

More than just an add-on: Enhancing discipline-specific employability skills and awareness via the virtual learning environment

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ABSTRACT

While students tend to recognise the value of employability skills and training, they often do not prioritise this due to academic demands, lack of clarity regarding the most sought-after employment competencies, and challenges attaining these whilst studying. The benefits of tailored, discipline-specific employability training have been well documented. However, little guidance exists as to how to integrate employability within the core online curriculum, particularly in disciplines with highly diverse and rapidly evolving career landscapes. To address this gap, this postgraduate taught curriculum development project systematically identified discipline-specific employability competencies, and integrated them into the core online curriculum, which aimed to boost students' employability skills, awareness and career management skills. The rich learning generated from this project is captured in a series of actionable prompts and recommendations for identifying and implementing meaningful and scalable employability practices.

Keywords: employability, virtual learning environment, distance learning, curriculum design, graduate capital

Introduction

Employability – defined hereafter as the totality of a graduate's competencies, knowledge and personal attributes instrumental to vocational success – is the quintessence of the university-to-work transition (Yorke, 2004; Donald et al., 2019). COVID-19 has arguably reshaped the landscape of both higher education and the graduate job market, and as we have entered a period of realignment, universities have responded by adapting curricula to better address the mismatch between the skills of university graduates and the skills demanded by employers (Ramlall et al., 2022).

The increased focus on developing learners' sector-specific skills is evidenced by the rise of more 'value for money' micro credentials such as 'stackable' mini courses, micro degrees and digital badges in further and higher education (Califano, 2022). At the same time, research shows that while such specialisms are important, they are more of a *'foot in the door'* and in this time of the 'fourth industrial revolution', and that what tends to be more important to employers is for these skills to be part of an employee's "portable, transferrable core" (Califano, 2022, p. 56). Because of the unpredictability of today's job market, graduates and employees alike need to be more adaptable and committed to continuing professional development through taking the initiative in training, retraining and upskilling (Tsiligiris & Bowyer, 2021). Major recent global disruptions such as COVID-19 and advancements such as artificial intelligence have underscored that employability is as much about maintaining a job during challenging times, which involves 'learning how to learn', as about attaining a job (Buheji & Buheji, 2020). An important consideration in this 'whole person'

approach being taken by employers are transferable skills (Abuzagha, 2021; Kholiavko, 2021). These include social and emotional intelligence skills such as imagination, empathy, curiosity, creativity and resilience (Mok et al., 2021; Buheji & Buheji 2020). These skills seem to be especially important to not only *securing* graduate employment but also *sustaining* employment and *thriving* in the workplace (Leadbeatter et al., 2023).

Universities must see these changes as an opportunity to become better connected with employer needs, and increase graduate employability, especially given the increased popularity of, and investments in, online learning (Ewing, 2021). This requires increased sector awareness, as well as more emphasis and innovation regarding nurturing and developing graduates' transferable skills and attributes employers place value on. Yet, mirroring the 'whole person' approach now taken by employers in employability-relevant teaching has been challenging due to difficulties with balancing core subject learning with developing transferable, and often complex, situational and culturally specific, individual attributes and skills such as integrity, citizenship and leadership (Viegas et al., 2016; Hora et al., 2019). Additionally, students' 'graduate capital' – the totality of "resources that confer benefits and advantages onto graduates" – extends beyond skills acquisition and encompasses access to psychological, social, cultural and human resources (Tomlinson, 2017, p. 339).

Although the prevailing assertion has been that employability is most successfully attained during work placements and internships, the constraints on the scalability and accessibility of those programmes to various student populations, including online distance learning (ODL) students, have been recognised (Tymon, 2013; Andrewartha & Harvey, 2017; Dean & Campbell, 2020; Jackson & Tomlinson, 2022). The issues of equity and access are especially pertinent to ODL students, who are less likely to engage with, have access to, and benefit from, the full range of employability services and events, most of which are delivered face-to-face (Andrewartha & Harvey, 2017). The evidence of differential access to employability-boosting opportunities in different student groups is concerning and reflective of the strong relationship between employability outcomes and cultural and social capital (Clarke, 2018; Andrewartha & Harvey, 2017; Jackson & Tomlinson, 2022).

The benefits of tailored, discipline-specific employability training, over and above standalone university employability modules, have been well documented (Scott & Willison, 2021; Tibby & Norton, 2020). Embedding employability skills within the core curriculum has at least three main benefits. First, students are more likely to engage in activities which are not perceived as an added burden to their study workload (Rees, 2021; Thompson et al., 2013). This is a particularly important consideration for time-constrained students who often find it difficult to consistently engage in extracurricular activities (Jackson & Tomlinson, 2022; Thompson et al., 2013). Second, this approach may foster student engagement and motivation – critical ingredients in active online learning – as it can increase its perceived value for employment success (Cachia et al., 2018; Czerkawski & Lyman, 2016). As Jorre de St Jorre and Oliver (2018) show, students are more likely to engage in learning whose importance for employment is demonstrated by educators. Third, it creates a more equitable learning experience in which ODL students are not excluded from employability development opportunities.

Those anticipated benefits warrant optimisation of the virtual learning environment to ensure employability can be embedded seamlessly and accessibly. While generic frameworks for promoting employability in the curriculum exist, they are rarely implemented via the virtual learning environment – indicating opportunities for innovation in this area (Clark et al., 2011; Rees, 2021; Heymann et al., 2022). Accordingly, the project documented in this paper demonstrates how employability skills can be enhanced in the online learning context, in a UK postgraduate taught (PGT) programme.

The EEVE Project: Enhancing discipline-specific Employability skills and awareness via the Virtual learning Environment in a UK PGT programme

Disciplinary and programmatic context

The ODL Global Mental Health MSc Programme at the University of Glasgow was launched in 2015 – attracting learners from a wide range of countries worldwide such as Nigeria, Kenya, Panama, Malta, Romania, China, Lebanon, France, Canada, Ukraine and the UK. The Programme offers two study modes: on-campus and ODL. In the 2022/23 academic year, the Programme had 32 registered on-campus students. In addition, there were 58 ODL students (all part-time), 69% of whom are international (non-UK-based). Notably, the on-campus students have access to the same comprehensive self-taught online learning modules as ODL students. Online teaching is delivered via Rise 360 Articulate (<https://360.articulate.com/>) and hosted on Moodle. This enables a ‘flipped classroom’ approach, whereby some of the live sessions become spaces for elaboration and discussion of the online learning activities – fostering active and collaborative learning (Kavanagh et al., 2017; McNaughton & Bhardwaj, 2022). This makes the online curriculum a cornerstone to the teaching provision.

Similar to other disciplines such as psychology and geography, global mental health is a professionally diverse field, which does not have “direct links to industry and a natural path from education to employment” (Blackmore et al., 2016, p. 23). This presents distinct challenges to identifying and supporting students' awareness and acquisition of a comprehensive range of subject-specific and other employability skills. This highlights the need for curricular innovation in this area and underscores the transferability of the project learnings across a range of programmes.

Project approach and aims

The ‘EEVE’ (Enhancing discipline-specific Employability skills and awareness via the Virtual learning Environment) project is underpinned by two fundamental beliefs. First, ODL students, including international students and those in part-time study, should equally benefit from employability-focused learning opportunities and outcomes as face-to-face home students. This is integral to helping bridge geographical and socio-economic differences in students’ social mobility and graduate capital (Delaney & Farren, 2016; Butcher & Rose-Adams, 2015). The Programme team’s commitment to equity and to supporting students’ transitions to employment provided the impetus for this project. Recently, the World Economic Forum (2023) formally championed a ‘skills-first’ approach to employability, whereby talent recruitment and professional development emphasise individuals’ skills and competencies rather than their employment histories and degrees. This approach aims to foster more inclusive and equitable talent attraction, management and redeployment, and is also aligned with the current project.

Moreover, we believe developing work-related skills ought not to be at odds with the acquisition of core subject knowledge (Daubney, 2020; Quinlan & Renninger, 2022). As argued by Quinlan and Renninger (2022, p. 879), the formal curriculum can be harnessed to “[...] illustrate[d] career applications of the concepts or disciplinary techniques being taught”. Embedding employability within the core curriculum resonates with Daubney’s (2020) approach to extracted employability, whereby educators seeking to boost employability “should not focus on adding content but instead on extracting and surfacing what is already developed in the curriculum” (p. 90). We propose that true alignment is achieved when students are

provided with the opportunities to develop their employability skills while “engaging with their subjects in a critical and in-depth way” (Rees, 2021, p. 665).

The project took place between September 2022 and July 2023. The distinctiveness of this project lies in its systematic identification and integration of a comprehensive range of in-demand discipline-specific competencies within the core online curriculum. The main objectives of EEVE are to:

1. develop a discipline-specific employability framework of core in-demand skills and attributes by conducting a job market analysis;
2. audit and update the curriculum by applying the employability framework to enhance its professional orientation, particularly by introducing self-taught employability-focused enhancements in the virtual learning environment;
3. enhance students’ employability skills and confidence, and sector awareness – integral aspects of students’ graduate capital (Tomlinson, 2017).

Phase One: job market analysis

Job advertisement analysis is deemed a more robust, ecologically valid approach to employability attributes identification than dominant methods such as employer surveys, case studies, and interviews (McArthur et al., 2017). This approach aims to bridge the commonly observed discrepancy between curricular provisions and the rapidly changing industry landscape (Osmani et al., 2019; Abelha et al., 2020; Hennemann & Liefner, 2010), with emerging evidence suggesting this chasm has widened since the COVID-19 pandemic (Ramlall et al., 2022).

The search for relevant job advertisements was carried out between September 2022 and January 2023 by author GH. The search spanned multiple sectors, organisation types and roles. Although an effort was made to include listings for international positions and positions in several low- and middle-income countries, the sample remains limited in its geographical representation. Guided by purposive sampling (Suri, 2011) and by the practical constraints of the project, the priority was to feature a wide range of sectors and roles illustrating diverse competencies, rather than represent all major regions or countries.

Job listings were organised into categories according to their job family. Eight broad job families were discerned: advocacy (7 ads); capacity development (8 ads); clinical (5 ads); policy (7 ads); programme implementation, management and evaluation (12 ads); research (15 ads); service delivery (12 ads); and teaching (4 ads). The more heterogeneous the job family (that is, the more diverse competencies being present across ads), the more exemplars were included. This job family mapping was shared with the students, which aimed to boost industry awareness and career planning. More detail and illustrations can be found in the good practice guide we developed for staff (Karadzhov et al., 2023).

The job advertisements were imported into the data analysis software package, NVivo 12 (<https://lumivero.com/products/nvivo/>), and coded line by line for relevant competencies using qualitative content analysis by authors GH and DK (Elo & Kyngäs, 2008). The analysis focused on the job description, person specification and, where relevant, on the employer or organisation description. First, snippets from each advertisement corresponding to discrete competencies (e.g., accountability, professionalism, experience of working in humanitarian settings etc.) were coded. Then, the long list of codes was reviewed by authors DK and GH and grouped into sub-categories based on their similarity. Following this, the sub-categories were clustered into higher-level, more abstract categories. Descriptions were added to the

codes, sub-categories and categories on NVivo to ensure consistency. To aid the categorisation, concepts from the literature were occasionally borrowed. For example, the concept of personal resources was adapted from Kasler and colleagues (2017), and defined here as traits and competencies that promote coping, resilience and thriving in the workplace.

Phase Two: employability framework development

The initial multi-sectoral, global mental health employability framework was developed via the qualitative content analysis of the job descriptions. Four meta-level categories were found to accommodate the main categories and sub-categories generated by the qualitative content analysis: Self, Skills, Sector, and Subject. After all stages of analysis were completed, common higher-order categories emerged, and the novel '4S' employability framework was created (See Table 1, for a high-level overview, and Appendix, for the complete framework).

Table 1 Overview of the novel Global Mental Health (GMH) Employability Framework

Category	Definition	Sub-categories
Self	Enduring personal characteristics, abilities and aptitudes	Personal resources Intellectual abilities Values
Skills	Transferable skills required across a wide range of professional settings. These include technical and soft skills	Interpersonal skills Organisational skills Research skills Knowledge dissemination and exchange
Sector	Skills, competencies and experience required in specific sectors and roles	Programme management and evaluation Policy Advocacy Psychological and psychosocial service delivery Teaching Sector- and country-specific knowledge and experience
Subject	Working knowledge of theories, concepts and frameworks relevant to global mental health practice	Core global mental health knowledge Knowledge of psychosocial and psychological interventions Expertise in related disciplines

The framework was piloted with GMH experts, alumni, and educators, who were asked to comment on its content, structure, and utility. The Careers Service was consulted during the developmental stages. Stakeholder feedback helped identify ambiguous terms and scientific jargon, which were edited for clarity.

The discipline-specific Employability Framework serves as a standalone learning and career navigation tool for students. Specifically, it can help students more effectively link what they are learning at university with the competencies required in their desired profession; enhance their industry awareness; and help them identify extracurricular activities to target identified priority developmental areas. In addition, the Framework informed a new self-assessment tool to help students identify training needs and appraise their progress during and beyond their studies – an area that can be challenging to students (Saunders & Zuzel, 2010). The self-assessment questionnaire can be found in Karadzhev et al. (2023). It is intended to foster students' career management skills (Bridgstock, 2009). These encompass the abilities to self-assess one's career-relevant knowledge, skills, and aptitudes, including familiarity with industry, including culture and values; locating appropriate vocational opportunities; and presenting one's skills and experience accordingly (Bridgstock, 2009).

Phase Three: curriculum audit and employability enhancements

The job market analysis and the resultant Employability Framework guided curriculum audit and the identification of opportunities to integrate employability-focused online learning enhancements.

Curriculum auditing

Curriculum auditing was carried out to assess “[...] how and where employability-related learning is incorporated into curricula – and where there might be gaps” (Yorke & Knight, 2006, p. 9). The Employability Framework prompted productive Programme team discussions about how employability-focused teaching can be enhanced in both our on-campus and ODL programmes. The Programme Director and the Course Coordinators engaged with the Framework to identify strengths and developmental opportunities in the current offering from an employability perspective. The curriculum audit exercise helped identify gaps in provision and opportunities for strengthening the professional orientation of the core course content (see next section).

Employability enhancements

Four main employability enhancement types were introduced to students in the form of rubrics integrated into the virtual learning environment. These were: *employability insights*; *reflective practice*; *ideas into action*; and *futures thinking*. Using a curriculum-wide approach, those enhancements were mapped across the Programme's six 20-credit 10-week teaching modules (see Figure 1, for an example). This ensures an even distribution of the curricular enhancements. Where deemed appropriate, the existing course content was made more concise to ensure a manageable student workload. Module coordinators and the Digital Education Unit team were closely involved in this process to maximise the constructive alignment, interactivity, and accessibility of the enhancements.

	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
M1		RP/EI		RP						
M2					IA	EI		FT		
M3				RP						
M4							FT	IA	RP	
M5			RP	EI						
M6			EI			FT/RP		IA		

Weekly content (W); module (M); employability insights (EI), ideas into action (IA), futures thinking (FT), and reflective practice (RP)

Figure 1 Example of curriculum mapping of the employability-focused enhancements

Table 2 features examples of the four types of employability enhancements introduced, and their relationship with the job market analysis. For more examples, see Karadzhev et al. (2023).

Table 2 Examples of employability enhancements informed by the job market analysis

New Employability Enhancement Type	Description and Rationale	Example
EI: Employability Insights	Explicit connections are drawn between core subject material and employability skills and attributes identified in the job market analysis. Excerpts from job advertisements are included.	<p>Culturally adapting assessment tools, training packages and treatment guidelines is an important skill in many professional global mental health roles. Solid knowledge of the principles and techniques of cultural adaptation will boost employability.</p> <p>To demonstrate, a recent advertisement for a Mental Health and Psychosocial Support Technical Advisor post at the International Federation of Red Cross listed in its key tasks and responsibilities:</p> <p>“Develop, culturally adapt, and disseminate tools for training to enable humanitarians to offer Psychological First Aid and other psychological support to Ukrainian refugees.</p>

		[...] Adapt existing training packages to the current context and different needs.”
RP: Reflective Practice	Activities designed to prompt students to explore their “personal strengths and competence limitations” and identify “sources and means for solving existing and future professional activity problems.” (Colomer et al., 2020, p. 4). The job market analysis revealed the importance of reflective skills, self-awareness and adaptability. Employers also frequently required that candidates’ values align with those of the organisation.	Articulate your core values and reflect on how they align with the values and mission adopted by a relevant employer. Consider how you might evidence those values in future job applications. See also Figure 2 below.
IA: Ideas into Action	Action-oriented, authentic learning activities that closely resemble real-world roles, procedures or responsibilities. They seek to develop students’ entrepreneurial, problem-solving, and creative capabilities, which were all emphasised by employers. These activities are considered more advanced and are highly appropriate for group in-class and online problem-based learning.	Online, self-taught interactive learning activities were developed on how to set up and manage a successful non-governmental organisation (NGO). These explore pertinent practical, including managerial and ethical, responsibilities such as establishing relationships with beneficiaries, promoting transparency, raising funds, and tackling corruption. Individuals with real-world experience of managing NGOs were consulted, together with academic staff from other Schools such as the School of Education and the Business School with expertise in social entrepreneurship. Other examples include online learning activities on writing policy briefs and organising policy dialogues – in-demand skills identified by the job market analysis.
FT: Futures Thinking	Learning activities aimed at enhancing students’ career adaptability and responsiveness to change. This curriculum enhancement was informed by the evidence linking students’ career adaptability to their (perceived) employability (Monteiro et al., 2020). In this sense, employability is synonymous with exploring and taking up new career opportunities, responding effectively to change, and acquiring and applying knowledge to new challenges (Monteiro et al., 2020; Deeley, 2014). The ability to manage	Discussion questions: How can AI affect scaling-up mental health care in low- and middle-income countries? COVID-19: How do we future proof community-based mental health services? How will the climate crisis shape the global mental health landscape? How can professionals, services and communities be better prepared to meet those current and future challenges?

uncertainty is another attribute of career adaptability.
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These enhancements embody Daubney's (2020) 'extracted employability' approach. This approach is also consistent with von Treuer and Reynolds's (2017) assertion that educators should demonstrate to students how professional competencies and core subject learning "meld together at the course level" (p.6). This method to within-curriculum employability development is learner-centred as it can enable students to make strategic decisions about how to engage with the learning activities based on their career aspirations and training needs (Dollinger & Lodge, 2020). Crucially, we ensured the newly developed activities directly aligned with the core course content, and did not significantly increase students' workload (Jackson & Tomlinson, 2022).

**Reflective Practice Activity:
Being a Recovery-Oriented Professional**

Take a few moments to look back on your professional (including voluntary) experiences. Have you developed and demonstrated any skills or attributes relevant to recovery-oriented practice? Share your response to this question and the ones that follow in the Class Space.

Mental health, advocacy, and social work professionals often face challenges carrying out their work in line with a recovery-oriented approach.

- What do you think some of these challenges might be? For example, how might high workloads, a lack of resources, and clients' complexity of need impact professional practice?
- In light of these challenges, why do you think resilience and grit are key personal attributes of a recovery-oriented practitioner?

Figure 2 Example of how the employability enhancements were presented in the virtual learning environment

Prompts and recommendations for enhancing employability in the core curriculum

The learning generated from this project culminated in a series of prompts and recommendations to support educators with enhancing employability via the core curriculum.

Curriculum development prompts

The following prompts can be engaged by educators to explore and establish target areas where employability development would be appropriate.

Gauging students' concerns, expectations, and career awareness

Enhancing discipline-specific employability skills and awareness via the virtual learning environment

- Have students expressed concerns over employability post-graduation? What are the students' expectations about how the programme will equip them with employability skills? How can the teaching provision adapt accordingly?
- Do students possess a good understanding of the contemporary job market relevant to your discipline? Do they hold any erroneous assumptions or unreasonable expectations with regards to the range, nature or competitiveness of professional roles available?

Clarifying up-to-date discipline-specific professional competencies

- To what extent do the University Graduate Attributes capture the complexities and idiosyncrasies of professional activities in your field?
- Do teaching staff have up-to-date knowledge of the job market relevant to the discipline?
- Is up-to-date information available about what key skills employers value the most? Have you spoken with employers about what key skills job candidates most often struggle to evidence? Can insights from these questions help 'upgrade' the curriculum?
- Have employers or alumni practising in the field been invited to deliver lectures or workshops? Have they participated in curriculum development?
- What would an employability framework for your discipline look like? Has it been updated to reflect the contemporary job landscape?

Assessing and optimising the employability orientation of the curriculum

- Does the programme provide students with opportunities to reflect on, and develop, the more complex or abstract graduate attributes such as innovative thinking, resilience, perseverance, leadership, and professionalism? Is there value in discussing with students what these attributes look like in practice?
- Have Careers Services been consulted on enhancing employability in the curriculum?
- How do you monitor whether core course content aligns with key professional competencies, including transferable and discipline-specific ones? Are there opportunities to demonstrate the link between course content with professional competencies more explicitly?
- Are students encouraged to reflect on their professional values, experience and skills, make professional development plans, and monitor progress during their studies? Are they offered practical support?
- Do teaching staff have a shared understanding of the term 'employability'? Is there acknowledgement of the various definitions adopted in the literature?

Recommendations for the effective adoption of employability practices

Table 3 distils the key learnings from this project in the form of recommendations for the effective adoption of employability practices in the curriculum.

Table 3 Recommendations for the effective adoption of employability practices

Recommendation	Why/How?
Consider the advantages of discipline-specific employability guidance	While general employability training and other resources are indeed useful, students also value professional guidance and tools targeted towards their discipline or desired job family.
Be receptive to various definitions and aspects of employability	<i>Employability</i> is not a static or unidimensional concept. It can refer to both students' objective employment outcomes and professional skills acquisition, and their subjective (perceived) competencies and potential (Donald et al., 2019). It can signify both a specific set of transferable and job-specific skills, and the generic capability of responsiveness to change. Being open to this dimensionality predisposes an openness to a diversity of ways to enhance employability (Bailey & Ingimundardottir, 2015).
Embrace collaboration as the lifeblood of employability-focused curriculum developments	Engage with various stakeholders – particularly the industry, practitioners, alumni and career advisors – and gather their perspectives on the most in-demand competencies, as well as approaches to their development (for example, scenario-based learning drawing from real-world professional activities, problems and dilemmas).
Transcend disciplinary boundaries	Seek input from educators in other subjects or disciplines that teach relevant employability skills. For example, can educators in the biosciences offer input on practical ethics? Or, can educators in Business Studies provide guidance on teaching entrepreneurship?
Validate, refine, test, revise	Be open to piloting, validating and refining employability-focused enhancements on a continual basis. Adopt a cyclical model of evaluation and improvement (Sharp et al., 2022). Incorporate questions about employability in routine course and programme student evaluations.
Engage students in career-awareness activities early	Familiarise students with both discipline- or programme-specific and central University employability resources.

	<p>Establish a baseline of student's self-reported career awareness and professional skills. Assess progress mid-way and at the end of the programme.</p> <p>Encourage students to keep a professional development log or portfolio.</p>
Leverage existing pedagogical best practice but dare to innovate	<p>Balance incremental curriculum enhancements with bolder, more experimental innovations.</p> <p>As Rees (2021, p. 676) perceptively notes: “[...] to inspire our students we have to be inspirational, and to empower entrepreneurship and employability skills, we have to be entrepreneurial.”</p>
Be forward-thinking and anticipate change	<p>Embrace change as inherent to the employability landscape. Consider the future of work and reflect on what skills may become more and more vital to professional success. Be proactive in preparing learners for an uncertain, competitive and unpredictable career landscape by emphasising transferable, meta-skills and meta-competencies (Abelha et al., 2020).</p>

Further considerations and future directions

Our project systematically mapped sectors, employers, job families and skills relevant to contemporary global mental health practice, and produced curricular enhancements and standalone career development tools. These aim to boost several graduate capital dimensions, including skills and knowledge (*human capital*), self-awareness and career exploration (*identity capital*), and self-confidence and adaptability (*psychological capital*) (Tomlinson, 2017; Benati & Fischer, 2020). An important next step is to evaluate students' perceived changes in those forms of graduate capital in the course of their studies. It is particularly important to capture the views and experiences of populations that have been relatively overlooked in the employability discourse such as international students (Fakunle & Pirrie, 2020) and students with low capital levels such as socially disadvantaged students (Pitman et al., 2019).

Ultimately, as hinted at in the 'Introduction', the successful transition to the labour market is contingent upon a wide range of resources – including social and cultural capital (Tomlinson, 2017). Curriculum-based employability training alone will be helpful but insufficient to increase all students' graduate capital without wider institutional support and external stakeholder buy-in (Clarke, 2018; Fakunle & Pirrie, 2020). As it has been well-established, graduate capital is not an individualistic, isolated concept, but a dynamic and relational *process* (Tomlinson, 2017). Accordingly, we recommend that core curriculum enhancements should be accompanied with opportunities for students to expand their professional networks via industry events, mentorship, access to role models via guest speakers, and engagement with LinkedIn (Clarke, 2018).

University-employer partnerships should also be pursued, including employer input into curriculum design (Wrye et al., 2019; Hack-Polay, 2020). Critically, efforts to increase access to various career development opportunities should recognise and mitigate the inequitable graduate capital possessed by students from different geographic, cultural and socio-economic backgrounds (Tomlinson, 2017).

Finally, we recognise the cultural and contextual relativity of many of the employability skills surfaced in the job market analysis such as leadership, communication, humility, resilience and independence (Hora et al., 2019; Appendix). In other words, cultural, institutional and other normative and situational factors shape how such skills are interpreted, internalised and measured (Hora et al., 2019; Bailey & Ingimundardottir, 2015). Teaching transferable skills in a rigid, culture-blind manner is antithetical to internationalisation and decolonisation of the curriculum (Hora et al., 2019). It is therefore incumbent on educators to explore – in collaboration with students and employers – “culturally embedded aspects of employability”, in the context of their discipline (Bailey & Ingimundardottir, 2015, p. 51).

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References

- Abelha, M., Fernandes, S., Mesquita, D., Seabra, F., & Ferreira-Oliveira, A. T. (2020). Graduate employability and competence development in higher education—A systematic literature review using PRISMA. *Sustainability*, 12(15), 5900. <https://doi.org/10.3390/su12155900>
- Abuzagha, H. Y. M. (2021). *Soft skills: The success formula for the newly-hired graduates in the educational workplaces during and post Covid-19* [Unpublished doctoral dissertation]. Middle East University, Jordan.. <https://meu.edu.jo/libraryTheses/Soft%20Skills%20The%20Success%20Formula%20for%20the%20Newly-%20Hired%20Graduates.pdf>

- Andrewartha, L., & Harvey, A. (2017). Employability and student equity in higher education: The role of university careers services. *Australian Journal of Career Development*, 26(2), 71–80.
<https://doi.org/10.1177/1038416217718365>
- Bailey, L., & Ingimundardottir, G. (2015). International employability: Stakeholder attitudes at an international university in Malaysia. *Journal of Teaching and Learning for Graduate Employability*, 6(1), 44-55.
<https://doi.org/10.21153/jtlge2015vol6no1art572>
- Benati, K., & Fischer, J. (2020). Beyond human capital: Student preparation for graduate life. *Education+ Training*, 63(1), 151-163. <https://doi.org/10.1108/ET-10-2019-0244>
- Blackmore, P., Bulaitis, Z. H., Jackman, A. H., & Tan, E. (2016). *Employability in higher education: A review of practice and strategies around the world*.
<https://www.pearson.com/content/dam/one-dot-com/one-dot-com/uk/documents/about/news-and-policy/employability-models-synthesis.pdf>
- Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31-44.
<https://doi.org/10.1080/07294360802444347>
- Buheji, M., & Buheji, A. (2020). Planning competency in the new Normal – employability competency in Post-COVID-19 pandemic. *International Journal of Human Resource Studies*, 10, 237-251. <https://doi.org/10.5296/ijhrs.v10i2.17085>
- Butcher, J., & Rose-Adams, J. (2015). Part-time learners in open and distance learning: Revisiting the critical importance of choice, flexibility and employability. *Open Learning: The Journal of Open, Distance and e-Learning*, 30(2), 127-137. <https://doi.org/10.1080/02680513.2015.1055719>
- Cachia, M., Lynam, S., & Stock, R. (2018). Academic success: Is it just about the grades?. *Higher Education Pedagogies*, 3(1), 434-439. <https://doi.org/10.1080/23752696.2018.1462096>
- Califano, S. K. (2022). People, place, and purpose: Emergent post-pandemic higher education and employment needs in the future of work. In S. Ramlall, T. Cross, & M. Love (Eds.), *Handbook of Research on Future of Work and Education: Implications for Curriculum Delivery and Work Design* (pp. 55-70). IGI Global.
DOI: 10.4018/978-1-7998-8275-6.ch004
- Clark, K., A. Selwood, & M. Muir. (2011). *Mapping employability toolkit*.
<https://www.advance-he.ac.uk/knowledge-hub/mapping-employability-toolkit>
- Clarke, M. (2018). Rethinking graduate employability: The role of capital, individual attributes and context. *Studies in Higher Education*, 43(11), 1923-1937. <https://doi.org/10.1080/03075079.2017.1294152>
- Colomer, J., Serra, T., Cañabate, D., & Bubnys, R. (2020). Reflective learning in higher education: Active methodologies for transformative practices. *Sustainability*, 12(9), 3827. <https://doi.org/10.3390/su12093827>
- Czerkawski, B. C., & Lyman, E. W. (2016). An instructional design framework for fostering student engagement in online learning environments. *TechTrends*, 60(6), 532-539. <https://doi.org/10.1007/s11528-016-0110-z>
- Daubney, K. (2020). Extracted employability: The employability value of what is taught. In S. Norton & R. Dalrymple (Eds.), *Enhancing Graduate Employability: A Case Study Compendium*. Advance HE, pp. 89-93.
<https://www.advance-he.ac.uk/knowledge-hub/enhancing-graduate-employability-case-study-compendium>
- Dean, B. A., & Campbell, M. (2020). Reshaping work-integrated learning in a post-COVID-19 world of work. *International Journal of Work-Integrated Learning*, 21(4), 355-364. ISSN: EISSN-2538-1032. ISSN: EISSN-2538-1032.
- Deeley, S. J. (2014). Summative co-assessment: A deep learning approach to enhancing employability skills and attributes. *Active Learning in Higher Education*, 15(1), 39–51. <https://doi.org/10.1177/1469787413514649>
- Delaney, L., & Farren, M. (2016). No 'self' left behind? Part-time distance learning university graduates: Social class, graduate identity and employability. *Open Learning: The Journal of Open, Distance and E-Learning*, 31(3), 194-208.
<https://doi.org/10.1080/02680513.2016.1208553>
- Dollinger, M., & Lodge, J. (2020). Understanding value in the student experience through student–staff partnerships. *Higher Education Research & Development*, 39(5), 940-952. <https://doi.org/10.1080/07294360.2019.1695751>
- Donald, W. E., Baruch, Y., & Ashleigh, M. (2019). The undergraduate self-perception of employability: Human capital, careers advice, and career ownership. *Studies in Higher Education*, 44(4), 599-614.
<https://doi.org/10.1080/03075079.2017.1387107>

- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Ewing L. A. (2021). Rethinking higher education post COVID-19. The future of service post-COVID-19 pandemic, Volume 1: Rapid Adoption of Digital Service Technology, 37–54. https://doi.org/10.1007/978-981-33-4126-5_3
- Fakunle, O., & Pirrie, A. (2020). International students' reflections on employability development opportunities during a one-year Masters-level program in the UK. *Journal of International Students*, 10(S2), 86-100. <https://doi.org/10.32674/jis.v10iS2.2719>
- Hack-Polay, D. (2020). Are graduates as good as they think? A discussion of overconfidence among graduates and its impact on employability. *Education + Training*, 63(3), 377-391. <https://doi.org/10.1108/ET-10-2018-0213>
- Hennemann, S., & Liefner, I. (2010). Employability of German geography graduates: The mismatch between knowledge acquired and competences required. *Journal of Geography in Higher Education*, 34(2), 215-230. <https://doi.org/10.1080/03098260903227400>
- Heymann, P., Bastiaens, E., Jansen, A., van Rosmalen, P., & Beusaert, S. (2022). A conceptual model of students' reflective practice for the development of employability competences, supported by an online learning platform. *Education + Training* 64(3), 380-397. <https://doi.org/10.1108/ET-05-2021-0161>
- Hora, M. T., Smolarek, B. B., Martin, K. N., & Scrivener, L. (2019). Exploring the situated and cultural aspects of communication in the professions: Implications for teaching, student employability, and equity in higher education. *American Educational Research Journal*, 56(6), 2221-2261. <https://doi.org/10.3102/0002831219840333>
- Jackson, D., & Tomlinson, M. (2022). The relative importance of work experience, extra-curricular and university-based activities on student employability. *Higher Education Research & Development*, 41(4), 1119-1135. <https://doi.org/10.1080/07294360.2021.1901663>
- Jorre de St Jorre, T., & Oliver, B. (2018). Want students to engage? Contextualise graduate learning outcomes and assess for employability. *Higher Education Research & Development*, 37(1), 44-57. <https://doi.org/10.1080/07294360.2017.1339183>
- Karadzhev, D., Sharp, L., Hatton, G., Langan Martin, J., & Stubbs, F. (2023). Employability in the core online curriculum: Good practice guide. University of Glasgow, MVLS. <https://doi.org/10.25416/NTR.24602136.v1>
- Kasler, J., Zysberg, L., & Harel, N. (2017). Hopes for the future: demographic and personal resources associated with self-perceived employability and actual employment among senior year students. *Journal of Education and Work*, 30(8), 881-892. <https://doi.org/10.1080/13639080.2017.1352083>
- Kavanagh, L., Reidsema, C., McCredden, J., & Smith, N. (2017). Design considerations. In C. Reidsema, L. Kavanagh, R. Hadgraft, & N. Smith (Eds.), *The Flipped Classroom: Practice and Practices in Higher Education* (pp. 15–35). Springer Nature.
- Kholiavko, N., Popelo, O., & Tulchynska, S. (2021). Priority directions of increasing the adaptivity of universities to the conditions of the digital economy. *Revista Tempos E Espaços Em Educação*, 14(33), e16383. <http://dx.doi.org/10.20952/revtee.v14i33.16383>
- Leadbeater, D., Nanayakkara, S., Zhou, X., & Gao, J. (2023). Employability in health professional education: A scoping review. *BMC Medical Education*, 23(1), 1-11. <https://doi.org/10.1186/s12909-022-03913-7>
- McArthur, E., Kubacki, K., Pang, B., & Alcaraz, C. (2017). The employers' view of 'work-ready' graduates: A study of advertisements for marketing jobs in Australia. *Journal of Marketing Education*, 39(2), 82-93. <https://doi.org/10.1177/0273475317712766>
- McNaughton, L., & Bhardwaj, N. (2022). The Flipped Classroom. In P. Hughes & J. Langan Martin (Eds.), *Teaching Psychiatry to Undergraduates* (pp. 130-137). Cambridge University Press. doi: 10.1017/9781108921206.021
- Mok, K. H., Xiong, W., & Ye, H. (2021). COVID-19 crisis and challenges for graduate employment in Taiwan, Mainland China and East Asia: A critical review of skills preparing students for uncertain futures. *Journal of Education and Work*, 34(3), 247-261. <https://doi.org/10.1080/13639080.2021.1922620>
- Monteiro, S., Ferreira, J. A., & Almeida, L. S. (2020). Self-perceived competency and self-perceived employability in higher education: The mediating role of career adaptability. *Journal of further and Higher Education*, 44(3), 408-422. <https://doi.org/10.1080/0309877X.2018.1542669>

- Osmani, M., Weerakkody, V., Hindi, N., & Eldabi, T. (2019). Graduates employability skills: A review of literature against market demand. *Journal of Education for Business*, 94(7), 423-432. <https://doi.org/10.1080/08832323.2018.154562>
- Pitman, T., Roberts, L., Bennett, D., & Richardson, S. (2019). An Australian study of graduate outcomes for disadvantaged students. *Journal of Further and Higher Education*, 43(1), 45-57. <https://doi.org/10.1080/0309877X.2017.1349895>
- Quinlan, K.M., & Renninger, K.A. (2022). Rethinking employability: How students build on interest in a subject to plan a career. *Higher Education*, 84, 863–883. <https://doi.org/10.1007/s10734-021-00804-6>
- Ramlall, S., Cross, T., & Love, M. (2022). Redefining higher education and work. In S. Ramlall, T. Cross, & M. Love (Eds.), *Handbook of Research on Future of Work and Education: Implications for Curriculum Delivery and Work Design* (pp. 1-13). IGI Global. DOI: 10.4018/978-1-7998-8275-6.ch001
- Rees, S. (2021). Re-imagining employability: An ontology of employability best practice in higher education institutions. *Teaching in Higher Education*, 26(5), 663-678. <https://doi.org/10.1080/13562517.2019.1670637>
- Saunders, V., & Zuzel, K. (2010). Evaluating employability skills: Employer and student perceptions. *Bioscience Education*, 15(1), 1-15. <https://doi.org/10.3108/beej.15.2>
- Scott, F. J., & Willison, D. (2021). Students' reflections on an employability skills provision. *Journal of Further and Higher Education*, 45(8), 1118-1133. <https://doi.org/10.1080/0309877X.2021.1928025>
- Sharp, L., Karadzhev, D. and Paterson, H. (2022) Gathering feedback. In P. Hughes, & J. Langan Martin, J. (Eds.) *Teaching Psychiatry to Undergraduates* (pp. 162-167). Cambridge University Press doi: 10.1017/9781108921206.025)
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63-75. <https://doi.org/10.3316/QRJ1102063>
- Thompson, L. J., Clark, G., Walker, M., & Whyatt, J. D. (2013). 'It's just like an extra string to your bow': Exploring higher education students' perceptions and experiences of extracurricular activity and employability. *Active Learning in Higher Education*, 14(2), 135–147. <https://doi.org/10.1177/1469787413481129>
- Tibby, M., & Norton, S. (2020). *Essential frameworks for enhancing student success: Embedding employability*. <https://www.advance-he.ac.uk/knowledge-hub/essential-frameworks-enhancing-student-success-embedding-employability>
- Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education + Training*, 59(4), 338-352. <https://doi.org/10.1108/ET-05-2016-0090>
- Tsiligiris, V., & Bowyer, D. (2021). Exploring the impact of 4IR on skills and personal qualities for future accountants: A proposed conceptual framework for university accounting education. *Accounting Education*, 30(6), 621-649. <https://doi.org/10.1080/09639284.2021.1938616>
- Tymon, A. (2013). The student perspective on employability. *Studies in Higher Education*, 38(6), 841-856. <https://doi.org/10.1080/03075079.2011.604408>
- Viegas, C. V., Bond, A. J., Vaz, C. R., Borchardt, M., Pereira, G. M., Selig, P. M., & Varvakis, G. (2016). Critical attributes of sustainability in higher education: A categorisation from literature review. *Journal of Cleaner Production*, 126, 260-276. <https://doi.org/10.1016/j.jclepro.2016.02.106>
- von Treuer, K. M., & Reynolds, N. (2017). A competency model of psychology practice: Articulating complex skills and practices. *Frontiers in Education*, 2(54). Frontiers Media SA. <https://doi.org/10.3389/educ.2017.00054>
- World Economic Forum. (2023, November). *Putting skills first: A framework for action*. World Economic Forum <https://www.weforum.org/publications/putting-skills-first-a-framework-for-action/>
- Wrye, B., Chafin, C., & Higginbotham, C. (2019). Creating a win-win: Designing and implementing mutually beneficial collaborations between community organizations and academic programs. *Education + Training*, 61(5), 605-621. <https://doi.org/10.1108/ET-01-2018-0011>
- Yorke, M. (2004). Employability in the undergraduate curriculum: Some student perspectives. *European Journal of Education*, 39(4), 409-27. doi:10.1111/j.1465-3435.2004.00194.x
- Yorke & Knight. (2006). *Embedding employability into the curriculum*. http://www.employability.ed.ac.uk/documents/staff/heabriefings/esect-3-embedding_employability_into_curriculum.pdf

Appendix: The Novel Multi-sectoral Global Mental Health Employability Framework Generated by the Job Advertisement Analysis

