 5 units across 2 disciplines: all undergraduate course levels within one Health Science course; and one postgraduate unit in Master of Nursing. Implementation has continued in 2023 and has expanded to more units (e.g., sonography, speech pathology). Relational employability integrated in a practical legal education module in a UK university (in 2022 and continuing).	Positive feedback received from most academics and students. Benefits articulated by staff and many students. Academics spreading the word among colleagues new to the approach. Continued use and new adoption of the framework. Future use of the approach by academics.	Testimonials. Student survey results. Interview data. Student engagement analytics. Retention rates. Success rates. Increased interest in the approach. Increased adoption over time.
Involvement and informal discussions with existing Communities of Practice (CoPs), including:	Each CoP is comprised of academics and professional staff.	Staff considered relational employability and how they might integrate the approach in their work with students.	Increased sharing and reach of relational employability across ECU. Increased potential that others will take and adapt the approach to their contexts.	Testimonials. Recorded or captured online (Teams) discussions/meetings. Increased adoption over time. Increased # staff awareness of relational employability.

OUTPUTS / ACTIVITIES	USERS	OUTCOMES / EARLY IMPACT	IMPACT	EVIDENCE
<ol style="list-style-type: none"> 1. Academic Discipline teams 2. School of Education HDR Community 3. Work-Integrated Learning Community. 				Increased # staff using relational employability.
<p>“Relational Employability Toolkit” to support effective implementation of the approach at ECU, delivered via SharePoint (practical contribution, including resources, evidence and research).</p>	Academics and professional staff involved in relational employability teaching-learning and development at ECU.	Staff explored the toolkit, and some engaged with me to learn about relational employability and how to integrate the approach in their work with students.	Relational employability understood by staff and integrated in various ways within units, and across courses, in various academic disciplines at ECU.	<p>Strong functioning CoP.</p> <p>Increased # staff using relational employability as part of their usual practice.</p> <p>Increased # units in which the approach is used.</p> <p>Increased # students experiencing relational employability.</p> <p>Positive feedback from students through student surveys, including institution’s Unit and Teaching Evaluation Instrument, through ongoing evaluation (as part of my ongoing research with academics).</p>

OUTPUTS / ACTIVITIES	USERS	OUTCOMES / EARLY IMPACT	IMPACT	EVIDENCE
				<p>Positive feedback from staff via the Feedback tab of the SharePoint site and via direct email to me.</p> <p>Adoption of relational employability across whole of institution.</p> <p>Supported by Senior Executive (emails as evidence).</p> <p>Analytics from SharePoint site – tracking # views by staff across the university.</p>
Research publications.	Academics Discipline experts Learning designers Careers counsellors HE organisations Universities	Increased (depth and breadth) of knowledge and skills with respect to relational employability. Invitations to speak at events. Requests for support to embed.	Relational employability enacted in other educational contexts both nationally and internationally.	Citations. Increased reputation as a researcher. Increased social media presence and engagement.
Presentations, podcast episode and talks, including at ECulture	Academics Discipline experts	Increased (depth and breadth) of knowledge and skills with	Relational employability enacted in other contexts both nationally and globally.	Increased social media presence and engagement.

OUTPUTS / ACTIVITIES	USERS	OUTCOMES / EARLY IMPACT	IMPACT	EVIDENCE
2022 and 2023, at ECU's Research Methods Seminar Series 2023 and at Lancaster University's Celebrating International Collaboration 2023.	Learning designers Careers counsellors HE organisations Universities	respect to relational employability.		

Contributions to knowledge

This study contributes new knowledge to the field of graduate employability through an ambition to transform the paradigm, building on relational employability (Lacković, 2019), and enable its application within curricula. It also provides a specific focus on relational employability as a contribution to the emerging relational higher education paradigm (Lacković & Olteanu, 2024) and the field of relational higher education that focuses on the negotiations of meanings through the analyses of knowledge and learning as relating to social, environmental and digital phenomena and states, which are always in flux. By integrating relational employability principles alongside and with (not in opposition to) existing career frameworks, a cohesive and unified approach can be achieved; thus, addressing identified gaps between theoretical concepts and practical implementation across fields (Healy et al., 2022; Römgens et al., 2020).

The acceptance and implementation of relational employability by participants was demonstrated, despite potential challenges associated with the traditional employability paradigm, offering new insights into the shift from a skills-focused paradigm to a relational employability framework. Furthermore, the successful implementation of the framework by ECU academics, and its positive reception by students, suggests that relational employability may alleviate the pressure to integrate employability that some academics experience at other universities too. In addition, by using inquiry graphics (Lacković, 2020), this study highlights the value of multimodal learning in contemporary higher education and society.

The findings demonstrate the feasibility and meaningfulness of incorporating relational employability into curricula, while aligning with previous recommendations (e.g., Pegg et al., 2012; Cook, 2022). Transformative effects for students were seen by using the framework in teaching-learning, particularly with respect to their learning experiences, employability development and wellbeing; thus, contributing to the existing literature on

student growth and career/employability development (Lambert, et al., 2007; Tymon, 2013; Ingleby, 2015; Bennett, 2016; Higdon, 2016; Gedye & Beaumont, 2018; Sambell et al., 2021; Spagnoli et al., 2023; Donald et al., 2023; Niska, 2023). While it is important to note that the generalisability of the findings may be limited due to the framework's application in only two disciplines at ECU, and a small sample size, this study's results offer promising preliminary evidence suggesting that the benefits and adaptability of relational employability could potentially extend beyond nursing and health sciences to other disciplines as well.

By embracing the principles of relational employability, educators can alleviate the pressure to integrate existing employability frameworks into the subjects they convene. The relational employability teaching-learning framework (Cook, 2023), used in conjunction with inquiry graphics, fosters multimodal learning experiences within relational higher education and society (Lacković, 2020; Lacković & Olteanu, 2024) that may help promote justice-oriented agency, ethical reasoning, social responsibility, critical thinking, and creativity awareness and practice, among students (Hill et al., 2018; UNESCO, 2021^a; Karunaratne & Calma, 2023; Spagnoli et al., 2023). Furthermore, the framework addresses the intersection of technology, ecology and employability, effectively preparing students for future career contexts driven by technological advancements, and constantly evolving jobs and workplaces (Carvalho et al., 2022; Dickerson et al., 2023; Leadbeatter et al., 2023; Markauskaite et al., 2022; Fawns, 2022).

This thesis argues for a courageous and transformative approach to the ways that universities, academics and students perceive and engage with 'graduate employability'. It advocates for empowering academics and involving students in reshaping the traditional employability paradigm. This shift involves moving beyond a focus solely on individual skills and organisational outcomes, toward also considering broader aspects and contributions throughout careers. The thesis signals that there may be potential for proactive (bottom-up)

measures and actions to drive policy change with respect to employability. It also emphasises the importance of holistic considerations and contributions with respect to careers education, particularly to promote human flourishing and positive effects in/for our supercomplex world.

This doctoral research achieves two key objectives. Firstly, this thesis addresses crucial concerns regarding the adverse impact of government expectations aimed at improving employment outcomes on the purposes, values and practices of universities. Prominent scholars, such as Molesworth et al. (2009), Sloane and Mavromaras (2020), and Wheelahan et al. (2022), have shed light on these concerns. Furthermore, the influence of these government expectations extends to teaching-learning processes and curricula, as discussed by Boden and Nedeva (2010) and Cook (2022), while also perpetuating existing inequalities, as noted by Hooley et al. (2019) and Hooley (2020).

Secondly, this thesis proposes a refined definition of relational employability, advocating for intra-curricular relational employability. The relational employability framework acknowledges the interconnectedness of core career development concepts, employability skills, humanistic interactions and considerations, *and* interactions and considerations involving more-than-human entities throughout careers. Embracing a relational lens, as advocated in this thesis, could enable academics and students to acknowledge the interconnectedness and interdependence of humanity with the world, while placing a high priority on personal and collective wellbeing.

Methodological contributions

This study advances employability and higher education research through the application of design research, an emerging approach in both fields. Furthermore, this study contributes an innovative conceptual framework that may be used to underpin future research and practice related to a relational employability paradigm in higher education.

Design research facilitated the design, implementation, exploration and evaluation of the relational employability framework, while inquiry graphics offered a novel intra-curricular approach in employability practice and research. These innovative methods fostered collaboration among participants, leading to the development of new practices and outputs that aligned with the research objectives.

Practical applications and implications for future educational practice

This study supports the adoption of a relational perspective in higher education and recommends the integration of the relational employability framework into university curricula, which has practical implications for educational practice. This study's findings suggest that users of the framework can view and use it differently, depending on their needs and perspective, which also aligns with the pragmatist philosophy of the study – a “recognition of the interconnectedness between experience, knowing and acting” (Kelly & Cordeiro, 2000). Within pragmatism, the whole is only understood when all the parts (or perspectives) are individually and collectively understood. The same can be said for the relational employability framework; each component part needs to be understood and developed as each is equally important to the whole and each part influences the other component parts. Individuals, alone, can reflect on and self-evaluate how they interact with the components of the framework, *and* the framework can be used when collaborating with others. Therefore, there are multiple ways it can be used and applied; and it does not rely upon being collaborative even though it is about the interconnectedness of life and work.

For students, the framework serves as a tool to guide them toward developing skills, planning their career, achieving meaningful work (blue ring of the framework), and reflecting on how they interact with, rely upon and contribute to other people at home, in their social lives and at work (purple ring) and, in addition, reflecting on how they interact with, rely upon and contribute to more-than-human entities, such as materials, technologies and

environments (green ring) in life and work. Relational employability is also an approach that helps students to identify their strengths and areas for improvement so they can determine how to harness and develop these throughout their career. In doing so, they may be more likely to experience human flourishing. Thus, the framework helps to prioritise interconnectedness and wellbeing. By using it, universities could shape graduates who are better prepared to navigate the complexities of the modern world.

For academics, the framework is a tool to guide their teaching practice to ensure it is meaningful and relevant for students' disciplinary learning, as well as their employability and career development. Academics in any discipline should be able to use the framework in their teaching because it is relational. That is, all components are necessary for careers in any field. For example, engineers need skills (blue ring of the framework), they work in teams and build on the work of others (purple ring), and they use and often also produce materials and/or technologies in their work. Engineers also need to be aware of the potential impacts of their practices and outputs on societies and environments – holistic and systems thinking – and they rely upon materials, technologies and environments to carry out their work.

In addition to using the framework for teaching, academics (and any professional for that matter) can use it to support their own learning and development; to reflect on, and self-evaluate, their relational employability, identifies, career motivations and goals – this is an avenue for future research.

To summarise this section, the framework is a practical tool that educators can use in existing curricula to enhance their teaching practice. It can promote relational awareness, deeper reflection and higher order thinking about employability and career futures among students. This study has shown that an intra-curricular relational employability approach has the potential to enhance educational experiences by establishing stronger connections between career and employability development, disciplinary learning and workplace

challenges. By infusing the framework across whole degrees, educators may help to empower students to develop essential critical and creative skills, engage in reflective practices and become relationally aware global citizens who will be better prepared for their future career in a changing world.

Policy implications

The findings of this research have important policy implications for higher education institutions. Firstly, universities are encouraged to adopt relational employability principles in their strategic planning to go beyond narrow employment outcomes and address the broader dimensions of employability, promoting social justice and societal contributions. Secondly, aligning operational relational employability actions with the strategic objective of enhancing relational employability would ensure that universities not only prepare students for the workforce but also equip them to make meaningful contributions to society. Lastly, consistent integration of the framework throughout academic programs may be crucial for enhancing students' understanding of employability and fostering their self-confidence. Incorporating relational employability principles within e-portfolios may help to create a cohesive learning experience for students.

Recommendations

Based on the findings of this research, the following 16 recommendations are proposed for educational practice, categorised according to Gribble and Beckmann's (2023) 4Cs strategy:

Classroom

1. Integrate relational employability into teaching practices (in ways that are possible in a specific context) to maximise its transformative impact for students through teacher continuing professional development programs and training at university level.

2. Explicitly articulate to students the broader purpose of relational employability, which is to benefit not only themselves but also others, and contribute to positive and meaningful change in communities, societies and ecologies. By emphasising this broader purpose, students can develop a deeper understanding of the effects of their attitudes, strengths, values, behaviours, actions, employability skills and competencies.
3. Embed relational employability into assessment to raise students' awareness of global citizenship and encourage critical and creative thinking skills.
4. Implement scaffolded activities, such as inquiry graphics, to prepare students for assessment and enhance their understanding of relational employability in creative and critical ways.
5. Recognise individual differences and preferences when implementing the relational employability framework, acknowledging that not all teaching-learning approaches work for all students.
6. Self-evaluate the integration of relational employability in teaching practice to continuously improve.

Corridors

1. Integrate relational employability into curricula, starting from the first year and continuing throughout the entire degree program.
2. Promote the adoption and integration of relational employability principles and practices within universities, with a focus on intra-curricular approaches.
3. Embed the framework of relational employability within e-portfolios, enabling students to track their progress and reflect on their experiences across the degree.

4. Conduct collaborative research to explore the role of relational employability in developing critical global citizenship, creativity, self-confidence, intrinsic motivation and gratitude among students across their degree studies.
5. Peer-review and evaluate relational employability practices at the course, subject, unit and/or module level, as appropriate.
6. Use relational employability to foster interdisciplinary collaboration, establishing a unified overview of conceptual frameworks and definitions with respect to relational employability.

Campus

1. Incorporate relational employability into both strategic and operational planning to create a comprehensive framework that considers broader societal, technological and ecological dimensions and promotes a deeper understanding of employability.
2. Emphasise the significance of relational employability to future students, integrating it into their education and future career preparation.
3. Continuously monitor and evaluate the impact of integrating relational employability practices on student outcomes, academic performance and perceptions of teaching quality.

Community

1. When applying the findings and recommendations of this study to other contexts, such as schools with younger learners, workplaces and universities with different population demographics, please be aware that the effectiveness and applicability of relational employability may vary and, as such, may need to be adjusted.

Future research directions

Future research in the field of relational employability should focus on the following key areas to advance our understanding and application of this emerging concept in higher education. It would be valuable to assess the applicability and impact of relational employability in other higher education settings and to conduct comparative studies across different disciplines, institutions and countries. Such research could provide insights into the wider effectiveness of the framework for teaching-learning and help inform its use by academics in different disciplines, settings and locations. This research could also help to cultivate a culture of evaluation in higher education (using Table 18 as a guide) and contribute to the scholarship of teaching and learning.

Since this study was conducted in medical, nursing and health science disciplines, future research should explore how the relational employability framework works for academics and students in different disciplines. The framework has exhibited efficacy in a practical legal education module within the UK, where the involved academic expressed a desire to continue its use. Nevertheless, to comprehensively gauge its effectiveness, particularly in disciplines characterised by less vocational specificity or a more generalised orientation, further empirical investigation is warranted. Although initial indications suggest its adaptability across diverse disciplines, a systematic inquiry into its performance within varying academic contexts will yield comprehensive insights. It is noteworthy that the framework's overarching focus transcends the narrow purview of skills and job outcomes, emphasising holistic learning, knowledge enrichment, and meaningful interactions and contributions within both the realms of life and work. This expansive orientation posits the framework as a versatile tool with potentially limitless applications.

Similarly, it would also help to explore how the nature of a specific discipline, and any type of teaching culture (e.g., more, or less, collaborative), might mediate how relational

employability works, is received and applied. Notably, the framework is not contingent on collaboration; individuals can use it for self-reflection as effectively as in collaborative settings. Thus, I do not foresee a specific teaching culture significantly impacting its use or effectiveness. However, as we contemplate introducing the relational employability framework in certain academic disciplines, such as mathematics, a pertinent question arises. Will academics and students encounter challenges if they are less familiar or comfortable with this mode of thinking or reflective practice? It will be important to investigate potential hurdles and opportunities when implementing the framework in various academic contexts.

Examining the potential of relational employability to cultivate students' essential employability skills (Dickerson et al., 2023), foster their exploration of existential questions and facilitate their holistic development represent additional compelling directions for future inquiry. Understanding the long-term effects and enduring value of relational employability beyond university studies, including its potential adaptation for schools and workplaces, could offer valuable insights into its potential benefits and contribute to lifelong learning and career success. There is also potential value in examining the application of relational employability within workplaces, involving employers, staff and human resources departments.

Investigating the potential role of relational employability in addressing equity, career ambiguity, and human flourishing within higher education would further our understanding of its potential impact and may help create more inclusive and supportive learning environments. Further research is also needed to substantiate the potential benefits of relational employability for students studying any discipline(s), and to fully understand the nuanced challenges and opportunities faced by academics using this framework. Examining the incorporation of relational employability into teaching practices, its implications for students, academics and educational institutions, and its relationship with technology and

teaching-learning, holds promise for enhancing its effectiveness and optimising its use.

Narrative approaches, such as exploring the transformative potential of self-narratives, and investigating the experiences of practicing professionals through narrative analysis, also present exciting opportunities for enhancing relational employability, and understanding and sharing individual perspectives.

Exploring these research directions would expand our understanding of relational employability, establishing a robust evidence base for effective strategies. This, in turn, could contribute to cultivating inclusive and supportive educational and work environments, aligning with broader objectives related to relational employability and relationality.

Final remarks

This thesis challenges the current dominant approach to employability in universities. The conventional understanding of employability poses difficulties for integrating it into curricula, creating both practical and moral challenges for academics, and limitations for students. Furthermore, the current focus on skills alone overlooks the broader aspects of employment and careers. To truly thrive in future careers, graduates must engage with and critically consider the thriving and wellbeing of others, including more-than-humans, going beyond a narrow skills-focused perspective to, hopefully, strive to make the world a better place.

Through a design research methodological framework, I leveraged my expertise in educational design and career development learning to develop and test a new relational employability framework (Cook, 2023). The engagement of experts and academics from various disciplines ensured its applicability in diverse settings. By adopting a relational lens, I contend that universities can foster a more inclusive and equitable educational experience, while equipping students to navigate the complexities of the world. This critical understanding within the higher education community opens the path for positive change,

prioritising interconnectedness and the wellbeing of others alongside our own species. The true test for relational employability lies in its widespread adoption by academics in the future, without my direct support. Embracing a relational approach to employability aligns with the broader movement toward relational ontology and teaching-learning in education. Through this shift, universities can shape a more connected and compassionate society, preparing individuals to tackle ‘wicked problems’ through their curriculum, enhancing their reputation, and enabling students to thrive in complex environments.

The contributions of this research have both immediate and long-term impacts. In the short term, the study offers insights and recommendations for universities to embrace relational employability principles, promote inclusive curricula, and prioritise interconnectedness and wellbeing. In the long term, this study highlights the possible transformative effects of the relational employability framework on student learning experiences, employability and development.

This research calls for a paradigm shift in the approach to graduate employability, urging universities to embrace a broader perspective and adopt a relational lens. It is anticipated that the insights afforded through this study will inspire further research, practice and collaboration, leading to broader application of the relational employability framework in diverse settings. Ultimately, the envisioned effects include the cultivation of graduates who are better prepared to navigate the complexities of the modern world, make positive contributions throughout their careers, and shape more inclusive, caring and compassionate futures.

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Appendices

Appendix A: Consent form and participant information sheets

Department of Educational Research
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Consent Form

Title of Project: Developing and evaluating a new relational employability tool for use by teachers at ECU

Name of Researcher: Elizabeth Janice Cook

		Please Tick
1.	I have read and understand the information sheet (dated 17 June) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2.	I understand that my participation is voluntary. If for any reason I wish to withdraw during the period of this study, I am free to do so without providing any reason. I understand that my contributions will be part of the data collected for this study and my anonymity will be ensured. I give consent for all my contributions to be included and/or quoted in this study.	
3.	I consent to the interview/focus group being audio recorded.	
4.	I understand that the information I provide will be used for a PhD research project and the combined results of the project may be published. I understand that I have the right to review and comment on the information I have provided.	
5.	I agree to take part in this research.	
6.	I will not use the researcher's ideas without acknowledgement.	
<p>Name of Participant:</p> <p>Signature</p> <p>Date</p>		



Participant Information Sheet

Title of Project: Developing and evaluating a new relational employability tool for use by teachers at ECU

Research Student: Elizabeth Cook, Senior Analyst Strategy and Planning, ECU

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17 June 2022

Dear colleague,

I would like to invite you to take part in my PhD research project. I am studying with the *Higher Education Research and Evaluation Centre* in the Department of Educational Research at Lancaster University.

Before you decide if you wish to take part, you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk with others and/or ask me for clarification or further information if you wish. It is important to take time to decide whether or not you wish to take part.

Purpose of the study

This research is for my PhD in *Higher Education Research, Evaluation and Enhancement* (HEREE) programme with the Department of Educational Research at Lancaster University. I would like to understand your opinion on a new relational employability tool (pedagogy) for use with work-integrated learning (WIL) or any other unit, which I have developed for further development.

What participation involves and how to withdraw if you no longer wish to participate

You have been invited to participate in this research because you are a careers and employability expert. You received this invitation directly from the researcher.

Do I have to take part?

No, your participation is entirely voluntary, and you are under no obligation to take part. If you provide consent and then later decide to withdraw, you can, at any time (prior to the publication of findings), without penalty. If this occurs, all your data (e.g., audio recordings, researcher notes) will be destroyed and references to you will be removed from the research.

What would taking part involve for me?

Taking part involves a 60-minute interview/focus group conducted via Microsoft Teams at a mutually agreed time. Prior to your interview/focus group, you will be emailed a link to a MS Sway that will describe the project and employability tool that I have developed for you to review. The MS Teams link will be sent via your ECU email. The audio will be recorded and used to construct a transcript. I will share the transcript with you to give you the opportunity to review it and provide feedback.

What are the benefits or risks of participation?

You may not derive direct benefit from participating in this research. However, you may find reflecting on your practice and/or learning about the tool useful for professional development and/or beneficial to your work. Research findings will be published as a contribution to higher education. There are no anticipated risks beyond normal day-to-day living associated with your participation in this research. The conversations we have will not cover any distressing content.

What do I do next?

If you agree to participate, please complete the enclosed Consent Form or if you have any questions about this research, contact me via email (e.cook@ecu.edu.au). On receiving your consent, I will respond by email (phone if requested) to arrange the interview.

Protecting your data and identity**What will happen to the data?**

'Data' includes the researcher's notes, audio recordings and any email exchanges we may have. The audio data does not need to be kept for the long term and, therefore, will be erased and destroyed once transcribed and checked. Before it is destroyed audio data will be securely stored on encrypted personal devices. All remaining data will be securely stored on encrypted devices for ten years after successful completion of the PhD *Viva* as per Lancaster University requirements and, after that, any personal data will be destroyed.

You can request to view my notes or listen to the audio at the end of the interview/focus group. Any parts you are unhappy with can be disregarded from the data. Aggregated data will be used in reporting this research (in the thesis and any papers or conference presentations). Please note that if your data is used, it will not identify you in any way, unless you indicate your express permission to do so.

You have the right to request your data to be destroyed up to 3 weeks after your interview/focus group and have full protection under the UK Data Protection Act. Data collection will be completed before the end of 2022 and the research project will cease at the end of 2023. Throughout that time, data will only be accessed by myself and my supervisor (Dr Natasa Lackovic).

This research may be used for journal articles and conference presentations, and will be used in my thesis.

How will my identity be protected?

A pseudonym will be given to protect your identity in all reports and presentations related to this research and any identifying information about you will be removed. All pseudonyms will be securely stored and only known to myself.

If you would like to receive any research outputs, please let me know via email. Any emails sent to me in relation to this research will be securely stored on encrypted personal devices in a separate location to your audio data.

Who to contact for further information or with any concerns

Please contact myself or, if you have questions or concerns that you do not wish to discuss with me, please contact: Professor Paul Ashwin – Head of Department P.Ashwin@Lancaster.ac.uk

Thank you for reading this information sheet and considering participation in this research.

Yours sincerely,

Elizabeth Cook

Participant Information Sheet – for students

Title of Project: A new relational employability teaching tool for Edith Cowan University

Research Student: Elizabeth Cook, Senior Analyst Strategy and Planning, ECU

Full Address: Building 1.385B, Edith Cowan University, 270 Joondalup Drive, Joondalup, WA, 6028.

Tel: 08 6304 2630

e.cook@ecu.edu.au

Supervisor: Dr Natasa Lackovic

Educational Research Department, County South, Lancaster University, LA1 4YD, UK

Tel: +44 (0)1524 59 2879 Email: n.lackovic@lancaster.ac.uk

12 October 2022

Dear student,

This information sheet provides the details of my PhD research project so you can decide whether you want to opt out of having your de-identified data included in my analysis and publications. **After reading the below information, if you wish to opt out, please email me via e.cook@ecu.edu.au.** This information sheet also includes an invitation to participate in an interview if you wish.

Please take time to read the following information carefully. Talk with others and/or ask me for clarification or further information if needed.

Purpose of the study

This research is for my PhD in *Higher Education Research, Evaluation and Enhancement* (HEREE) programme with the Department of Educational Research at Lancaster University. I would like to use your anonymised coursework data (discussion forum posts and research reflections) to inform my further development of the Relational Employability Framework, including how it is taught and used to support and enhance students' employability learning and development.

What participation involves and how to withdraw if you no longer wish to participate

Participation requires no additional work from you. However, if you wish for your deidentified data to be excluded from my research, please opt out by sending me (Elizabeth) an email: e.cook@ecu.edu.au.

Alternatively, you can opt in to participate in a 30-minute conversational interview with me, to provide feedback on your experiences with the framework, please email me (e.cook@ecu.edu.au) and I will provide a Consent form to sign and specific information about the interview process.

Do I have to take part?

No, your participation is entirely voluntary, and you are under no obligation to take part. If you opt out, all your data (e.g., Canvas discussion posts, researcher notes, assessment tasks and learning activity artefacts) will be excluded from the research.

What are the benefits or risks of participation?

You may not derive direct benefit from participating in this research. However, you may find reflecting on your relational employability and related concepts useful for professional development and/or beneficial to your employability. Research findings will be published as a contribution to the improvement of university

teaching and student learning with respect to employability. There are no anticipated risks beyond normal day-to-day living, and we will not cover any distressing content.

What do I do next?

If you wish to opt out, please contact me via email (e.cook@ecu.edu.au). If you wish to participate in an interview, please email me and I will respond by email with further information and consent form.

Protecting your data and identity**What will happen to the data?**

'Data' includes the researcher's notes, audio recordings, artefacts and any email exchanges we may have. Any audio data does not need to be kept for the long term and, therefore, will be erased and destroyed once transcribed and checked. Before it is destroyed audio data will be securely stored on encrypted personal devices. All remaining data will be securely stored on encrypted devices for ten years after successful completion of the PhD *Viva* as per Lancaster University requirements and, after that, the data will be destroyed.

Aggregated data will be used in reporting this research (in the thesis and any papers or conference presentations). Please note: if your data is used, it will not identify you in any way.

This research may be used for journal articles and conference presentations, and will be used in my thesis.

How will my identity be protected?

A pseudonym will be given to protect your identity in all reports and presentations related to this research and any identifying information about you will be removed. All pseudonyms will be securely stored and only known to myself.

If you would like to receive any research outputs, please let me know via email. Any emails sent to me in relation to this research will be securely stored on encrypted personal devices in a separate location to your audio data.

Who to contact for further information or with any concerns

Please contact myself or, if you have questions or concerns that you do not wish to discuss with me, please contact: Professor Paul Ashwin – Head of Department P.Ashwin@Lancaster.ac.uk

Thank you for reading this information sheet and considering participation in this research.

Yours sincerely,

Elizabeth Cook

Appendix B: Interview scripts

INTERVIEW SCRIPT – ACADEMICS

Thank you for participating in my PhD research project. All your data will be de-identified and securely stored, and you may withdraw at any time. If you have no questions, I will begin recording.

START RECORDING – TEAMS

Did you have time to view the Sway?

Q1. How is employability approached in your School/discipline and how have you been teaching it?

Q2. Is there an underlying theory or paradigm to your current employability approach?

Q3. Is the current employability approach working for you? Why or why not?

SHARE SCREEN TO SHOW Sway – In the following Qs, when I say “tool” I mean the entire approach shown in the Sway, i.e., pedagogy underpinned by relational model.

SHOW MODEL

Q4. What is relational graduate employability to you?

Q5. Are there any employability tools that you are using at the moment?

Q6. What do you think you need to improve your teaching / students’ learning for employability in general and with WIL?

Q7. What do you think about the employability tool, and could it meet your needs?

Q8. What do you see as its advantages and challenges? How could these challenges be overcome?

Q9. Can you think of a module or activity that could be enhanced by this tool?

SHOW PEDAGOGY VIDEO

Q10. What kinds of media and technologies do you use in your teaching in general? Do you use similar tools when teaching for employability with WIL?

Q11. Do you use visual media in your teaching and how?

Q12. What do you think about the visual and multimodal teaching approach described in this video?

Q13. How do you understand this teaching approach as linking with the relational employability model?

Q14. Would you use this teaching approach in your practice? How? Why or why not.

SHOW TOP OF SWAY

Q15. What improvements do you think are needed to the employability tool?

[Stop recording] Thank participant.

INTERVIEW SCRIPT – EXPERTS

Thank you for participating in my PhD research project. All your data will be de-identified and securely stored, and you may withdraw at any time. If you have no questions, I will begin recording.

START RECORDING – TEAMS

Did you have time to view the Sway?

Q1. What is your current role at your university?

Q2. What is your background in employability/WIL/teaching?

Q3. How is employability approached at your university?

Q4. Is there an underlying theory or paradigm to your university's current employability approach?

Q5. Would you say the current employability approach across HE is working? Why or why not?

SHARE SCREEN TO SHOW Sway – In the following Qs, when I say “tool” I mean the entire approach shown in the Sway, i.e., pedagogy underpinned by relational model.

SHOW MODEL

Q6. How would you describe relational graduate employability?

Q7. What does the paradigm mean to you, and do you believe a shift is needed?

Q8. What do you think is needed to improve teaching-learning for employability in general and with WIL?

Q9. What do you think about the employability tool?

Q10. What do you see as its advantages and challenges? How could these challenges be overcome?

SHOW PEDAGOGY VIDEO

Q11. What do you think about the visual and multimodal teaching approach described in this video?

Q12. What do you think about using visual media in teaching for employability?

Q13. Is visual media used in teaching for employability at your university? How/why/why not?

Q14. How do you understand this teaching approach as linking with the relational employability model?

SHOW TOP OF SWAY

Q15. What improvements do you think are needed to the employability tool/this Sway?

Q16. What steps should I take to enhance the take up of the paradigm and tool by teachers and universities?

[Stop recording] Thank participant.

INTERVIEW / FOCUS GROUP SCRIPT – STUDENTS

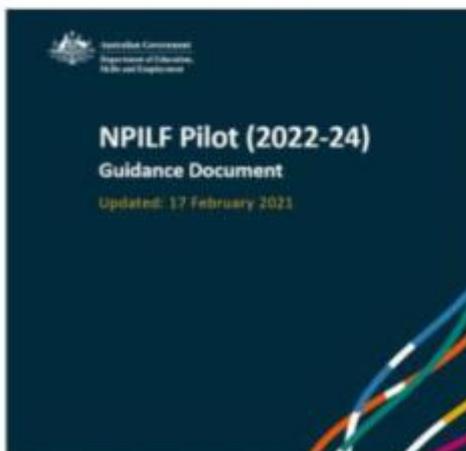
1. What does relational employability mean to you?
2. What did you appreciate/value about relational employability?
3. Have you reflected on your identity and relational employability outside of class?
4. In the survey, you agreed that future students should learn about relational employability. Why do you think is it important?
5. How does relational employability help you to identify strengths and areas for improvement?
6. How has learning about relational employability changed your ideas, thoughts or actions?
7. Do you have any feedback or ideas to improve assessment of relational employability in the unit?
8. Do you think using images or visual or multimodal media would enhance your learning about relational employability?
9. How did you engage in the relational employability discussion forum? How does that engagement help your learning?
10. What ideas or suggestions do you have to enhance the relational employability approach?
11. How would that benefit future students?



I then became an **Educational Designer** at the University of Southern Queensland, assisting academics with using technologies, designing learning activities, assessment tasks and rubrics, providing feedback and instructional strategies, reviewing units and promoting open educational practice.

I continued building professional relationships with the [Australian Collaborative Education Network](#) and [National Association of Graduate Career Advisory Services](#) (NAGCAS).

At Edith Cowan University, I am a **Senior Analyst, Strategy and Planning** in the Strategic and Governance Services Centre, and recently prepared ECU's responses to the [Job-ready Graduates Higher Education Reform Package](#) and [National Priorities and Industry Linkage Fund](#) (NPILF) Pilot. NPILF is focused on improving graduate employment outcomes, and increasing industry engagement and WIL. Click through the stack below to learn more about the NPILF and in respect to ECU's new Strategic Plan 2022-2026.



<https://www.dese.gov.au/job-ready/npilf>

- Part of the Job-ready Graduates package of higher education reforms.
- Allocates grants to universities to help engage industry to produce job-ready graduates.
- In 2021, ECU developed an NPILF Pilot Plan – approved by DESE in January 2022.
- 2022-2024 is the Pilot Plan period.

NPILF focuses on 3 priorities



increase the number of internships, practicums and other innovative approaches to **work integrated learning** across all disciplines.



increase the number of **STEM-skilled** graduates and improve their employment outcomes.



develop partnerships and collaborations **with industry**.

ECU's Strategic Plan 2022-2026 and the NPILF



- Vision: "to lead the sector in educational experience, research with impact, and in positive contributions to industry and communities."
- Goal 1: Priority 3 – Graduates empowered to succeed.
- Goal 2: Priority 8 – Highly valued higher degree by research graduates.

What will success look like?

- "Employment rates for ECU graduates will be equal to, or better than, those of other universities in Western Australia."
- "Higher degree by research students will have more opportunities for, and experiences of, industry engagement during their studies."
- 4 Supporting Plans* have [Objectives and Indicators](#) that link to the above Goals (and our NPILF Plan) providing structure to support ECU employability work.

Since October 2019, I have been a PhD student with Lancaster University. I have published two journal articles:

- Cook, E. J. (2021). **Evaluation of work-integrated learning**: A realist synthesis and toolkit to enhance university evaluative practices. *International Journal of Work-Integrated Learning*, 22(2), 213-239. <https://ro.ecu.edu.au/ecuworkspost2013/10403>
- Cook, E. J., Crane, L., Kinash, S., Bannatyne, A., Crawford, J., Hamlin, G., ... Richardson, S. (2021). **Australian postgraduate student experiences and anticipated employability**: A national study from the students' perspective. *Journal of Teaching and Learning for*

Graduate Employability, 12(2), 148-168.

<https://doi.org/10.21153/jtlge2021vol12no2art1030>

This project intentionally combines these interests and experiences in teaching and learning, policy and research.

Abstract from my thesis proposal

Many governments expect universities to improve graduate employment outcomes through increased industry and work-related engagement. This is driving university strategy towards employability activities, including increased work-integrated learning (WIL). The process is largely framed in neoliberal perspectives and human capital approaches with policy demands on the majority of universities to link institutional reputation to graduate employment. With limited careers support and training, teachers are increasingly expected to integrate career development and employability in university curricula, which is not easy and can fuel tensions related to university employability strategy. Debates are ongoing about whether employability is part of the curriculum, why and how. If WIL is to be utilised, as now required in all Australian universities, teachers need a pedagogical solution that can enhance teaching-learning practice with positive implications for employability. This doctoral research project will develop a new relational career development pedagogy for university teachers to use with WIL in support of a relational employability paradigm shift. The pedagogy will be dialogic, multimodal and inquiry-based to engage learners in using visual and multimodal media (in conjunction with talk and text) to explore intersections between disciplinary content, employment and workforce themes and multifaceted experiences. It will be developed through three mixed methods phases: (1) review the literature and develop the prototype (complete); (2) interview 14-16 teachers (across academic disciplines) from a public Western Australian university for feedback on the prototype and perceptions on the paradigm to analyse thematically (current phase); and (3) use the findings to refine the approach before surveying staff from a targeted group of Australian universities (17 ACEN member institutions) for feedback on the final output (future phase). A relational career development pedagogy will be offered to teachers of WIL for empowering learners' future employment as responsible citizens and positive change agents in a world of social, technological and ecological crises.

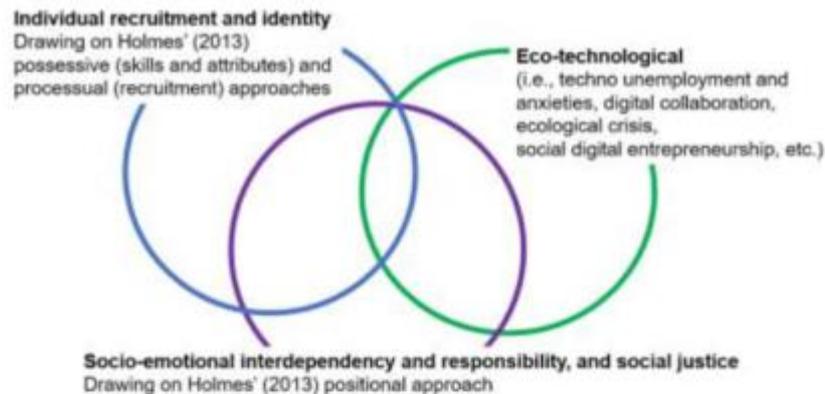
A relational graduate employability paradigm

In a recent narrative review of graduate employability models, their paradigms and their relationships to teaching and curricula (Cook, 2022), I categorised Lacković's (2019) model as relational, describing how it differs from most other graduate employability models in the higher education literature. Lacković proposed an extension and reconfiguration of the dominant graduate employability paradigm (of enhancing graduates' skills, competences and attributes) to include relational aspects of careers and employment (including considerations beyond selves) in the thoughts, plans and actions of learners, teachers and universities.

In addition to describing the conceptual basis of her paradigm, Lacković provides pedagogical descriptions that may help teachers to use the paradigm in their teaching practices, with learners. She emphasises that the paradigm is intentionally designed for teachers' who practice dialogic pedagogies (staple for good teaching practice) so that it can be integrated within existing curricula in any discipline. Essentially, teachers would develop their existing dialogic activities to integrate disciplinary content with the relational model to challenge learners to share their perspectives,

experiences and reflexive contemplations of content and discipline in respect to each meta-layer of the graduate employability paradigm.

Relational graduate employability



1 - My interpretation of Lacković's graduate employability model.

Extract from my paper, describing the layers of Lacković's model:

The **relational recruitability** layer acknowledges the *possessive* and *processual* aspects of graduate employability (Holmes, 2013), with possessive referring to the individual goal of amassing skills and attributes, and increasing self-awareness and professional identity, and processual referring to universities' recruitment and transitions work in support of employment outcomes and the process of employability development in individuals. This layer is individualistic, and outcomes focused, but not in a negative sense. As Lacković emphasises, this is a necessary component. Workforce, labour market and economy (context) could be considered to be part of this layer. For those who assimilate with Tomlinson's (2017) Graduate Capitals model, the human and identity capitals could be considered here too.

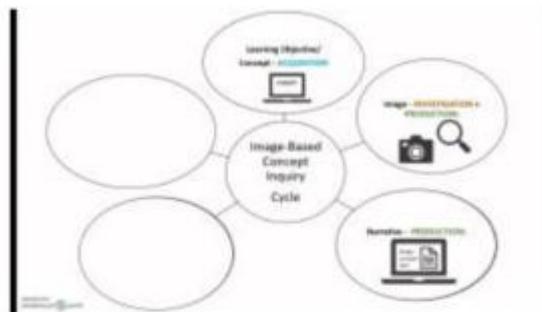
The **socioemotional relationality** layer draws on Holmes' (2013) *positional* approach to recognise the importance of social and emotional interdependencies in developing employable graduates and that the need to consider equality and justice in respect to employability, employment and workplace dynamics. Lacković argues that the impacts of social and emotional aspects (in society, life and work) should be acknowledged in the employability work of universities, including teaching. Turning to Tomlinson's (2017) model, the cultural, psychological and social capitals could be considered as relevant to this layer.

Finally, the **eco-technological relationality** layer brings in wider ideas than have been traditionally included in published conceptual graduate employability models. There are two parts to this layer, which Lacković says are vital to sustaining life and work, now and into the future. The first part incorporates ecological issues and concerns (e.g., the climate crisis), which must be addressed by individuals and workplaces across the globe. Employers will increasingly expect graduates to create and innovate, and respond appropriately, in this regard. Moreover, students are increasingly advocating for greater attention to matters of sustainability in higher education.

The second part incorporates technological aspects relating to graduate employability and employment, including, for example, techno-materials, ways of working and living with technologies, and associated issues and anxieties. Also included are topics such as technological advancement and its effects, unemployment due to lack of technical skill, digital collaboration (which requires digital

literacy) and social digital entrepreneurship (i.e., using technology to build networks and be an entrepreneur). Technological relationality could also include matters such as appropriate use of technology, workplace policy arrangements and rights to do with technology at work, and health and safety concerns (e.g., digital fatigue and ergonomic workspaces). Personally, I think human reliance of material objects could be considered as part of this component too.

Prototype pedagogy



2 - Nataša Lacković talks through an image-based concept inquiry cycle that can help embed visual media into online learning practices.

Underlying pedagogical theory

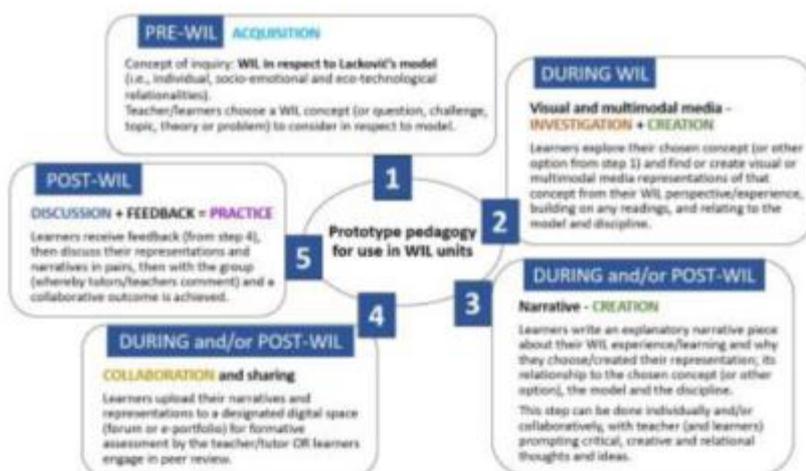
This video (8:33) describes image-based concept inquiry (IBCI; Lacković, 2020); pedagogy that draws on the work of Diana Laurillard (2012), and Young and Perovic (2016). When I learned about the IBCI cycle in my PhD coursework, I saw potential for its use by teachers with WIL; as a pedagogy for inquiry about learners' WIL experiences, the disciplinary content and employability conceptualised as relational (Lacković, 2019).

Applying IBCI in a WIL unit using inquiry graphics

Learners could share, show and discuss their WIL experiences and their perspectives careers about employability in our supercomplex world using inquiry graphics (Lacković, 2020; Lacković & Olteanu, 2020; i.e., visual multimodal media used in inquiry-based learning and teaching). I imagine the pedagogy could be used:

- in units across disciplines (i.e., teachers of units in two or more disciplines teaming up so learners hear about their different WIL experiences and perspectives on employability/careers).
- in the WIL same unit with multiple workplace types experienced (i.e., learners sharing experiences of different jobs in that discipline).
- in units across course levels (i.e., learners in any combination of first, second, third or four year of study, sharing experiences and perspectives).

Used in such ways, the pedagogy could enable learners (and teachers) to gain many insights of benefit to their lives, work and employability.



Incorporating career development learning

The prototype pedagogy includes career development actions that learners can do before, during and after their WIL experiences. Learners are expected to access the university's online career development resources (e.g., career action plans) to support their career development. Teachers should be familiar with these resources but are not expected to teach career development. Rather they should reflect on their own career experiences and are encouraged to share these with learners.

The career development actions (articulated in the pedagogy table below) draw from Watts' (2006) DOTS model: Decisions, Opportunities, Transitions and Self.

Applying the pedagogy

Teachers (with unit coordinators) can use the summary table below as a guide to support the integration of this pedagogy in WIL units and adapt it for use by learners (e.g., as unit information, a checklist and rubric).

	Before WIL	During WIL	After WIL
WIL stage	ACQUISITION	INVESTIGATION and CREATION using visual and multimodal media CREATION of narrative (text and/or talk) COLLABORATION and sharing	DISCUSSION and feedback (PRACTICE)
Learning and teaching focus	Lackovic's model and preparation for WIL experiences	WIL experiences and how WIL experiences can be explored using Lackovic's model?	Shared inquiry, critique and reflection on WIL experiences using Lackovic's model, and in respect to discipline, employability, workforce and careers.
Career development actions (Decisions, Opportunities, Transitions and Self)	Making decisions and developing a career action plan in preparation for WIL. Exploring career opportunities. Enquiring about transitions into WIL after WIL and after degree. Reflecting on achievements and personal career goals.	Making decisions during WIL. Exploring opportunities at work and jobs related to the discipline (individually and in teams). Transitioning to "employees", reflecting on that transition and making notes in preparation for future transitions. Fostering strong professional relationships (this means strong job choices with employer). Developing self-awareness (e.g., of strengths and limitations of work, knowledge, skills, character, etc.).	Revisiting career action plans in teams. Discussing and sharing experiences and research on opportunities. Transitioning effectively back to "class" (demonstrating adaptive capabilities for the second time = practice). Preparing for transitions beyond university. Reflecting on growth and career development, sharing those reflections with peers and teacher.
Possible online learning activities	Read online learning materials and posts. Listen to audio, podcasts, webcasts. Watch recorded lectures. Watch short videos, animations, knowledge clips. Observe live video streams (e.g., virtual field trip / demo). Attend webinars (virtual classrooms). Prepare e-portfolio.	Use online advice and guidance. Use e-portfolio. Contribute to discussion posts. Find or create visual or multimodal media representations using any digital tools. Analyse and present ideas/information using a range of digital tools. Collect data and artefacts using digital systems (images, video, audio). Compare and critique digital tools, and/or visual and multimodal media.	Use e-portfolio. Share, discuss and provide feedback on visual or multimodal media representations using online systems/tools (e.g., forum, e-portfolio). Prepare e-portfolio for assessment.
	While learners focus on career development, the teacher reflects on their career and shares relevant points (e.g., learning, strategies) based on experience. This can strengthen relationships, encourage learners to also share their learning, strategies, plans and experiences, and help create positive learning environments.		

[ECU staff access](#)

[External access](#)

How could this approach benefit employability?



An emphasis on multimodality and visual media in teaching-learning for employability is important because communication (in university and workforce) is usually multimodal and, as such, employability development needs to incorporate non-verbal media as resources and sources of reflection and learning (Kress & Selander, 2012). To my knowledge, this is not emphasised in higher education research and teaching practice.

Also, the relational world, saturated with social media and contemporary challenges, requires criticality and effective engagement with 'others', especially in employment and careers (e.g., teamwork, collaboration, considerations beyond selves). Collaborative and inquiry-graphics-based discussions in WIL coursework could challenge learners to deeply consider the supercomplex nature of careers and employment, and how they can be involved in addressing problems at work, in the local community and in the world.

These are just some ideas. In your interview you'll be asked what you think of the approach, including its potential benefits for your practice, learners and discipline.

Thanks, have a great day and see you soon!

Elizabeth Cook BSc. MTeach.

- e.cook@ecu.edu.au
- [LinkedIn](#)
- [Twitter](#)
- [Bepress](#) (presentations and project work)
- [ORCID](#) (published literature)

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[Final multimedia version of Sway \(open access\)](#)

Appendix D: Student questionnaires

Unit 3 (with inquiry graphics in assessment):

1. Please indicate the extent to which you agree or disagree with the following statements. *

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I appreciated the opportunity to think more broadly about my employability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning about relational employability has helped me to identify my strengths and areas for improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using images helped me to reflect on my relational employability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think future ECU students should learn about relational employability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning about relational employability has helped me to better understand the broader effects of my behaviours and actions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Briefly explain your responses to question 1 above. *

3. What did you find challenging or useful about relational employability? *

4. Would you be willing to participate in a focus group or interview? If so, please provide your contact details below (a non-ECU email address if you are graduating). Thanks!

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

Units 2 and 4 (without inquiry graphics in assessment):

1. Please indicate the extent to which you agree or disagree with the following statements. *

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I appreciated the opportunity to think more broadly about my employability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Learning about relational employability has helped me to identify my strengths and areas for improvement	<input type="radio"/>				
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	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Learning about relational employability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

helped me to articulate my professional identity	<input type="radio"/>				
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I think future ECU students should learn about relational employability	<input type="radio"/>				
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Learning about relational employability helped me to better understand the broader effects of behaviours and actions throughout careers	<input type="radio"/>				
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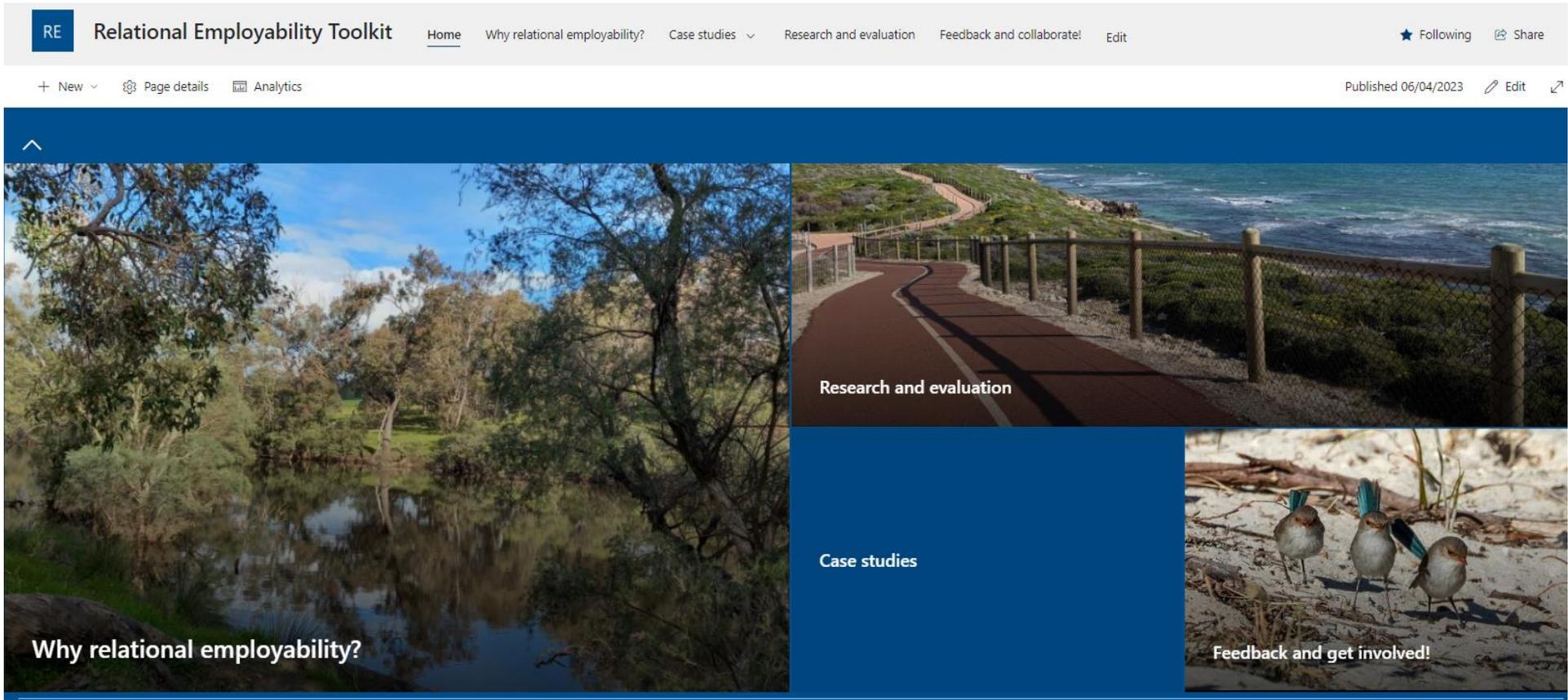
2. Briefly explain your responses to question 1 above. *

3. What did you find challenging or useful about relational employability? *

4. Would you be willing to participate in a focus group or interview? If so, please provide your contact details below (a non-ECU email address if you are graduating). Thanks!

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

Appendix E: SharePoint site



This SharePoint site is for ECU staff only to learn about relational employability and use/adapt the resources, as required. The downloadable resources must stay within ECU.



The current dominant approach to employability is largely focused on the success and development of individuals.

A newer approach, first described by Natasa Lacković (2019), is a relational view of graduate employability. My PhD developed Lacković's idea into a new [Relational employability teaching-learning framework](#) (Cook, 2023) that can be used to identify and reflect on broader interactions with others (incl. more-than-humans) throughout careers. This approach was first tested at ECU in S2 2022.

I am currently writing my thesis. Please acknowledge my contributions appropriately.

This SharePoint site is for ECU staff only to learn about relational employability and use/adapt the resources, as required. The downloadable resources must stay within ECU.

Here's a [podcast episode](#) (33:17) in which I talk about relational employability and my early publishing experiences.

Together, let's turn the dial on employability and create positive change!

[Click here to learn more about relational employability](#)

Feedback from a third-year female student in the unit:

"For me, it was like brainstorming with a model that's connected expertise to self-emotion awareness, to other emotions in workplaces, and their relationship between a workplace in society and the world. We should have this weblike connection always. It's not overwhelming, it has opposite [effect]. It means, when you have this level of connection, you use the highest potential of your capability".

Watch and read: a new relational employability teaching tool for Edith Cowan University - ECulture 2022

<p>ECulture - Video recording</p>	<p>ECulture - Abstract and PowerPoint presentation</p>
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I wish to acknowledge Laure Musy, Senior Information Management Officer, for her outstanding assistance in building this site.

Unit 2 - Case study in SharePoint



Elizabeth COOK
Senior Analyst

^ About this case study

In this unit, relational employability was integrated into an existing assessment task (Assignment 1).

Originally, Assignment 1 was a written rationale for a Health Promotion Plan. This assessment was transformed into a video rationale in which students were challenged to include a pitch for why, based on their relational employability/identity, the audience (e.g., a funding body) should consider and support their proposed Health Promotion Plan.

Q&A sessions were held with students to support their understandings of the video task. Assignment 1 (the video rationale) was then used by students to inform the development of Assignment 2 (full Health Promotion Plan, including written rationale).

Peer review was incorporated into the schedule to enable students to review each other's Assignment 1 videos and provide feedback, before finalising Assignment 2.

^ Teaching and learning

Study Schedule at a glance

Week	Topic	Relational employability
1	Introduction	Introduction to the framework. Using the framework to help reflect on relational employability identity as part of Assignment 1.
6	Community engagement / consultation	Assignment 1 due.
7	Discuss plans for Assessment 2.	Complete peer reviews. Reflect on feedback and use it to improve written rationale for Assignment 2. Use discussion forums to ask questions.
12	Pulling it all together for Assignment 2.	Assignment 2 due.

Video Resource

The resources below are free for use within ECU, with acknowledgement (details in each resource), and can be adapted to fit the context of your unit.

For any other use, please contact Elizabeth (e.cook@ecu.edu.au).





Unit 3 - Case study in SharePoint

 Elizabeth COOK
Senior Analyst

^ About this case study

ECUture 2022 presentation: Supporting student reflections on the research process and their relational employability

Abstract and Powerpoint

The research project aims to explore the experiences of students and staff in the process of supporting student reflections on the research process and their relational employability. The project will explore the experiences of students and staff in the process of supporting student reflections on the research process and their relational employability. The project will explore the experiences of students and staff in the process of supporting student reflections on the research process and their relational employability.

Video



^ Teaching and learning

Study schedule at a glance

Week	Topic	Relational employability
2	What is relational employability	Introductory video
	Research aim, question and sub-questions	
4	Research design	Example image reflections
5	Data collection	Reminder to bring in artefacts
6	Practicing reflection	On campus - artefact activity
	Consent and dissemination	Online - online discussion forum
13	Disseminating research findings	Developing reflections
	Submitting reflections	

The resources below are free for use within ECU, with acknowledgement (details in each resource), and can be adapted to fit the context of your unit.

For any other use, please contact Elizabeth (e.cook@ecu.edu.au).


Assessment task


Assessment tip sheet


Detailed study schedule


Rubric


Example 1


Example 2


Video slides


Week 2 on campus


Week 2 online

 **Panopto Video**
What is...

Appendix F: Example student assessment from Unit 4

Cultural Competence and Employability

The title of my community nutrition kit is Winner Dinner and it is targeted towards the adults living in a low socioeconomic area located in Balga. The main goal of this nutrition kit is to increase the knowledge about cost-effective, healthy, safe eating and the core food groups in the Australian Guide to Healthy Eating while increasing awareness of poor eating habits that could potentially lead to chronic diseases. In order to ensure that the nutrition kit was a success, we dedicated a minimum of 5-6 hours a week by meeting up weekly and had a meeting over calls on TEAMS to ensure progress. All team members were mindful of the deadlines and always completed the designated task on time. Our main mode of communication was through a group chat on Messenger, e-mails and TEAMS. Team member Jake completed the objective and aims, introduction, and he completed weeks 1 and 2 of the program. Barry completed the cover statement, week 3 of the program and most of the communication with the agency. I completed the participation evaluation form, worked out the ingredients and cost of the recipe, and week 4 of the program. Overall, the tasks were distributed fairly and everyone was content with the equal amount of workload. The content of our nutrition kit is targeted at the staff at the Warriapendi Childcare Centre who interact with children on a daily basis. For the purpose of this project, I mainly utilized my communication and interpersonal skills to contribute to this project.

The care takers at the childcare centre were respectful and well-mannered and displayed lots of patience towards the children. I offered to help out in case they needed it and also interacted with the rest of the workers asking them about the type of meals commonly served to the kids to get an idea of what their everyday meals look like. The communication with the agency took place through emails and occasionally phone calls. The knowledge and information presented was shared through a PowerPoint presentation. Helpful infographics and worksheets were printed onto recycled paper to ensure a sustainable project. The presentation was also heavily focused on activities such as the shopping cart and recipe renovation activity and the tools used for those activities were borrowed from the university which ensured the use of sustainable methods. The activities were efficient and effective as knowledge retains better upon application. This presentation took place in one of the classrooms at the childcare centre and all the participants were engaged throughout the presentation. In order to ensure the information delivered would meet the needs of the organization, my team and I made a trip to the childcare centre to have a discussion with the board director to identify and confirm that the content we are presenting is catered to what the organization needs.

Before the event, I felt nervous as this was a huge responsibility to take on especially because the information passed on to these childcare workers are going to be passed on to the children and their families hence, I was under a lot of pressure to ensure that the information being delivered were highly accurate and were retrieved from credible sources. During the event, I felt most nervous

however, I also felt empowered as I was using my three years of experience learning nutrition into practice. Furthermore, I also felt a sense of joy because I enjoyed connecting with the childcare workers and engaging in interesting conversations. After the event, I felt so and I was just engulfed by the feeling of accomplishment as I saw those doubtful faces of the childcare workers fill with confidence, making me feel like I have truly done my part. I feel like I have strengthened and further developed my communication and interpersonal skills throughout this experience as I feel more confident about going into a professional career as a nutritionist. I felt truly blessed throughout this entire experience as my group members were highly cooperative and proactive. Working for this agency gave us a good experience of what a professional career as a nutritionist would look like. With my experience having worked with many groups of people throughout my university period, I have dealt with a wide range of different personalities hence, I feel prepared and excited to work with other people in my future career as I truly enjoy the sense of teamwork, connecting and exchanging intellectual thoughts and ideas.

Overall, I feel that the presentation went a lot better than expected as the attendees were very cooperative and engaging and my groupmates and I came well prepared. The only issue we had was a slightly low attendance due to miscommunication from the agency about the presentation. Other than that, the presentation was executed in a timely manner and the audience enjoyed all the activities and found the information delivered helpful and relevant. One of the challenges faced by my groupmates and I is finding the right time to meet up in person for meetings as we are all busy with university and work commitments however, having a video call over TEAMS and working out a suitable time by compromising, ensured we were on track with the progress of our assignment. Based on the feedback from the agency, as a team, we worked well together and displayed excellent communication skills, time management and respect while demonstrating knowledge during the presentation. This confirmed that the skills developed most during the presentation were my interpersonal and oral communication skills. These were displayed as I confidently explained and presented the various nutrition concepts and suggested alternative ideas. My ideas were communicated clearly through the informative infographics that help the audience digest and remember the information easily. Furthermore my interpersonal skills stood out the most when I was working collaboratively with my group members and as I contributed my part and played as a team player throughout this experience.

Going into this session, I assumed that It was going to be a huge challenge as the whole assignment seemed very complex making me feel very anxious and overwhelmed. However, after having multiple group discussions with my team members and tasks were delegated fairly, I felt a sense of relief upon realizing the tasks were relatively straightforward. I then realised that employability is relational as I am always going to be surrounded by people as work is done by people, for people and with people in organizations whether big or small (Creed, 2019). Relational work is a concept developed by Locher and Watts which refers to the interpersonal level of

communication and it describes the act of negotiating relationships with others as the “work” that is invested (Darics, 2022).

Based on the progress I have made over the past 13 weeks and throughout my experience with this project I am pleasantly surprised at the progress I have made especially in regards to my interpersonal skills as I have managed to stay calm and resilient even when under stressful conditions. I also feel my ability to work collaboratively as a team has been strengthened. Past experiences with other presentations and group assignments have prepared me well when it came to working collaboratively with team members and to engage the audience. It felt fulfilling to apply the knowledge I have learnt over the course of my degree. I was pleased when I found out that the clients had an enjoyable and educational experience especially when they mentioned that the learnings are highly applicable in their everyday life. Although it was challenging to communicate with the agency as they were inconsistent with their replies and also changed the date of the presentation multiple times, we managed to retrieve adequate information regarding the objectives that they wanted to achieve by the end of the presentation hence, we were able to deliver our content with full effectiveness.

Overall, this experience has reassured me that I have chosen the right career and am able to carry out my tasks effectively while demonstrating cultural competence through my ability to comprehend and interact effectively with people across cultures (ACECQA, 2014). I am confident that I have what it takes to become a successful nutritionist especially after enjoying educating and communicating with people while applying my knowledge on nutrition. This is reflected by the improvement in my communication and interpersonal skills section of my ESCM. Prior to this project, I was naïve and unaware about the meaning of cultural competence however, I have gained a better understanding on the different cultural practices and ways to communicate and interact across cultures in a respectful manner (ACECQA, 2014). My knowledge in nutrition has increased and my passion for food, health, nutrition and preventative health measures has grown even more which will drive me to do my best as a nutritionist. This experience has also taught me to value children’s different learning abilities and to respect the differences in families’ home lives while encouraging cultural competence in children as this is vital for successful development. I also feel more confident and empowered when delivering my knowledge now that I am aware that I am capable of bringing positive change into people’s lifestyle and help to inspire others in my career as we continue to inspire each other. I also learnt that is highly possible to make an event sustainable by using equipment that can be reused such as laminated cards for the activities and a PowerPoint presentation instead of causing unnecessary waste. In order to improve my individualistic employability and learning, I aim to further my accreditation and learning by pursuing my masters in dietetics and then getting accredited by the Australian Dietitian Association while working as a nutritionist and continue to spread awareness of the importance of healthy living through educational workshops. These

educational workshops while working as a nutritionist will also help me focus on my humanistic aspect of relational employability. Being mindful about the types of resources used will help reduce the burden of ecological issues and maintain sustainability in the workplace.

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Appendix G: Unit Teaching Evaluation Instrument (UTEI)

Item	Statement	Why was this item included or excluded from this study?
1	In this unit I had a clear understanding of what was required of me (I always felt well informed about what was expected from me)	Relational employability was not the focus of units.
2	The learning materials in this unit were helpful (The Canvas site, notes, recordings, etc. supported my learning)	The resources I created were a minor part of each unit.
3	The assessments in this unit accurately evaluated my learning (The assessments covered most aspects of the course and my marks reflected what I had learned)	Relational employability was not the focus of units, nor was it embedded in all assessments.
4	The unit improved my general skills (General skills include teamwork, communication, writing, reasoning, problem solving etc.)	Relational employability was not the focus of units and skills development was not the focus of relational employability.
5	The unit was well organised (Most things about the unit were well planned and efficiently carried out)	Relational employability was not the focus of units.
6	The unit challenged my thinking (The unit encouraged me to think more critically and deeply about the subject matter)	Relational employability aims to challenge thinking, so this item was selected.
7	This unit extended my learning (The unit helped me to learn a substantial amount more about this subject)	Relational employability was not the focus of units, and this item is focused on disciplinary content knowledge.
8	I am satisfied with this unit (The unit met my expectations in most ways)	This item was selected to monitor the effects of changes made due to this study on the overall UTEI score.
9	What were the best aspects of this unit?	I was not provided with open-ended responses for ethical reasons.
10	What changes would you suggest for this unit?	