

Employability: breaking the mould

A case study compendium

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Contents

Employability: Looking Forward Stuart Norton and Roger Dalrymple	3
Students as lecturers; developing skills for graduate roles Dolores Ellidge and Louise Griffiths	7
Work-integrated learning as an inclusive pedagogy for employability: the case of Live Briefs at Anglia Ruskin University Marina Boz, Beatriz Acevedo, Andrew Middleton, Adrian Scruton,	12
Cyndy Hawkins, Joanne Outteridge and Liam Kite	
Future Global Leaders Forum: a cross-cultural and cross-disciplinary skills development programme Rosemary K. Clyne	18
Supporting master's students' employability – a tailored approach Katie Dallison, Katie Stripe and Dallas Alexandrou	23
Closing the gap: an inclusive approach to developing employability skills Emma James	30
Chinese international students' employability transition in UK higher education Xiaowen Gao	38
Social justice and employability: how to embody this in staff collaboration in order to improve student opportunities Helena Knapton, Dawn Warren, Denise Corfield and Lynsey Martin	44
Supporting physics graduates' outcomes through the lens of work mobility behaviour, personal resilience and career readiness Andrew Hirst and Alastair Buckley	49
Enhancing Indian MBA students' employability through an experiential and inclusive learning residential: an accessible and inclusive approach Victoria Jackson and Vicki O'Brien	54
Cracking the employability code: a multifaceted and collaborative approach to employability in the curriculum at Sheffield Hallam University Conor Moss and Esther Kent	61
Employability framework and personal development planning: closing the loop Mick McCormick, Rosie Meade and Eddie Tunnah	67
Developing innovative support for the most disadvantaged students: the Keele Connector Programme Lisa McWilliams and Bernadette Grannon	76

TED-style talks to enhance employability	81
Sara Namvar, David Greensmith and Niroshini Nirmalan	
Bridging the gap: understanding and addressing the employer/student divide on graduate attributes Catherine O'Connor	88
Is this for real? Business community engagement and authentic learning Joy Perkins and Stuart Durkin	94
'Sandwich placement: been there, done that'. A final-year to first-year student employability coaching and mentoring project at Bournemouth University Vianna Renaud	99
How to develop career cartographies: embedding innovative online careers and employability learning through collaborative co-creative design with students and employers	105
Andrew Cooper, Ben Robertson and Sarah Grund	
Mapping skills for curriculum design using a programme level approach in a transnational education context Maria Romero-González	111
Breaking the mould for placement delivery – the Peer Enhanced e-Placement (PEEP) Lisa Taylor	117
Whose job is it anyway?: Inclusive approaches to developing work-ready students for the graduate labour market Iwi Ugiagbe-Green	122

Employability: Looking Forward

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If the global events of 2020 have necessitated a renewed creativity and flexibility in employability development in higher education (HE), the evidence of the current case study collection is that a step change in scope and vision was already well underway. Whether it be the exploration of the affordances of virtual placements (as in Taylor's case study), the creation of placement opportunities within the university context itself (Ellidge and Griffiths); the empowerment of students to map and plot their employability journeys (Robertson et al), or increased recognition of the differential opportunity structures impinging on work-related learning experiences (Knapton and Ugiagbe-Green's respective contributions), a new depth of enquiry and dynamism of innovation are in evidence in the field, amply represented by the case studies presented here.

In a 'business as usual' academic year, graduating cohorts would have started working from July, with many graduate recruitment programmes commencing in late August or early September. Yet the considerably contracted labour market awaiting this year's graduates is reflected in successive reports from the Office for National Statistics' labour market overview (ONS 2020), showing, at the time of going to press, a labour market some 40% smaller than that recorded in January 2020. While there are naturally pronounced differences among sectors, employer decisions to scale back graduate recruitment programmes intensifies the challenges for the cohort of 2020 and their immediate successors: Henehan (2020) directs us to the sobering Office for Budgetary Responsibility assessment that the graduate employment rate three years post-graduation is likely to be 13% lower than the pre-pandemic projection.

Given that the legacy from pandemic disruption thus looks likely to extend into the medium term, a suggestion indicated by the pattern of previous recessions (Grove, 2018), the current collection also brings some timely and promising innovations to wider notice. These include embedding employability initiatives in all academic years of undergraduate and postgraduate study (collectively addressed in the studies by Clyne; Kent and Moss; and Dallison et al), and cross-fertilising the learning from employability initiatives between international and home domiciled cohorts (see the respective case studies by Jackson and O' Brien; Gao; and Romero-González). Likewise, given the finding in a spring 2020 NUS survey that 70% of students are concerned about their employability (NUS, 2020), a number of this volume's contributions emphasise the central role of student voice and student selfconcept in effective employability development (eg Hirst et al; McCormick et al; Namvar et al). The same survey also touches upon themes of student wellbeing and resilience - qualities much impacted by the events of this year – and a corresponding emphasis on these aspects characterises the contribution from Vianna Renaud, who stresses the efficacy of student-to-student mentoring in respect of employability development. Broader inclusivity considerations also inform a number of contributions to the volume including those of Emma James and Lisa McWilliams, which prompt reflection on the wider contexts and intersections of disadvantage that can so profoundly influence a student's employability development.

Encouragingly, these case studies present insights from a sector already much preoccupied with tackling the challenges of what the World Economic Forum has styled the Fourth Industrial Revolution, exacerbated as these may be by the current global health crisis. The 2018 McKinsey report anticipated that approximately 50% of all current workplace tasks could become automated in the medium term, bringing a concomitant major shift in the composition and nature of the labour market. The World Economic Forum (2018) has further suggested that over 50% of extant jobs will be lost to automation by 2025, albeit offset by the corresponding creation of myriad job roles and requirements that do not yet exist. Regardless of the accuracy of these predictions, it's fair to postulate that the nature of work and the workforce is fast changing and that, more than ever, effective employability development should involve preparing graduates for this protean and dynamic environment. Optimal stakeholder and employer engagement thus remains a crucial feature of successful employability initiatives in HE. Positive in this respect are the initiatives reported in the case studies by Boz et al; O' Connor; and Perkins, each of which emphasise the value of maximising employer engagement and the alignment of employer, student and HEI perspectives on the desired employability profiles of graduating students. The collective import of these contributions is that there is likewise value in educational institutions seeking to work together in a new way, both internally and externally, to provide richer foundations for continuous learning.

What new bearings and overall direction of travel for employability development are indicated by the case studies gathered here? One answer is suggested by the increasingly sector-wide convergence, mirrored in the case studies, of the concepts of employability, enterprise and entrepreneurship. While tending to be used discretely in everyday discourse (we read newspaper reports about entrepreneurs, we hear about the fate of different types of enterprise in the news, and we watch TV formats where smart-suited aspirants pitch investment opportunities to entrepreneurs), research has suggested that the separation of these concepts is something of a misconception (Levie et al, 2009). Likewise, discussion and debate surrounding definitions of employability (Norton, 2016; Williams et al, 2018) increasingly recognise the salience of enterprising and entrepreneurial dispositions and behaviours in the profile of employability in HE (Norton and Dalrymple, 2019; Tibby and Norton, 2020). The 2018 QAA Guidance for UK HEIs on Enterprise and Entrepreneurship Education notes the increasing convergence and affiliation of the two concepts with employability and recognises that education of this kind: "provides interventions that are focused on supporting behaviours, attributes and competencies that are likely to have a significant impact on the individual student in terms of successful careers, which in turn adds economic, social and cultural value to the UK" (QAA, 2018, 2). Such a description anticipates the holism and broad scope of the kinds of intervention reported in the present study and reflects the sector-wide priority to support learners in developing the mindset and skills to adapt and flex in an uncertain future. Coping with uncertainty, identifying opportunities, actively making things happen, managing risk, networking, creative problem-solving, being strategically aware and acting independently are all aspects of enterprise education with reflections in the current collection of case studies on employability.

Perhaps the most insistent learning point held out by the present collection then, is the suggestion that when a more equable climate is restored to the sector post-pandemic, we would do well to resist the temptation to return to full 'business as usual'. The uplift in digital capability, the re-visioning of how work-related learning may be realised in digital environments, and the surge in sheer creativity and metacognitive capacity realised by the unique circumstances of 2020 can themselves indicate the trajectory for addressing future challenges and for ensuring that HE remains an incubator of enterprising, entrepreneurial and employability behaviours and aptitudes. Should this continued level of innovation be accompanied by a more philosophical framing of employability as intrinsically allied to enterprise and entrepreneurship, there is scope to reaffirm the place of HE in equipping students to realise their full potential as learners, thinkers, influencers, advocates, leaders, current and future educators and, indeed, citizens.

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Students as lecturers; developing skills for graduate roles

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Background

Nottingham Trent University's BA Health and Social Care internship, the subject of the current case study, was developed from a conversation between a third-year student and the course leader. The student said that they would have liked the opportunity to gain experience in a lecturer role, prompting consideration of how far the course itself might provide a vehicle for experiential learning opportunities. This discussion coincided with identifying the need to improve graduate employability outcomes in response to the 2018 Destination of Leavers of Higher Education (DLHE) report that highlighted a decrease in the number of graduates who were available for employment or had secured employment or further study. DHLE data also showed an increase in the proportion of graduates who reported that they had felt they were not well prepared for employment (DHLE, 2018). It is established that development of graduate employability skills alongside subject knowledge enhances graduates' success in gaining employment (Saunders and Zuzel, 2009; Paterson, 2017). Higher education institutions (HEIs) have a responsibility to support students to gain skills that are transferable to employment; therefore the DHLE data was both disappointing and required a creative approach to improving employability support and developing key graduate skills within the degree programme.

Nottingham Trent University's Success for All Strategy (2016) aims to support target groups, such as students with a background of BTEC qualifications, to achieve positive outcomes. The university's BA Health and Social Care degree admits a high proportion of BTEC students and it was anticipated that the course internships would provide additional opportunities for students and contribute to embedding work experience into all courses as outlined in the university's 2015-2016 strategic plan (Nottingham Trent University, 2018a).

The purpose of the internship was to provide an opportunity for students with a career interest in lecturing, or indeed teaching across any educational phase, to undertake meaningful work experience which would support the development of skills such as lesson planning, developing learning outcomes and delivery of a micro-teach session. It was envisaged that students would gain transferable skills, including developing and delivering presentations, and it was acknowledged that participating in the internship had the potential to positively impact on their degree classification as documented by Binder et al (2015). In addition, Miralles-Quiros and Jerez-Barraso (2018) suggest that internships provide an opportunity to learn and demonstrate essential skills for employment.

Mentorship was identified as essential in supporting the interns and so the success of the course internship was reliant on the course team's support of the initiative and their willingness to dedicate their time to providing this form of work experience. Despite the time not initially being included in their workload, the course team embraced the opportunity to become internship mentors.

Approach

The underlying principles of the internship were to create an opportunity and environment in which undergraduate students would be able to access training that would support them to engage confidently in opportunities to contribute to lesson planning and delivery of seminar content. The internship could be used by students to gain work experience and fulfil the placement requirements for a second-year module. A process of recruitment, training, mentorship and evaluation was developed with the first and second iterations of the internship being delivered in 2019.

Second and third-year students were invited to apply for the internship positions. However, due to the increased time and study commitment, students who were repeating a year were excluded from the recruitment call to avoid overload and any impact on successful completion of their degree. In their application students were asked to indicate how they anticipated that participating in the internship would support their career aspirations and to indicate which of the modules they would prefer to engage with.

For the second cohort this recruitment strategy was developed to include an interview process to determine suitability and commitment of students as well as create a further opportunity to develop skills for employment. In Cohort 1, which took place in Term 2 (2018-2019), six students were accepted onto the internship with a further five eligible students being successfully recruited in the second cohort, which took place in Term 1 of 2019-2020. Each student accepted onto the internship was allocated a mentor who also was the lead lecturer for the module to which they had been allocated.

Interns were invited to attend training. This focused on outlining the internship programme, including details of their mentor, commitment in hours, the structure, support and micro-teach session. Another training session provided guidance to support students in planning and delivering short sessions, which included foundational educational theory such as Bloom's taxonomy (Bloom, 1956), using a session planning template and reflecting on their own experiences of being taught. This training was delivered by course lecturers and, for Cohort 2, an intern from the first cohort supported the training. In Cohort 1 the training was delivered over two days. However, the interns' evaluation suggested that delivering the training over one day would enable them to manage their time more effectively and this was amended for Cohort 2.

A training session was also provided for lecturers to recap the skills and responsibilities of mentorship and to familiarise them with the paperwork and process of the internship. This session reinforced lecturers' perception that being a mentor was both a process where 'expert practitioners' shared knowledge and experience with 'novice practitioners' and where the mentor could learn and develop their own experience (Scott and Spouse, 2013). To be effective, mentoring needs to be a considered process (Shornack and Beck, 2011) that is evidence-based (Byars-Winston and Lund Dahlberg, 2019). Models such as Clarke's Layered Relationship Mentoring model (2004, cited in Clarke and Powell, 2013) provide guidance for effective mentoring and development of mentoring relationships. However, no model appeared to be comprehensively applicable to this project so we developed our own model. Effective mentorship proved to be a key factor in the interns having a positive learning experience. Trust is essential in mentoring relationships to enable mentors to provide emotional support as mentees developed through questioning and challenging their assumptions (Johnson, 2006). The mentoring relationship benefited from interns' and lecturers' pre-existing knowledge of each other and therefore a degree of trust was already established. Regular review meetings were a planned part of the internship to support interns to develop personal learning outcomes and negotiate with mentors to identify opportunities to meet these goals. The review meetings supported interns and mentors to reflect on the intern's progress and adapt planned involvement in response to the intern's experiences. This process ensured that all interns had a personalised experience enabling them to use the internship to develop the skills and experience which would benefit them most in their journey to be ready for graduate employment.

Outcomes

There was varied engagement between the cohorts. While the interns' time commitment varied, the majority completed 30 hours of work experience which aligns with the requirements of the Year Two work experience module. Evaluation results were used to amend specific aspects of the programme as identified above which may have increased engagement for Cohort 2.

Evaluative feedback from both cohorts identified that all students felt they had benefited from engaging in the internship. Although all interns participated in supporting seminar delivery and engaging in small group work with students, some of the students embraced opportunities to develop a session plan, contribute to the development of presentations and delivered small sections of class content. One intern from Cohort 2 successfully planned and delivered a full seminar under the supervision of their mentor. The range of experiences gained varied between interns as mentors empowered interns to choose the activities they engaged in and some interns were able to commit more time. These experiences contributed to intern evaluation which reported the development of communication skills and confidence as key benefits in engaging in the internship programme, although one intern suggested "discussions about building a rapport" would have been beneficial. One intern also said that they felt "extremely grateful for the mentoring process; feel like I have connected more with the course team" (Intern 6).

The final element of the internship was for interns to deliver a microteach on any topic to fellow interns and mentors. Interns were able to use the skills and experience gained to independently develop and deliver a learning activity. As the activity was intern-led, students had the freedom to focus on topics outside of the degree programme which resulted in creative and informative learning activities. Interns chose a range of topics from hobbies and interests such as ethical clothing, pole exercise, crafts for children and disabled students in higher education, and activities which related to their independent business ventures. Interns' topic choices highlighted to mentors that many students within the degree programme are independently developing entrepreneurial and enterprise skills which would further enhance readiness for graduate employment.

Alongside demonstrating teaching and presenting skills, the micro-teach enabled interns to demonstrate time management, communication skills, problem solving when the activity did not go as planned and increased confidence which they reported was beneficial. One intern stated "I felt confident about the planning and the use of a PowerPoint [which] helped me develop an effective PowerPoint for another module". Other attributes demonstrated included positive attitude and development of a professional identity, which is recognised as essential for work readiness (NTU, 2018b). Career success is linked with the experience of being mentored and mentoring enables organisations to develop the next generation of the workforce (Shornack and Beck, 2011).

The successful completion of two cohorts has been a learning experience for students and academics alike and has resulted in the development of the 'TRENT' model to underpin the delivery of future internships within the degree programme and for dissemination across Nottingham Trent University and external universities. The model, whose acronym denotes Training, Reflection, Education, Nurturing and Teaching, brings together the factors that interns and mentors identified as contributing to the project's success. In the forthcoming academic year, we look forward to trialling the TRENT model and adapting the internship programme to an online delivery format to assess the flexibility of the programme. On reflection, while we have evaluated the interns' and mentors' perspectives, we have yet to capture the impact on the students that the interns have taught – an area of evaluation which we plan to develop with Cohort 3. Expanding the mode of delivery and considering the impact on students will support us to develop the transferability of the project to other degree programmes within and external to the university.

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Work-integrated learning as an inclusive pedagogy for employability: the case of Live Briefs at Anglia Ruskin University

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Background

Despite much debate and varying discourses around the links between graduate employability and employment (Clarke, 2017; Holmes, 2013), the evidence suggests that UK graduates are more likely to earn higher median salaries and be in highly skilled employment compared to non-graduates (Office for National Statistics, 2020). Likewise, to 'get on the career ladder' remains a leading driver for university study among UK students (Neve and Hewitt, 2020).

In 2018, Anglia Ruskin University (ARU) launched a distinctive education strategy aimed at preparing our students for life and work in the 21st century through a framework founded on active and inclusive approaches to learning and teaching. The Active Curriculum Framework takes a holistic course-level approach to curriculum design and delivery and is aimed at supporting students to develop the graduate capital required to succeed in their careers, through a specific focus on employability. By this means, the employability strategy, normally implemented as part of Student Services, as an add-on to the students' journey, became an integral part of the active curriculum. The authors, a team of academic leads for employability, worked closely with academics and other stakeholders to carry out a comprehensive curriculum review to embed the Active Curriculum Framework in all ARU undergraduate courses. One of the main findings was that some courses actively sought external partners to collaborate in the creation of real-life learning experiences, through specific collaborative projects where students worked with partners to mirror a live experience. These experiences prompted the authors to develop the ARU Live Briefs initiative – a distinctive pedagogic approach to develop graduate employability through authentic and engaging assessment for learning, one of the eight dimensions of the Active Curriculum Framework.

We define Live Briefs as a curriculum-based approach to engaging students and assessing their learning by using current, real-world activities devised and presented by professional partners in collaboration with academic staff. As such, Live Briefs are a type of work-integrated learning (WIL) method. Although many conceptualisations for WIL exist, the one that better defines the essence of Live Briefs is "the intentional integration of theory (ie what the student has learned) with the practice of work" (Dollinger and Brown, 2019, 90). As evident in our definition, the Live Briefs initiative draws upon the notion of authentic learning developed by Herrington and Oliver (2000), which is characterised by:

context, activities, expert performances, multiple roles and perspectives, collaboration, reflection, articulation and authentic assessment. The aim is for each project under the Live Briefs umbrella to be purposefully co-designed with professional partners to require students to apply relevant knowledge and skills and support achievement of module learning outcomes.

Exposing students early to work with professional partners can contribute to the acquisition and enhancement of graduate capital, which may help to address issues with access to both internships and graduate employment affecting disadvantaged students in the UK (Cullinane and Montacute, 2018). While most institutions offer WIL initiatives in the final year of undergraduate courses and/or in selected courses only, ARU launched Live Briefs at scale. From the academic year 2020/21 onward, ARU aims to provide all undergraduate students with the opportunity to engage with partners in professionally relevant tasks or projects as an essential part of their course in their first and second year of study.

From a graduate employability perspective, the purpose of Live Briefs is to facilitate the growth of graduate capital for students in the curriculum while recognising that capital is acquired and enhanced through a range of experiences outside the curriculum as well. The authors adapted Tomlinson's model (2017) to create a reflective framework to help students engage with their employability development from a life-wide learning perspective, supporting them to assess and discuss their graduate capital as an outcome of the experiences they accrue across the curriculum, co-curriculum and the extra-curriculum.

Approach

The strategic portfolio review that took place at Anglia Ruskin in 2019 was the starting point for Live Briefs to become an institutional initiative at scale. This review was supported through a crossinstitutional development programme of more than 30 two-day Course Design Intensive (CDI) events. The CDIs were identified as a development platform for engaging all undergraduate course teams in principle-based design discussions towards their adoption of both active learning and approaches to developing graduate employability. To support the latter, the authors, in their capacity as academic leads for employability, were appointed to work with course teams to explore innovative ways of integrating employability in the curriculum.

As the authors engaged with the course teams to enhance the way employability is integrated in the curriculum, they adopted an appreciative inquiry (AI) approach to review existing practice of WIL across ARU's four faculties. As argued by Mishra and Bhatnagar (2012), this approach shifts the focus from problem-solving to taking existing good practice as a starting point in any development intervention. When applied, the AI approach consisted of observations and interviews with academics which prompted them to celebrate their successes and critically reflect on their practice so that they could imagine ways to improve it. As expected, there was great diversity in the levels of authenticity and proximity observed in the existing modules that offered some type of WIL, from field trips to live case studies and work experience. The authors also used Schonell and Macklin's (2019) criteria for good practice in WIL to reflect on the strengths of the existing offer and consider ways to enhance the design and delivery of these to a wider group of students.

Institution embeddedness	Sponsored by senior leadership and integral to institutional strate			
Relationships	Mutually beneficial for stakeholders			
Student preparation	Theoretical knowledge, technical and interpersonal skills			
Supervision	University staff as points of reference and oversight for feedback and support			
Learning outcomes	Module learning outcomes to include professional standards and attributes			
Curriculum	Authentic learning activities connected throughout the curriculum			
Pedagogies	Teaching methods that mirror workplace requirements			
Assessment	Assessment of learning to cover integration of theory into practice and stimulate reflective skills			

Table 1: Criteria for good practice in WIL adapted from Schonell and Macklin (2019, 1198)

Throughout the portfolio review, it became evident that the existing WIL offer beyond placement year was limited to very few courses and in many instances was located in optional modules. This meant that only a few students were exposed to the opportunity of engaging with professional practice in their subject as an essential part of their course.

Moreover, there was little scope in the curriculum to accommodate compulsory modules that are purposefully designed as WIL, particularly in courses that were professionally accredited. Despite these challenges, the authors were determined to enhance the offer of WIL in the undergraduate portfolio in a systematic and progressive way for all students, which prompted the team to create the aforementioned ARU Live Briefs as a key curriculum intervention to developing student employability and graduate success. The authors defined Live Briefs following a period of appreciative inquiry into existing practice in WIL, taking into consideration the ARU Active Curriculum Framework, our commitment to provide parity of experience to our students and the existing criteria for good practice in WIL by Schonell and Macklin (2019). As a result, it was agreed that every Live Brief should address the following critical attributes:

Table 2: The ARU Live Briefs critical attributes

Inclusivity	Is situated in a compulsory module so that all students can have the same experience			
Externality	Engages all students in a learning experience initiated by a representative of a professional partner organisation relevant to the course, eg an employer, professional organisation or service			
Currency	Sets out a current problem or opportunity based on an actual real- world situation forming a challenge that requires the student to apply relevant knowledge, skills and professional attitudes			
Active	Leads to all students undertaking directed or self-directed learning activities to address the opportunity or challenge inherent in the specified situation			
Outcomes-focused	Creates an activity space aligned to the module's intended learning outcomes			
Applied learning	Requires that students use, evaluate, and develop their conceptual knowledge			
Productive	Involves student-run processes, performances, or the production of artefacts upon which the external partner will provide feedback from a professional (ie non-academic) perspective			
Impactful	Leads to an academic assessment of the student's knowledge and the provision of rich feedback to develop their graduate capital			

Following the endorsement of ARU by senior leadership, the Live Briefs project was announced as a compulsory curriculum initiative to be offered in every undergraduate course from Year One starting in the academic year of 2020/21. The initiative has been led through a joint effort between Anglia Learning and Teaching, Employability Services and the Research and Innovation Development Office, with a dedicated team to oversee its implementation.

The agreed process to design and deliver Live Briefs in faculties started with each school identifying the most suitable Level 4 modules to incorporate a Live Brief (one per course excluding those with embedded compulsory professional practice). At the end of the academic year 2019/20, the authors engaged with the identified module leaders through live webinars to prepare them for the upcoming design and delivery stage in 2020/21. Next, the authors worked with these module leaders on a one-to-one basis to support and empower them to design Live Briefs proposals, following the principles of constructive alignment (Biggs and Tang, 2011). Every Live Brief starts from identifying suitable brief activities to meet a selection of the module's intended learning outcomes. In this initial design stage, module leaders are also expected to consider the types of output students can produce as a result of the identified suitable briefs and how these outputs link to the module assessment tasks.

Moreover, module leaders are also expected to anticipate the level of support from intended professional partners necessary to support the brief, including how professional feedback will be provided to students. Once a first draft of the Live Brief proposal is completed by a module leader, it is then reviewed by the dedicated implementation team behind the Live Briefs initiative. This review process is not only to ensure that the proposed briefs exhibit all the aforementioned critical attributes, but also to identify the support module leaders will need from professional services. For instance, the business partnership development teams support module leaders in finding suitable partners locally, formalising the partnership through collaborative agreements and managing these relationships to ensure they are mutually beneficial and sustained throughout time. On the other hand, employability and career advisers support module leaders with preparing students to work in a professional context and make the most of their interaction with the collaborating partners.

Outcomes

In 2020/21, it is anticipated that Live Briefs will be offered in approximately 40 Level 4 modules across more than 70 courses at ARU, which are all those undergraduate courses that do not embed compulsory professional practice in the curriculum. From 2021/22 onwards, Live Briefs will also be offered in Level 5 modules in the same courses. ARU has already secured the collaboration of diverse partners, including city councils, local trusts, design studios and international consultancy firms. We have also received expressions of interest from more than 25 local professional partners who are keen to offer Live Briefs to ARU students.

Early anecdotal feedback from the module leaders and partners involved has been positive regarding student attitude and engagement with their Live Briefs. Systematic evaluation of this first iteration of the Live Briefs initiative will be carried out during summer 2021, when data in relation to module performance and stakeholders' experience will be available. Only then we will be able to share some impact case studies.

The appropriate governance structure and processes have been established across faculties to provide accountability to the university executive team. The agreed institutional KPIs to monitor and evaluate the impact of the Live Briefs initiative include students' assessment of perceived impact on career prospects and satisfaction with the modules.

An interesting institutional outcome of Live Briefs, which may be of interest to the wider sector, is its emerging importance to ARU's wider work on innovation and business development. Although the Live Briefs project has emerged as a curriculum initiative, it has quickly become a strategic part of our business support services portfolio through offering access to student and graduate talent in our community.

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Future Global Leaders Forum: a cross-cultural and cross-disciplinary skills development programme

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Stage one: background

Queen Mary University of London is one of the most diverse higher education institutions in the world, with international students representing more than 160 nationalities and comprising approximately 40% of the student body. As the university's Academic Lead for International Student Experience, the author undertook an evaluation of international student data from a suite of surveys and focus groups conducted from 2016-2018. The analysis suggested that international students were seeking additional work experience placements and more opportunities for interaction with staff outside of lectures. Accordingly, I sought to develop an initiative that would address these expectations as well as enhance the interaction between international students and their UK peers.

The global jobs market demands higher-level skills (Advance HE, 2016; STEM Learning, 2010-19; Lewis, 2017) and higher education can help foster their development. Active learning through work experience benefits skills development and career prospects by extending learning into the real world (Killen and Chatterton, 2015; Advance HE, 2016). Through student-staff partnerships, the knowledge, behaviours and skills that employers value can be gained, including teamwork, communication skills, critical thinking and problem-solving (STEM Learning, 2010-19). This aspect of higher education is increasingly important, given that career goals have been cited as the primary reason why most current and prospective students opt to attend university (Universities UK, 2016).

The Future Global Leaders Forum, focus of the present case study, was developed as an institutionwide student-staff partnership scheme enabling students to take on leadership roles and drive positive change. It brought together international and UK students, from diverse disciplines and backgrounds, to work and learn together and build professional and cultural competencies needed in future leaders. It aimed to offer an authentic international learning experience, without requiring student mobility.

In the pilot year of the Future Global Leaders Forum (2019), the development timeframe was approximately six months, with 19 work experience projects being delivered. One stream of projects was developed with Queen Mary academic or professional services staff on the main Mile End campus (11 projects relating to various aspects of student experience, involving nine staff members). A second project stream was developed with Leaders in Community, an award-winning local charity in the Borough of Tower Hamlets (eight projects relating to ongoing charity initiatives, involving seven charity staff). Staff defined the initial project theme before staff and students subsequently worked in partnership to agree and deliver the outcomes.

Project work was supplemented with a programme of leadership and skills development sessions and numerous networking opportunities. It culminated in a student conference event called the Global Leaders Summit, where the teams presented the outcomes of their work. The Future Global Leaders Forum was approved under the University's 'QM Extra' scheme for recognising extracurricular achievements; students who engaged with the programme had their participation recorded in Section 6.1 of the Higher Education Achievement Report (HEAR).

Consulting Queen Mary students' union representatives at the outset encouraged their input into the format of the pilot, in keeping with the importance of student voice in designing partnership schemes (Mercer-Mapstone and Marie, 2019). Selection for participation was based on a personal statement, while project allocations were informed by student preferences as indicated on the application form, and assigned according to the application ranking order. The programme launched in January 2019 and the reporting deadline was in March, which gave the teams approximately six weeks to conduct their project work.

Stage two: approach

The Future Global Leaders Forum was open to application by all London-based students at Queen Mary (any nationality, subject area or level of study). This was done to recruit a wide range of participants and bring varied perspectives (cross-cultural and cross-disciplinary) to the project teams, which can enrich learning (Bovill, Cook-Sather and Felten, 2014). In the inaugural year, 58 students were selected, who represented 20 nationalities and all three of the university faculties.

Following the engagement from the student body and positive feedback from students and staff, it was decided to expand the programme to 100 students in the second year (2020). This was achieved through increasing the number of staff partners who volunteered campus projects (16 projects involving 19 members of staff). The number of external partners was also increased, with the Institute of Directors and local charity ReachOut UK joining Leaders in Community to offer non-profit work experience (12 projects involving seven staff). Team size was set uniformly to four students per team. Following a successful application call, 104 students were selected, representing 25 nationalities and greater diversity across schools than in the pilot (owing to even wider promotion of the programme across faculties).

Several enhancements were introduced that were motivated by anonymous evaluative feedback collected from the pilot cohort. The timeframe for project work was expanded to nine weeks, since six weeks was seen to be too limiting and often did not allow for teams to implement their proposed recommendations. The skills sessions were expanded to include additional topics (such as presentation skills and working effectively in diverse teams). A minimum attendance (50%) was imposed for inclusion on the HEAR, which improved engagement with the skills sessions compared to the pilot year. Students who did not meet the attendance requirement due to evidenced timetable conflicts could submit a reflective exercise to compensate for missed sessions.

All student and staff partners were invited to the Global Leaders Summit in the pilot year. This was, for many, the highlight of the programme, providing a rare developmental opportunity for students to contribute to a conference event. They presented the outcomes of their work in an interactive format (World Café, 2020), engaging with and receiving feedback from distinguished leaders and

entrepreneurs, who also inspired them with plenary talks about their personal leadership journeys. In 2020, the event had to be cancelled due to disruption from the global pandemic and, at the time of writing, a digital version including plenary speakers and award-winning student presentations is being compiled instead.

Several participants in the pilot cohort indicated that they would have liked to have seen examples of leadership in practice or, in the words of one participant, "to see what leadership looks like" (Cohort 1 respondent). In response, I designed a work shadowing opportunity for the second cohort. Work shadowing is typically an unpaid and generally informal opportunity to observe professionals at their job to gain insights into their role and workplace (Smith, 2019). My 'leadership shadowing' scheme engaged the Future Global Leaders Forum students with distinguished leaders across London in government, policy and business, including university senior management and a diverse group of Queen Mary alumni. All were short visits with opportunities for small group career development discussions with the leader host. To ensure genuine motivation, visit allocations were based on a statement of interest and preference ranking. Of the 30 leadership shadowing visits that were organised, eleven had to be cancelled due to the 2020 pandemic, while two were implemented online instead.

Stage three: outcomes

Partnerships can promote a sense of belonging to the learning community, which is linked to success (Healey, Flint and Harrington, 2014; Cook-Sather, 2018). The Future Global Leaders Forum implemented three innovative concepts for diverse teamwork: 1) Students across the entire student body working together towards common goals; 2) Cultural and academic discipline diversity within teams; and 3) Partnership work between students and staff, who otherwise would not typically encounter one another. Impact was measured through anonymous surveys of the participating students and staff conducted after the programme completion in both years.

Students asserted that the Future Global Leaders Forum, through the team projects and skills sessions, developed transferable skills and enhanced their personal development. Another reported benefit of the Future Global Leaders Forum was the interdisciplinary knowledge gained through cross-disciplinary partnerships (Healey, 2019; Taylor, 2015; Sotiriou, 2018). The team-based approach succeeded in engaging international students with UK peers, and the charity-based projects engaged them with our surrounding multicultural community, both developing intercultural awareness. Working across disciplines and cultures on meaningful projects "added richness to the overall experience" (Cohort 1 respondent) and was highlighted in feedback as a very effective way to gain new skills and knowledge.

The students further valued the knowledge gained "from leaders with a vast range of experiences" (Cohort 2 respondent) and many reported transformational growth in self-confidence. They "made great contacts from networking" and these connections introduced new ideas and possibilities about future careers. The leadership shadowing innovation enriched the programme tremendously, giving rare insights into leadership and professional skills and encouraging students to "not shy away from any role" (Cohort 2 respondent) of being a leader. Further, 100% of the leaders said they would participate in the leadership shadowing again.

The Forum was a special opportunity that merged "passion and career goals together" (Cohort 1 respondent) and helped students "find a voice within a university of thousands" (Cohort 2 respondent). It fulfils elements of the university strategy as an extra-curricular opportunity that enables and documents skills development (through HEAR), promotes cultural understanding, and helps students understand and contribute to real-world issues. It also provides a successful model for meaningful engagement of students with external organisations and leaders for career insights.

Diverse practices in student partnerships within and beyond the formal curriculum have been reported previously (Healey, 2019; Mercer-Mapstone and Bovill, 2019; Mercer-Mapstone et al, 2017). The Future Global Leaders Forum enacted a cross-institutional student-staff partnership, which could similarly be applied at subject or faculty level if a focus on discipline-related skills and networking was the strategic objective. Although initially designed for face-to-face delivery, the programme could be further developed for digital delivery; indeed, several successful projects implemented this year included an online component, providing a framework for more globally facing projects offering sustainable 'virtual mobility' and even wider reach.

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Supporting master's students' employability – a tailored approach

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Background

One-year master's students have long posed a challenge for educators wanting to support the development of both academic content and employability. How can providers fit all such content into a short space of time, especially given the time frames presented by the UK labour market, which often expects students to apply for graduate level jobs and PhDs almost as soon as they begin their study? The challenge, exacerbated in the 2019-20 academic year by the global health pandemic and the attendant need to use online and multi-mode formats, is for employability-related content for postgraduate students to be delivered in the right way and at the right times.

This case study reports on an initiative developed at Imperial College London following the College's 2018 introduction of a new Learning and Teaching Strategy (Imperial College London, 2018). The strategy sought to review, evaluate and reinvent curricula, implement strong pedagogic models and update teaching methods, with a particular emphasis on interactive learning, to futureproof all programmes. Among the many opportunities presented by this strategy was the scope for departments to create projects and apply for funding from the Pedagogy Transformation Fund. The Faculty of Medicine's Postgraduate Education Team, in collaboration with the Careers Service, seized this opportunity to create an innovative, digital learning tool called Attributes and Aspirations, to support master's students' employability. The present case study will show how the tool addressed an unmet need, identified by both students and staff via surveys and such feedback channels as the Staff-Student Liaison Committee.

A bid was prepared, outlining an online short course that would specifically focus on postgraduate medicine programmes, using a framework based on a new careers model, Plan: Me (Dallison, 2019). The bid detailed that a pilot with a select number of postgraduate taught programmes in the Faculty of Medicine would be run initially in the 2019-2020 academic year, before rollout to all Faculty of Medicine postgraduate programmes in the 2020-21 academic year. This would then be followed by offering adapted versions of the short course to other Imperial College faculties. By adapting content and creating tailored courses relevant to the differing disciplines, the intention was that the short course would be suitable for master's programmes across the college. Continuous evaluation processes were built into the bid to assess the viability of further adaptations to offer the short course to undergraduate programmes within Imperial College, and potentially to other institutions.

While similar online programmes targeting master's students are available (eg University College London offers a pre-entry careers skills online course), the tailoring of Attributes and Aspirations to specific subjects, combined with the facility for students to develop both careers and transferable skills makes this short, innovative and timely course both essential and pioneering.

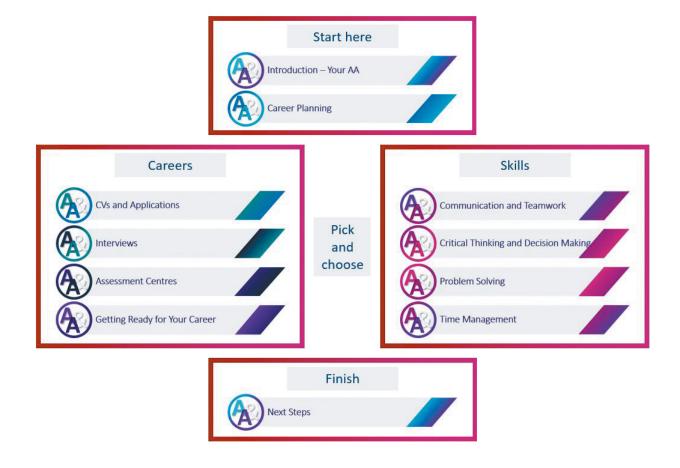
Approach

The Attributes and Aspirations team adopted a co-creation approach, within which all team members were responsible for all content. The diverse, multi-disciplinary team undertook an initial brainstorm of ideas for content and delivery in order to craft an effective structure, with modules and units that flow and contain varied and interactive content that would both entice and maintain student engagement. This was actioned through a combination of implementing the Analyse, Design, Develop, Implement and Evaluate (ADDIE) Model (Kurt, 2017) and Merrill's influential model of instructional design (Greenwood, 2017) and was informed by Knowles' four principles of andragogy (Thompson and Clayton, 2004).

Real world tools such as LinkedIn, GoinGlobal and Marketline Advantage are incorporated throughout Attributes and Aspirations to create an authentic learning environment and enable students to practise networking and searching, mimicking the job exploration process. Active learning is also fostered using media and interactive content which means that students are not just passive observers. Videos, created by the team and from sites such as TED Talks and internet sources, are integrated into the content to add detail and depth. Formative feedback is ever present with more than 150 short activities that provide answers, and suggestions for development spread throughout the 11 modules and 45 units of the short course.

The aim of Attributes and Aspirations is to meet the employability and skills needs of students. Therefore, the team's first task was to develop an information base of what these needs were. Discussions were undertaken with students, academics, employers, and other organisations within the college involved in transferable skills development, to help create a comprehensive overview of what skills and support would be needed. Research was also undertaken to identify the primary transferable skills employers would want from future graduates, using reports such as *Workforce of the Future* (PwC, 2018), *The Skills Gap in the 21st Century* (QS and ISE, 2018) and the *Future of Jobs Report* (World Economic Forum, 2018). From here a plan was developed to create and pilot the careers-related content for delivery in the 2019-20 academic year and then to build the transferable skills modules, ready to roll out to all Faculty of Medicine master's cohorts the following academic year. While there were initial discussions on making the short course credit bearing, this idea was discarded to enable students the freedom and flexibility to use the content as and when they needed it, without the added pressures of further assessments.

Fig 1: The AA short course



The completed Attributes and Aspirations short course is constructed in two broad sections as indicated above: career related and transferable skills, with over one hundred links between units, as well as links to key skills throughout. To maintain the flexibility of the course, students can access any module or unit within the programme when they wish. They can choose to study all modules or just those that they feel will be most beneficial to them. It is recommended to students that they complete the Introduction and Career Planning modules first, as these contain the foundation on which the short course is built and offer training on three core elements – Plan: Me, reflection, and the creation of impactful LinkedIn profiles to enable networking. Each section has a link to the Attributes and Aspirations Skills Map (Imperial College, 2020b) which gives students an overview of the links between units and allows them to clearly see where the 24 key skills are addressed throughout the short course.



Fig 2: Example of interactive AA Skills Map

The backbone of Attributes and Aspirations is the practical careers tool Plan: Me (Dallison, 2019) which scaffolds the development of practical goals and allows reflection on learning gained during the short course and from the students' own life experiences. The tool was developed over years of careers practice to support students to adopt a logical and methodical approach to career planning and to action a decision-making process. The development of the tool was informed by the tenets of Hope Theory (Synder, 1995) which is based on the notion that individuals like to work towards a goal and to build their sense of agency. It also incorporates elements of careers theories including the visual aspects which Amundson discusses in his book on active engagement (Amundson, 2003); solution focused career counselling (Miller, 2004); and the GROW coaching model (Alexander, 2006), all of which focus on developing confidence and independence in individuals. In a practical sense, Plan: Me is the systematic development of a career pathway diagram constructed over the course of Attributes and Aspirations to help the student visualise and work through a series of actions to progress their decision making. As students work though the short course, their Plan: Me evolves, allowing each student to track their journey and develop an effective decision-making and career-planning process.

Learning design best practice commonly employs tools such as a learning design canvas (Instructional Design Central, LLC, 2020). Such an approach was adopted by the team and, while modelling the target audience for Attributes and Aspirations, four distinct student profiles were defined. These profiles were then developed into the 'AA Avatars' and are used to help describe elements of the course. As students progress through Attributes and Aspirations they see the 'AA Avatars' - Rumi Jones, Alan Acharya, Chris Deaks and Christina Jai – identify personal skills and values, apply for jobs and start work. Not only do these avatars, who all have CVs and other application documents, provide exemplar material to aid students in the development of their own application documents, they also narrate the entire short course, take different pathways, and engage with different activities while interacting with students as they ask for advice and share their experiences. Each avatar also has a unique Plan: Me which develops and evolves with them as they move throughout the short course. For example, Alan successfully applies for a PhD in Aberdeen and we explore the decisions he makes during his relocation; Rumi balances a job and freelance work, and we see how she prioritises her actions, and both Chris and Christina explore the overlap between personal and professional life. The aim of these stories is to allow students to relate the avatars' learning and development to their own real-life situations.

Student input into the design and development of Attributes and Aspirations occurred at numerous levels. Students participating in the Imperial StudentShapers programme (Imperial College London, 2020c) worked in partnership with the team to provide content input and to consider how it would be delivered to students; student forums were held during the initial development phase to seek input and gauge views, and regular feedback was sought from those participating in the pilot. Additionally, two learning gains surveys were completed by students, one focusing on career development and the second on skills development, to support evaluation of the effectiveness of Attributes and Aspirations and to support further developments and enhancements.

Students are made aware of the existence of Attributes and Aspirations through a range of routes, including direct communication from their programme teams and via social media promotion. A dedicated website was developed and introductory sessions are offered during induction weeks to ensure students have full information about how the short course can support their learning, development, decision making and employability opportunities. In the pilot year, these introductory sessions were held face-to-face but from 2020-21 onwards these will be virtual sessions.

Outcomes

The pilot was delivered in 2019-20 within the Faculty of Medicine, with six master's programmes and one PhD programme. Students from the PhD programme were aware that the content was not targeted at them specifically, but showed significant interest when they heard of the short course and it was felt it would be potentially both interesting and useful to include them in the pilot and review their evaluation. Over the course of the year, students completed 141 units, with the most accessed module being Career Planning. Feedback was overwhelmingly positive from students with one student giving verbal feedback that they, "would rather do Attributes and Aspirations than watch Netflix" (Pilot Student 1, 2020) and crediting the course with prompting a complete change of career direction, from an anticipated role in management consultancy to a research and development role in the pharmaceutical industry, with a view to completing a PhD in health economics. A second student submitted formal feedback stating: "I have been particularly impressed with the way the course navigates through all the career advice that a postgraduate student should be aware of [...] AA gives some excellent tips that I had never heard of before and I wish I had known sooner! Moreover, the online course is extremely easy to navigate and has been a great source of information to refer back to time and time again" (Pilot Student 2, 2020). This student has gone on to do a PhD.

Multiple students fed back through course evaluation forms that they appreciated the content around social media and networking and that they would like us to add more. In response to this we have further developed some of the pilot units to include different social media behaviours as well as revisiting it in some of the newly developed modules. Another theme running through the feedback was an appreciation for practice material and preparedness, "It makes me more aware that I do not feel prepared for getting a PhD, which doesn't sound like a good thing, but it honestly is" (Pilot Student 3, 2020).

An unexpected but welcome outcome of the pilot has been the commissioning of the team to develop a full version of Attributes and Aspirations for PhD students. An assessment element will be included in this version, with five ECTS points being applied to the PhD short course. A pilot will be delivered within the Faculty of Medicine during 2020-21, with a view to full roll-out across the faculty in 2021-22.

With the onset of the Covid-19 global health pandemic in March 2020, the decision was taken to allow Attributes and Aspirations to be offered to all Faculty of Medicine master's programmes to support employability for all students. This also raised the profile of the short course with academic programme teams who, over summer 2020, were working to transfer their respective teaching content into a multi-mode format. As a result, in academic year 2020-21, some programmes will be directly instructing their students to take Attributes and Aspirations modules that serve to support their course content (eg MSc Immunology students will be advised to complete the Critical Thinking and Decision Making, and Problem Solving modules).

Overall, the implementation of Attributes and Aspirations to date has been a positive, steep and informative learning curve with the team's current three key learning points being:

- 1 Engaging networks both within the university structure and externally enables all elements of the development and implementation to operate more effectively.
- 2 The last 20% of development of each phase takes considerably longer than originally planned for sometimes as long as the first 80%.
- 3 The co-creation process generates a fruitful and energetic development space, be it in person or online, which leads to more robust and interactive content.

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Closing the gap: an inclusive approach to developing employability skills

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Background

There are increasing concerns internationally that undergraduate students are not always developing the skills required to compete in today's society. In relation to the student population considered in this case study – accounting graduates – Pan and Seow (2016) reveal how technological innovation has transformed the way companies report financial performance, with a resulting increase in the level of digital skills expected from graduates. Sithole (2015) reports that, due to organisations moving from manual to computerised processing, the most highly rated digital skill required by employers is knowledge of accounting software packages. Machera and Machera (2017) suggest that many graduates' inadequate exposure to these packages leads to underperformance at induction stage with a resulting expense of time and money by employers. Therefore, it would seem that an increased component of computerised accounting is very much needed within the accounting curriculum.

One positive means by which accounting undergraduates can develop employability skills through work experience has been the widespread incorporation of internships on programmes. However, there remain many challenges in delivering them. At the start of the new millennium, Howieson (2003) stressed the need for accounting internships to be constantly evaluated to ensure their ongoing success, but as Jackson (2015) shows, the more immediate challenge is often one of simple placement capacity. There is a danger that these problems will increase: Bunney, Sharplin and Howitt (2015) reveal class sizes are growing.

Another strategy for developing student employability is extra-curricular activities. Artess, Hooley and Mellors-Bourne (2017) state that these additional strategies can complement or extend the curriculum and in turn enhance the student learning experience. These opportunities can help graduates differentiate themselves by demonstrating additional competencies to prospective employers.

This paper will report on an alternative approach to widening opportunities for accounting students to gain additional employability skills through extra-curricular activities. It involves the integration of digital skills and technology through the application of pedagogical frameworks.

Approach

Computerised Accounting is an extra-curricular course within Swansea University's BSc Accounting programme, designed as a non-credit bearing module since 2015. This allows the curriculum to be extended and provides opportunities to enhance the student learning experience. The module is voluntary and offered to final year accounting students. The curriculum is designed to integrate technology within the classroom through a commercial computerised accounting software programme, SAGE, which is used widely by many businesses.

By providing students with an opportunity to practise classroom accounting knowledge and experience real-life accountancy tasks, the module allows them to develop additional skills that employers are seeking and therefore add value to graduates (Senik et al, 2013). The scheme of work is carefully constructed to develop practical skills, which are outcome based. As noted, Machera and Machera (2017) stress the increasing value employers place on an accounting curriculum that is outcome-led and which produces graduates who display 'hands-on' competencies. Throughout the module, students are thus assessed on their production and analysis of reports from the system to demonstrate their understanding.

Previous academic studies have revealed that when educators integrate digital skills into the curriculum, consideration must be given to how this will be embedded, as technology alone is not enough. If there is an over reliance on the technology, there is potential for the student's understanding of the concept to decrease: "computers do not change a thing in accounting education since you have to master the principle whether you have a computer or not" (Boyce, 1999, 202). Since Boyce's observation was made, technological advances have developed at a rapid pace and investment within technology continues to grow within various functions of an organization. However, there are global concerns that accounting curricula are failing to keep up with these advancements. Indeed, Pan and Seow (2016) reveal that accounting professional bodies are increasingly requiring accounting curricula to be reviewed in order to better reflect current and emerging technologies within businesses.

The pedagogical frameworks that inform this study are Technological Pedagogical Content Knowledge (TPACK) (Koehler and Mishra, 2009) and the Wheel of Learning (Crawley, 2011). The frameworks have been applied to develop an integrated curriculum that combines the lecturers' knowledge of accounting with their knowledge of computerised accounting skills and applies a pedagogical approach, which involves experiential learning. The application of these frameworks is represented in the diagram below:

Figure 1: Application of the TPACK Framework (Koehler & Mishra, 2009)

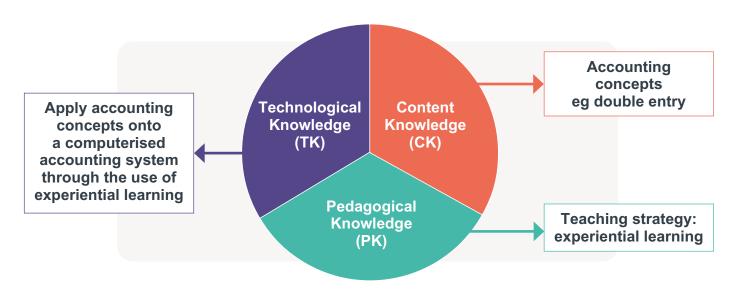
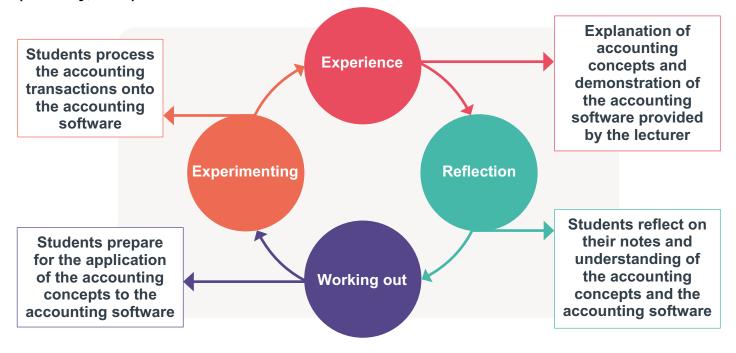


Figure 2: Application of the Wheel of Learning (Crawley, 2011)



Applying the wheel of learning (Crawley, 2011), as seen in figure 2, potentially allows for a more advanced form of learning with reinforcement. Students can review their practical results by experimenting with a computerised system and applying their knowledge of accounting concepts.

The reflection element allows a deep approach to learning as students can review their understanding of accounting concepts and the accounting software by reflecting on their notes and make any adjustments, if necessary, to extend their knowledge and understanding.

On completion of the course, the additional module is listed on the degree transcript. A certificate and portfolio, which includes a statement of competence that lists all the skills that they have developed, is also produced. External collaboration with local accounting firms and a professional accountancy body also supports the design of the module and enhances employability.

Outcomes

A questionnaire was designed to collect qualitative and quantitative data in order to evaluate if the skills that graduates developed from this module enhanced their employment prospects and supported their transition into the workplace. An application for research ethics clearance was approved and the questionnaire was provided to those that had graduated between 2015 and 2018. We received n = 61 completed questionnaires, therefore our sample represents 41% of the total population (n = 149).

Graduates reported that their main reason for studying computerised accounting during their degree studies was to develop their practical accounting skills (Table 1).

Table 1: Graduates motivational reasons for studying computerised accounting in rank order (1= very important, 5 = least important)

Motivational reasons	Rank
The opportunity to develop practical accounting skills	1
To improve my job prospects	2
To enhance my CV	3
Because experience of SAGE is required to apply for many accounting job vacancies	4
To be more competitive	5

Since completing the module, 73% of graduates reported that specific reference was made to the module during the recruitment and selection process. This signifies the importance of this module in that it reflects the additional skills, which are relevant to the accounting profession.

Although a small number of respondents explicitly reported using SAGE software (Table 2), the majority of graduates reported that they still use some other form of accounting software system within their role.

Table 2: Accountancy software programmes used by graduates

	Sage	QuickBooks	Xero	Other
%	27	6	6	61

Despite graduates not using the same software package as in their university studies, this clearly did not have a negative impact in terms of the perceived usefulness of the module (Table 3) as most graduates found the module very useful in preparing them for future employment.

Table 3: Levels of usefulness the computerised accounting module was in preparinggraduates for future employment

	Not at all useful	Slightly useful	Moderately useful		Extremely useful
%	2	8	31	40	19

Another important factor that could have contributed to the usefulness of studying computerised accounting is that 60% of respondents indicated that they did not receive any training on a computerised accounting software programme from their employers, thus suggesting the value of offering computerised accounting opportunities to students prior to their transition to the workplace.

Responses regarding the benefits gained prior to starting employment (Table 4), highlighted that graduates considered the module had developed their knowledge and understanding of accounting. Comparisons were made by some graduates between SAGE-approved trainers and the course they experienced at university.

One qualitative difference indicated by the graduate sample was their view that, in the university context, they had been actively encouraged to make links with the concepts previously studied and how to apply this knowledge to practical scenarios, while, in their experience, SAGE-approved trainers had focused largely on teaching to the assessment and preparing to pass a test. The significance of this demonstrates the need for a pedagogical approach to be integrated along with the technology and not to introduce the technology alone. Williams and Williams (2011) conducted a study using experiential learning and reported that this 'hands-on' approach provides opportunities for knowledge to be created through the transformation of experience.

Demonstrating the relevance of what they learn and how this can be applied to real life experience can equip students with the necessary tools for their future careers. This can be advantageous, especially for those who have not been able to undertake an internship (Davies, 2000).

After starting employment, another benefit to studying computerised accounting reported by respondents was the development of transferable skills, which assisted graduates within their role (Table 4). This could be understood by the fact that although 63% of graduates do use an accounting software programme within their job and that this is not SAGE (Table 2), the skills that they have developed have assisted them in using alternative accounting software packages.

Findings from this study (Table 4) also revealed how some graduates perceived that they had gained a competitive advantage, as they were able to apply for vacancies where experience of accounting software programmes was required. From gaining this experience, they could differentiate themselves from other candidates and those who had not been able to gain an internship during their degree studies felt they were not disadvantaged.

Response ID	
R_1obFm0xYtgw3I5J	Point of difference on a CV. Shows that I had initiative to go beyond the basics of my degree. The university course is by far and away better than courses provided by SAGE approved training providers (which I had paid for). The university course taught us how to use the package meaningfully while the training providers teach you to pass the test.
R_W67iJ7YTLxwYwnf	I received a few job offers due to my knowledge of SAGE 50.
R_2cpjM5Nguyg2UxR	It enhanced my CV to get me in the door. I currently use SAP in work and being able to use SAGE enabled me to learn how to use SAP a lot quicker.
R_W67iJ7YTLxwYwnf	It was easier to just get on with my role and my employer was satisfied, as I did not require any SAGE training.
R_Rzv5Nsf72LnWdTr	The advantage of experience with using an accounting programme as most positions state the use of computerised accounting when applying for accounting jobs.
R_2X0T5YfJqI3R0Ag	The employer asked theoretical questions regarding SAGE and how they linked to other modules, I had studied. I also referred to other skills I had developed eg time management skills. I explained that I opted to do an extra module and still obtain a first-class honours degree.

Table 4: Sample of responses from graduates about the benefits gained from studying computerised accounting before starting employment

The study thus establishes the importance of extra-curricular activities, and how they can enhance the student learning experience and the future careers of accounting graduates. More importantly, there are indications that the initiative provides an inclusive approach and alternative pathway for those who have been unable to complete an internship during their university studies.

This study could provide useful information to academics and administrators who are considering making changes to their curricula in order to develop additional employability skills and make use of the suggested frameworks to incorporate technology within their syllabuses to help align graduates to the job market as a result of technological advancements.

Going forward, the Computerised Accounting initiative will be developed by engaging employers to assess if there are other key skills which might be considered to further increase student development and support students as they enter a competitive job market.

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Chinese international students' employability transition in UK higher education

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Background

Successive UK governments have consistently given priority to graduate employability in higher education (HE) reform (Dearing, 1997; Wilson, 2012). Accordingly, an employability-enhanced curriculum has been widely adopted in universities, ranging from embedded versus stand alone; accredited versus non-accredited; and mandatory versus optional modules.

Despite the increasing emphasis in government policies on the importance of employability development, the concept of employability remains ambiguous when it is related to HE. It is claimed by Sanders and de Grip (2004) that employability is an individual characteristic in one's capacity and willingness to remain attractive in the labour market. Holmes (2013) proposes three competing perspectives on employability, namely possession, position and process, going on to theorise the last of these perspectives as ultimately a process of seeking personal identity (2013).

Nevertheless, we claim that to only emphasise individuals' attributes would be to overlook the institutional responsibilities of universities, whose key responsibility is arguably to teach students about 'learning how to learn'. Therefore, the current case study adopts the definition of employability as follows:

"A set of achievements – skills, understandings and personal attributes – that make individuals more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy."

(Knight and Yorke, 2003, 5)

In practice, even though universities have been trying in every way to help students to develop their employability skills, from course design to teaching pedagogy, and from teaching students personal and professional skills in class to building connections directly between employers and students, students' perception of employability development remains unclear. It is worth investigating what their understanding of employability is and what skills they are aware they possess after all the efforts we have made.

Our paper aims to explore the meaning of employability to Chinese international students in the UK and to investigate the perceived impact of employability training on students' employability prior and post their UK education. These questions are of importance to Chinese international students in the UK. Currently one in every three non-EU students is from China, and the number of Chinese student applications to UK universities is rising – up by 30% in 2019 (Weale, 2019). More importantly, from the current cohorts of Chinese international students at the University of Greenwich, we can establish what we have done well via the lens of employability development as the growing number of Chinese students coming to UK universities might indicate the competitive advantage we have compared to universities from other countries.

In prior studies, researchers have attempted to measure employability empirically on the outcome of employability-enhanced curriculum in HE (Cramer, 2007; Rothwell and Arnold, 2005; Speight et al, 2013; Tymon, 2013). There has been relatively little focus on international students. Recent research carried out by Huang, Tuner and Chen (2014, 12) studied 449 mainland Chinese students from 25 British universities and claimed "personal skills and attitudes" significantly affect employability. However, it is difficult to establish where these skills have been developed, especially for those students who have prior higher education experience in China before coming to the UK. It is important to explore the impact of employability development offered by UK universities. Answers to this question would indicate directions going forward and create room for improvement to ensure a growing share of the global education markets.

Approach

To obtain a deep understanding of Chinese students' experiences and perceptions of impact, a qualitative approach with a purposeful sample design was adopted in our research. Our research was undertaken at the University of Greenwich and involved one current cohort of Chinese students and two groups of Chinese students who graduated from the University of Greenwich in academic years 2018-19 and 2019-20. Our approach comprised three phases carried out over a six-month period. During Phase One, a feasibility study was conducted to develop interview questions and to check their wording. Since all participants were Chinese students whose first language is not English, this phase was to ensure the Chinese translation was equivalent to the interview questions and addressed the intentions of the research. In Phase Two, in-depth interviews were conducted with three student groups, who graduated from Anhui University in China in the years 2018, 2019 and 2020 respectively. Phase Three involved interpretation and analysis of the results.

This research invited participants from a 3+1 undergraduate business programme jointly provided by the University of Greenwich and Anhui university. Students on the programme normally study at the Chinese university for the first three years and join the University of Greenwich in their fourth year as direct entry students. Almost all of these direct entry students will continue with a master's degree at a UK university after their undergraduate study.

Three student groups were targeted. The first group consisted of students who had recently completed their study at Anhui University in July 2020 and were scheduled to join the University of Greenwich in Sep 2020. The second group was comprised of students who completed their study at Anhui University in 2019 and have recently graduated from the University of Greenwich in July 2020. The third group comprised the students who completed their study at Anhui University in 2018 and who had graduated from University of Greenwich with a bachelor's degree in 2019 and have also just graduated from a UK university with a master's degree in July 2020.

By purposefully targeting these three groups, one with zero experience of UK universities, one with one year's experience, and one with two years' experience, it was hoped to see a differential degree of transition in these students on the hypothesis that the longer the students studied with us, the more career-ready graduates they become. With all the students coming from one Chinese university, it helps to control to some extent for any impact made by the Chinese university on students' employability development.

Ten participants were recruited from each group for in-depth interviews. The research ethics approval for undertaking interviews was obtained from the university's research ethics committee prior to the interviews taking place. All interviews were conducted via WeChat, an interactive app with live chat, video and message functions. Each interview lasted one hour. An interview transcript was created and directly translated back into English after each interview. Interview questions were provided in both English and Chinese to the participants. All interviews were conducted in Chinese and the results were interpreted in English.

To understand the extent to which the discipline-embedded modules and employability specific module activities of UK and Chinese universities are supporting employability development, the following questions were asked:

- + What is your understanding of employability?
- + What skills have you learnt from the discipline modules?
- + What skills have you learnt from the employability modules?
- + Do you have experience of the careers service at university?
- + Do you have any internship experience?

Outcomes

Through in-depth interviews, our research explores the perception of employability of Chinese students and examines the impact of employability development on Chinese international students prior and post their UK education. A summary table of participant responses is as follows:

Table 1: Summary of participants' responses

	PG-UK	UG-UK	UG-CN
Understanding of employability	 + Having a clear career strategy and working hard towards plan + Skills for interview + Subject knowledge + Standing out of peers + Communication skills 	 + Subject knowledge + Relationship skills + Technology skills (Excel) + Language skills 	 + Professional certificates + Subject knowledge + Relationship skills
Skills learnt from discipline modules	 + Knowledge in specific areas + Communication skills – from tutorial + (Teamwork skills – from tutorial) 	 + Searching data + Critical thinking + (Communication skills – from tutorial) + (Teamwork skills – from tutorial) 	+ Using accounting software
Skills learnt from employability module	 + Academic writing skills + Words, Excel + Writing CV 	+ Academic writing skills	 + Submitting a 4000-word report + Submitting a PPT slides
Experience of career services	+ Little	+ Little	+ N/A
Internship experience	+ Yes	+ Yes	+ Yes

Table 1 provides a summary of Chinese students' perceptions of employability and employability development. For each interview question, the responses are listed based on the number of times mentioned, from most to least.

Regarding the understanding of employability, subject knowledge was mentioned across all three groups. It also appears that more skills have been recognised by the PG-UK group than by the UG-UK and UG-CN groups. Furthermore, more employability skills were mentioned in addition to subject knowledge by the PG-UK group. Interestingly, relationship skills appeared in both UG-UK and UG-CN groups but disappeared from the PG-UK group. China is a relationship-oriented society, the disappearance of relationship skills in the PG group indicates that Chinese international students have grown in self-confidence and independence after two years' study overseas.

For skills learnt from discipline modules, both PG-UK and UG-UK students reported subject knowledge learnt from attending lectures. Some students mentioned that cases used by lecturers helped to connect them with the real world. When further questions were asked about any skills learnt from tutorials, most of the students reported having developed communication skills and teamwork skills. For UG-CN students, no such skills development was reported since teaching in China is only conducted via lectures. There is no tutorial style of teaching.

The responses for skills learnt from employability modules were surprisingly disappointing. The predominant response is academic writing skills from both PG-UK and UG-UK groups. For UG-CN students, most participants only recalled the submission of a 4000-word report for the respective module Career Plan in their first year of study and in year two, the students were asked to present a business set-up plan with PowerPoint slides. No specific skills were mentioned by the UG-CN students.

Most students from PG-UK and UG-UK groups have little proactive experience of the careers service provided by universities. Students reported that they were not looking for jobs in the UK, especially for the UG-UK group as they would all continue a master's degree in the UK. A few PG-UK students revealed that they considered their English not good enough to seek help from the careers service. The students did report having received regular emails about job opportunities and invitations for company presentations organised by the careers service. However, they found these were not that helpful. Chinese companies normally recruit students directly when they visit campus, but few opportunities are offered by UK employers on their campus visits. On the contrary, Chinese universities normally organise a recruitment fair twice a year on campus, but there is no careers service providing services to individual students.

In conclusion, the response from Chinese international students indicates that the longer the learning experience at UK universities, the stronger the self-awareness of employability development. This may also echo the study stage of the students. Postgraduates recognise more employability skills than undergraduate students as they are joining the job market. In addition, there appears to be a common neglect of employability development among undergraduate students with both the UG-UK and UG-CN groups. Since it is not clear why the key transferable skills such as problem solving, leadership and decision-making skills have not been self-reported by either student group, further research should be undertaken to find out whether it was caused by a lack of awareness, despite students already possessing these skills, or if more needs to be done in subject curriculum design to develop these skills in students. It is also worth considering how to develop students' personal attributes through subject and skills modules. To make the learning of employability effective, we recommend either to explicitly allocate marks to employability development on assessments of discipline modules or to make employability modules credit-bearing to enhance students' attention and self-awareness. Finally, while this case study is focused on Chinese international students, there is an important broader implication for international students from other countries and home students on the effectiveness of employability learning.

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Social justice and employability: how to embody this in staff collaboration in order to improve student opportunities

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Background

The challenge of improving graduate outcomes against the background of the Teaching Excellence and Student Outcomes Framework (TEF) affects all English universities and their academic staff, whatever their individual commercial background or philosophical stance towards higher education (HE). In 2019/20 the Faculty of Education at Edge Hill University introduced an Employability Sub-Committee, responding to the widening of provision beyond the traditional remit of Initial Teacher Education (ITE), as well as TEF, and with a desire to maintain the faculty's well-established ethos of social justice. While social justice is itself a contested term, particularly in education (Boylan and Woolsey, 2015; Cochran-Smith, 2009; North, 2006), the faculty ethos reflects the regional context of the university: the north-west of England with above national average levels of deprivation, low social mobility (Carneiro et al, 2020) and low postgraduate physical mobility (Donnelly and Gamsu, 2017), ie social justice is situated in a context of both economic and cultural injustices. Education and access to education is considered to be necessary for the challenging of these injustices. Education has the possibility of being transformative when students can "celebrate their ways of knowing" (Duckworth, 2015, 32) and their identity is validated. From this standpoint of empowerment, students are in a position to access career and employment opportunities previously not considered to be within their grasp (Duckworth, 2013).

In introducing programmes to the faculty outside of ITE, faculty colleagues have encountered new challenges, particularly in relation to ensuring students have equivalent access to highly skilled employment opportunities on completion of their degree as those on ITE programmes.

Approach

During the development phase of the Employability Sub-Committee (ESC) in the spring and summer of 2019, a key factor that was fundamental to its creation was the intention to embody the ethos of social justice predominantly for the benefit of students but also for members. As a result, the faculty members included had a variety of academic and non-academic roles and few had significant committee experience (three out of 11). Moreover, papers were written to facilitate discussion around choice in order to value "their (own) ways of knowing" (Duckworth, 2015, 32) and to promote shared decision-making.

The committee first met in October 2019 and began by developing the Faculty Employability Strategy. Working within the University Employability framework of 'Knowing employability skills', 'Knowing employers', 'Knowing your employability strengths and being able to practise' and 'Knowing how to present as a compelling candidate' and using the University Employability Strategy as a basis, the ESC members co-designed its own strategy and underpinned this with a position statement which drew on the work of Yorke in particular:

"A set of achievements – skills, understandings and personal attributes – that makes individuals more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workplace, the community and the economy."

(Yorke, 2006, 8).

By taking this position, through ESC the faculty has been able to recognise the regional context of our students without diminishing their opportunities for development – and reflects something of the United Nations imperative for (higher education) institutions to consider the ethical impact of their work on the wider community as indicated in its Sustainable Development Goals (United Nations, 2015).

Outcomes

Working across traditional boundaries has allowed for perspectives and insights to be shared and for colleagues within and without the faculty to wrestle with common tensions and challenges within a safe space. Moreover, new initiatives have been able to develop quickly and flexibly. For example, it is widely recognised that the mapping of student employability opportunities across programmes benefits all stakeholders: academics, students, external stakeholders, partnership developers and administrators. Beginning with expertise from the Work-Related Learning Team in another faculty, a common format has been developed which integrates graduate attributes and the university employability framework together with local knowledge of the relevant graduate outcomes' markets. Originally intended for the education programmes, those colleagues working on ITE programmes on the committee quickly saw the benefits for their own programmes and became keen creators and adopters of the approach, bringing additional flexibility into the format as a result of the co-creation through the committee mechanism.

This sharing of innovative approaches across the faculty's traditional barrier between ITE and education programmes was also evident in the careers events that were delivered in April 2020. Two sets of events had been planned; one for primary ITE programmes and one for education programmes that did not lead directly into teaching. Due to discussions that began in the committee, it became evident that some ITE students had decided not to go into teaching and so access to the sessions and resources planned for the alternative event would be useful. Independently, each team decided to deliver their events online. Following this, conversations around online delivery became shared and opportunities for increased accessibility for students explored. As well as inviting students to both sets of events, the ease of recording online sessions meant that materials could be readily shared across a wide range programmes in ways that had not been previously considered. Moreover, it has meant that individual programme leaders could use the recordings with their students at times that fitted in with their curriculum delivery, rather than being dependent upon the availability of relevant staff.

The impact of this approach has had some positive unintended consequences. For example, the 2020 Advance HE Employability Symposium submission to which this paper refers involved a wide range of colleagues. As a group we represented professional support colleagues of different hierarchical standing as well as academics with very different roles and areas of responsibility and who cross both departmental and faculty boundaries. In working together, we have been able to provide developmental opportunities for each other that may not have existed otherwise – to the extent that the subcommittee secretary has been able to use the increase in responsibility and experience in improving her own opportunities and moving to another organisation.

In each of these examples a transformational leadership approach, as articulated by Dvir et al (2002), has been adopted so that the diverse membership of the committee can be given the confidence to work outside of their traditional hierarchical, programme, departmental and faculty divisions, marking something of a cultural shift within the institution. What this means is that there is an underpinning attitude that allows for an interaction between networking/collaboration and faculty process. The introduction of the committee has given permission for further collaboration to develop quickly from previously existing networks. In turn, networks have arisen as a result of the existence of the committee. A key element of the success of this has been the deliberate decision to minimise the negative impact of traditional boundaries between departments, academic versus support staff and hierarchies.

Looking forward, work-based learning for students on both ITE and Education programmes can be a common challenge. Inherent in that challenge is that programme leaders and departments can become more focused on their own specific issues rather than work across boundaries due to internal deadlines and external pressures. The nature of the ESC has not only created a context where the challenges and solutions are reported but provides an active base from which to develop innovative and shared solutions so that student experience is enhanced rather than truncated. The transferability of this approach reflects the new reality that all universities are responding to the increasing importance of the 'graduate outcomes' metric, with national data being used to create key performance indicators that will be key evaluative measures for the approaches taken. As indicated earlier, a common response has been an expectation that academic colleagues individually have a responsibility to deliver employability whatever their own commercial/industry experience has been and whatever their philosophical standpoint. Consequently, universities, faculties and departments are facing similar battles. This approach has allowed the faculty to address the common challenge of improving graduate outcomes without compromising the values of staff.

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Supporting physics graduates' outcomes through the lens of work mobility behaviour, personal resilience and career readiness

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Background context

The Industrial Strategy, the current government's plan for the future of UK productivity, articulates the ambition to position the UK as the world's most innovative economy, requiring a flow of "high-quality graduates" to support innovation and regional economic growth (Department for Business, Innovation and Skills, 2019). No regional economy will grow if it does not attract people to work in it, or provide its existing population with the means to prosper. Such ambition is tempered by the reality that regional productivity in the UK has become highly unbalanced as the economy continues to shift towards service-centric growth in the larger urban centres (Selfin et al, 2020). This economic reality matters to a large number of university students, including physicists who seek skilled employment in their home domiciled region (Higher Education Statistics Agency Open Data, nd). This is a concern given the persistent and uneven regional productivity, the variability of labour markets across the country and constraints upon work mobility for some students (Zymek and Jones, 2020).

Project Context

Analysis of the graduate work mobility patterns of all UK students shows that the White Rose Industrial Physics Academy (WRIPA) universities of Leeds, Sheffield and York are the three 'top ranked' institutions in terms of retaining graduates in the region; in each case more than 30% of students who move from their domiciled region to study at these universities stay there to work. It is also noticeable that these institutions also facilitate a significant proportion of net migration to London (around 20% of students studying at these institutions). However, the majority of the remaining 50% of students return to their domiciled region to work. This is especially true of students domiciled in the north (east and west) of England and suggests that many students have a preference for location, dubbed 'emotional geography', based on close social networks, influence of family or proximity to urban conurbations (Miller and Donlan, 2014). The importance that students give to 'emotional geography' affects the kinds of jobs they can get after graduation (D'Silva and Pugh, 2020). This is crucial when considering graduate outcomes as the economy of the south of England significantly outperforms that of the north of England (Teow and Reilly, 2019).

Approach

Within the Yorkshire, Humberside and East Midlands (YH+EM) economic region sits the White Rose Industrial Physics Academy (WRIPA) (Hirst, 2019). Inaugurated in 2014 and supported by Hefce Catalyst funding, WRIPA is a 10-year collaboration between business and the university physics departments of Hull, Leeds, Nottingham, Sheffield and York. WRIPA's mission is to provide physics students with the opportunity to gain skills, knowledge and work experience that will better prepare them for graduate-level technical employment, irrespective of where they choose to work. This ambition is delivered through physics-contextualised activities based on curriculum development, careers support and the organisation of employer recruitment events. More recently, WRIPA has been awarded funding from the Office for Students' Challenge Competition to improve links between physics departments and regional employers, develop inclusive modes of work-based learning and support physics students to be more work mobile.

The technical versatility and breadth of skills of physicists are pivotal for driving growth in strategically important industries, including those in the YH+EM region (Institute of Physics, 2017); Department for Business, Innovation and Skills, 2017). However, there are significant challenges in connecting physics students to highly skilled (regional) employment opportunities that can be characterised in the following way:

- + physics students connect poorly with central careers services
- + physics students tend not to look broadly outside of academia when looking for a career
- + a high proportion of high value and technical employment in the region is through small and medium-sized enterprises (SMEs)
- + physics students are often unaware of the regional employment opportunities that are available
- + physics students disproportionately engage with large companies via institutional recruitment fairs and are not aware of the opportunities offered by SMEs.

The factors highlighted above give rise to three core challenges that WRIPA has identified and often preclude physics students from gaining undergraduate work-based learning experience or graduate-level work. These core challenges are: firstly, work mobility (ie emotional geography) – physics students prioritise 'place' or geographic location over 'work' when seeking post-study employment. Secondly, students' 'invisible barriers' (eg imposter syndrome, fear of failure) to non-academic attainment precludes them from applying for work-based learning opportunities or graduate roles. Thirdly, students self-select out of institutional recruitment fairs that they consider 'prestigious' or 'self-marketing' activities.

Outcomes, next steps and question:

To address these challenges, WRIPA has implemented the following activities highlighted below. WRIPA aims to support all undergraduate physics students to have the opportunity of gaining work experience and to apply their technical knowledge and skills in a professional context. This approach will enhance the career prospects of all physics students and allow them to realise their potential, irrespective of where they choose to work.

Physics graduate work mobility: WRIPA has partnered with the Higher Education Statistics Agency (HESA) to understand UK graduate students' mobility and how work mobility affects students' career prospects. The dataset comprises 1.87m DLHE records for all graduating degree cohorts between 2011 to 2017. In analysing this dataset, the study will investigate: (a) how mobile (WRIPA) physics students are compared to other institutions and subjects and (b) what factors correlate graduate level employment with mobility (eg gender, education background, schooling). Our initial analysis of the data shows that local physics students tend to take local jobs and the data indicates that those students that are 'work immobile' have lower graduate prospects. The data suggests the higher education and labour markets are not 'liquid'. Typically, physics students prioritise 'place' or geographic location' over 'work' when seeking post-study employment. In an economic sense, WRIPA physics students are far from 'rational'.

Better connecting physics students to regional work opportunities: WRIPA surveyed approximately 300 physics students across the five partner universities to understand their interest and awareness of the regional job market. Their answers were stark:

76% of respondents answered Agree/Strongly Agree to the proposition:

"I am interested to take up employment in my local region."

82% of students answered "No" to the question:

"Do you know of employment opportunities for physics graduates in your local region?"

To date, WRIPA has directly supported more than 250 students to gain technical work experience through industrial placements, internships and undergraduate industrial projects. WRIPA now places an increasing emphasis on connecting our students to regional technical employers through a broad range of interventions – for example, via curriculum development. In the academic year 2019/2020 WRIPA ran 21 final-year industrial projects involving 63 students. The majority of these projects were sponsored by regional employers. Nottingham Physics has recently launched an MSc in Applications of Machine Learning in Science that is primarily focused on developing professional graduates aligned to the fast-growing regional financial technology (fintech) sector. WRIPA also organises an annual physics-specific recruitment fair that connects midlands and northern physics students to technical employers. Typically, the fair attracts 700-900 physics students and 40-45 regional and national employers.

Supporting physics students to apply for work opportunities – invisible barriers to nonacademic attainment: by surveying current registered year-in-industry students we found that fear of failure and imposter syndrome are strong demotivating factors for physics students applying for work-based learning or graduate opportunities. In response WRIPA has partnered with the Institute of Physics (IOP) to develop an Introduction to Resilience and Wellbeing guide. Published in late 2020, the guide is available to all UK university physics students (a current population of approximately 16,000 students) and will form the basis of a series of undergraduate workshops focused on aspects of resilience to change.

Optimising digital engagement tools to enable students to virtually research and connect with employers: we have found, from a WRIPA student survey, that a significant subset of physics students do not engage well with large corporate recruitment strategies or institutional careers fairs, which are perceived as 'prestigious' or a 'self-marketing' activity. To address this WRIPA is currently redesigning its website to enhance physics student career readiness and digital connectivity with employers. For example, a pilot project is ongoing between the physics departments of Leeds and Liverpool to develop an interactive Physics Careers Exploration tool. This digital tool will enable students to match their career aspirations and role preferences to physics-relevant jobs and subsequently to compatible employer webpages or WRIPA physics alumni. Initial feedback from students was:

Respondent A:

"Loved it - it actually gave me my desired career as my result, so that's pretty cool."

Respondent B:

"Think it's a super good concept for people that aren't sure what to do with their degree."

Conclusion

Greater attention than ever is being placed on how universities enable their graduates to achieve their career goals. Employability activities through curricular and extracurricular activities are typically a key approach used by both physics departments and careers and employability services to develop important graduate attributes based on skills-centred approaches. However, this approach is predicated on students being highly work mobile with high psychological capital (eg resilience in the face of change) and an awareness of how to relate their degree programme to regional labour markets. WRIPA looks to address these challenges by organising regional work-based learning opportunities that are contextualised in mathematics and physics or supporting our physics students to become more work mobile ie by supporting physics students to develop both their psychological capital and their social capital by, for example, building professional network contacts. We argue that while a skills-based approach is critical for physics students' learning, it is nonetheless too narrow and does not fully capture the complexity of work-ready graduates or graduate work mobility behaviour.

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Enhancing Indian MBA students' employability through an experiential and inclusive learning residential: an accessible and inclusive approach

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Background

This case study reports on the preliminary findings of a research project investigating the impact of a three-day residential learning experience on postgraduate MBA students' employability at the University of Central Lancashire (UCLan). The research design draws from the Career Edge Model developed by Sewell and Dacre Pool (2010), to explore students' perceived development across recognised graduate attributes.

In recent years, UCLan has seen a marked increase in the numbers of international students joining the University's MBA, a programme which embeds a professional placement element. In 2014, 14 students registered on the programme, rising to 522 enrolments (over two intakes) in the 2019-20 academic year, the majority of which are Indian nationals. This is in line with national sector trends, whereby UK universities have seen a growth in international recruitment, specifically postgraduate programmes offering practical training or work opportunities (Duttagupta, 2018). The number of international students studying at UK HEIs is set to grow further, with the UK government aiming to have 600,000 international students enrolled by 2030 (Department for Education, 2019). This, coupled with the new post-study work visa coming into effect from September 2020, forms the UK's international education strategy to make the UK more attractive to international students (ICEF Monitor, 2019).

However, recent studies suggest that the main aspect attracting international students to the UK is rather the availability of work experience and employability-enhancing opportunities (Duttagupta, 2018; British Council, 2020) and accordingly, policymakers stress that more needs to be done to develop work-ready attributes (CIHE, 2010; Universities UK International, 2020). Additionally, the Migration Advisory Committee (2018) stresses that if the post-study work visa is introduced widely, international students should be supported through their course to be able to secure skilled work upon graduation. Concerns over the supply of employment opportunities, such as internships, placements and graduate roles, have been exacerbated by the global health pandemic of 2020 and early reports anticipate up to a 61% reduction in the availability of employment roles (Weale, 2020).

The MBA course is two years in duration. In the first semester of study, in groups of approximately 20, the students attend a three-day experiential learning residential off-campus. The students engage in exercises on the residential, including role play, business simulations and team-building activities. Students also complete structured debriefing sessions after each activity. Overall, the residential provides an opportunity for students to practise their skills (including leadership, teamwork, problem-solving, time-management and communication skills) in a safe and supportive environment.

The residential encourages students to draw from their wider life experiences, previous education, individual cultures, personality traits and characteristics to explain their behaviours and actions on the residential. By thus helping students realise how and why they all respond differently to the same experience, the residential operates on principles of inclusive curriculum design, recognising that "students have multiple identities that are shaped by their previous experiences and that a diverse range of personal circumstances influence how they study" (Morgan and Houghton, 2011, 8).

Approach

This research aimed to evaluate the residential as an intervention for enhancing the employability of UCLan's MBA students (all of whom are international). To achieve this, an online questionnaire was created based on the Employability Development Profile (EDP) devised by Sewell and Dacre Pool (2010). The EDP draws from the CareerEDGE model of graduate employability created by the same authors (Dacre Pool and Sewell, 2007). One of the salient features of the CareerEDGE framework is its inclusion of emotional intelligence (EI) as a component of graduate employability (Dacre Pool, 2017), as emotional intelligence and emotional self-efficacy are increasingly considered to be strong predictors of employability (Dacre Pool and Qualter, 2013). The EDP offers a series of employability aspects to discuss with students, including generic skills and EI, which were the two main components incorporated into our questionnaire. Considering the economic disruption caused by the 2020 global health pandemic, our questionnaire also asked students if the residential had helped to develop skills that they considered would mitigate these impacts.

The online questionnaire was distributed in July 2020 to all 600 MBA students, across four intakes. As the research only included MBA students studying at one institution, this design adopts a case study methodology. While case study research findings are not usually generalisable to whole populations (Hammersley et al, 2011), case study research can provide valuable and rich data for illuminating a particular phenomenon (Flyvbjerg, 2006). The case study findings from this research will provide an opportunity for us, and others, to learn about international student perspectives on enhancing employability.

Ethics statement: the ethical considerations associated with our research mainly include the power dynamic between us as academic staff and our students, alongside GDPR considerations. We were granted the relevant approval by our institution's own research ethics committee before proceeding with the administration and analysis of the questionnaire.

Outcomes

Of the 600 MBA students approached, a total of 182 responded to our questionnaire, equating to a 27.6% response rate. The responses suggest that students overall felt the residential had helped to develop employability skills, as well as gain a better understanding of themselves through self-reflection. The results revealed three key areas in employability enhancement, as follows:

+ Increased confidence

A total of 89% of respondents stated they felt the residential had developed 'well' or 'superbly' their self-confidence. This increases to 99% if we also include the 'developed ok' responses. Reasons attributed for this increase in self-confidence are connected to the arrangement of the residential, which is perceived as a safe and supportive environment in which to practise skills and reflect:

"Before my residential I was somewhat timid and shy, but after the residential I have gained confidence in my skills and learnt that skills can be developed with practice and the feedback was very helpful to understand from an expert point of view."

(Respondent 1).

Overall, the responses support that international students felt that the residential alone had increased their self-confidence.

+ Enhanced emotional intelligence

Of the 174 MBA students who responded to the three emotional intelligence (EI) questions, an average of 77% of students felt that the residential had developed their EI either 'well' or 'superbly'. The chart below shows the responses for each of the three EI questions:

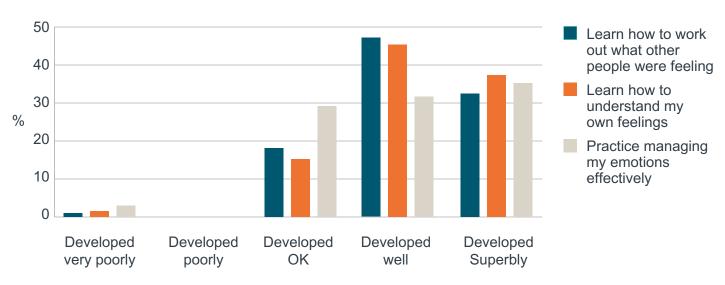


Chart 1: How MBA students felt the residential developed their Emotional Intelligence skills (%)

Student quotes support that they gained insights into their EI abilities via the immersive team working environment on residential:

"Residential helped me about being empathetic and I got to know that individuals have different feelings and emotions."

(Respondent 2)

"My team members mostly spoke in their native language all the time which rendered the learning experience more frustrating than I expected. Due to this main frustration, I learnt how to control my emotions and most importantly I cultivated a lot of self-control."

(Respondent 3)

As highlighted earlier, El is increasingly believed to be a strong predictor of employability (Dacre Pool and Qualter, 2013), so the high level of perceived development of emotional intelligence skills on the residential is a reassuring result, supporting the suggestion that the residential experience enhances employability.

Furthermore, 40% of the respondents stated the skills and experience gained on the residential had directly helped them to better cope with the job uncertainty as a result of the 2020 global health pandemic, largely attributing this to their EI development:

"My residential experience impacted my ability to cope with difficult situations, and also developed a strong emotional stability to discover opportunities in difficult situations."

(Respondent 4)

+ Job-seeking Benefits

Despite 71% of the sample having work experience prior to starting their MBA, the results indicate a trend that the residential is beneficial for job-seeking. Of the respondents, 53% stated that they had used examples from their residential in job application forms and 56% declared they had drawn upon experiences gained in the residential during job interviews. When asked whether respondents felt that the residential has helped them to obtain employment, 66% said 'yes' that the residential had either directly helped them obtain a job or had indirectly helped by developing certain skills employers seek:

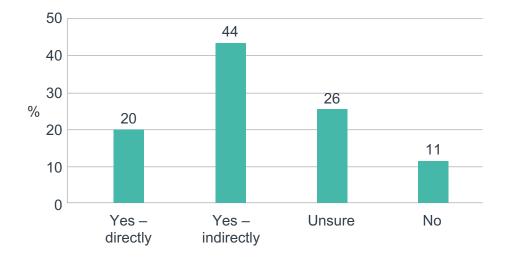


Chart 2: Has the residential experience helped you to obtain employment?

Indicative questionnaire responses on this question were as follows:

"It actually helped me realise who I am and what my strengths and weakness are. That actually helped me in interviews."

(Respondent 5)

"I added my experience of residential in my CV and explained it in some of my interviews. My experiences were about teamwork, time-management, decision-making, leadership. Those are the basics that every MBA candidate should have experience in, hence I believe these experiences helped me get an internship."

(Respondent 6)

"[The] residential actually helped me to crack two of my interviews for my part-time job. The HR was very much impressed by the way I expressed my views very effectively because of the skills I enhanced during residential."

(Respondent 7)

Overall, this research aimed to understand how an immersive and experiential learning experience helped international MBA students to enhance and understand their own employability. These early findings give indications of promise that this initiative is an effective way to enhance international students' EI skills and employability in an inclusive way. This research project focused upon the MBA students as a whole and did not fully explore how aspects such as age, gender and prior work experience levels influenced the specific benefits obtained from the residential. As a result, the next stage of this research will involve a deeper level of analysis of these key areas, to further understand MBA international student employability development.

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Cracking the employability code: a multifaceted and collaborative approach to employability in the curriculum at Sheffield Hallam University

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While universities increasingly employ a range of employability strategies (Farenga and Quinlan, 2016), many are often focused on a careers service offer with limited curriculum integration. This case study will outline how Sheffield Hallam University (SHU) developed a strategic path to diversified employability provision by evolving a combined programmatic approach that prioritises curriculum integration. By moving away from notions of a 'bolt on' or 'magic bullet' response to employability development, the initiative facilitated an all-encompassing skills-based approach (Jackson, 2016) informed by a Career Management model (Williams et al, 2016). Sheffield Hallam has a vision to become the world's leading applied university, shaping students' futures to prepare them for whatever they choose to do, while developing mutually beneficial collaborations with employers to ensure that graduates are well placed to become future leaders and employers can benefit from access to talent.

SHU has a strong track record in prioritising employability and enterprise. The institution's positive scores for highly skilled employment in the most recent Graduate Outcomes Survey indicate that 96% of SHU students progress immediately to work or further study. However, to take the ambition further and to achieve the institutional goal of becoming a world leader, SHU has more recently made the bold, value-driven commitment to embed credit-bearing work experiences for every student, in every level of their course.

In order to create something meaningful and sustainable, this step change needed a clear and defined employability framework that both students and staff would appreciate and recognise as 'change for good' with regard to their current practice within curriculum parameters. Critically, it needed to offer students and staff a real chance to review, inform and develop their curriculum. It was important for course teams to create their own space and identity to develop learning experiences that would prepare students and give them the confidence for further study or highly skilled employment, thus both embedding and revealing employability to students.

The approach

This new and evolving model consists of six crucial commitments applying to all undergraduate courses at SHU, at every level of study.

1. Work experience

Six work experience categories were defined with every student undertaking a core work experience module accounting for 20 credits at Level 4, 5, and 6. Local interpretations and responsibilities within the employability frameworks enabled the work experience model to come to life within each subject area.

The evidence is clear that engaging and involving students with employers is a proven success indicator associated with highly skilled employment (Silva et al, 2016) and that embedded work experience and experiential learning opportunities are enablers for graduates to be considered by employers (Helyer and Lee, 2014). The market research company High Fliers (2015, 2016, 2017, 2018 and 2019) repeatedly highlighted that top graduate recruiters state that, due to the very obvious benefits of work experience to an individual's skillset, graduates with work experience are prioritised in their selection processes.

2. Sandwich placements and applied professional diplomas (APDip)

The benefits of sandwich placements are well attested: they result in improved attainment outcomes, (Mansfield, 2011; Crawford and Wang, 2014); graduate outcomes and earnings levels (Jones, Green, Higson, 2015; High Flyers, 2016, 2017, 2018, 2019), as well as less immediately measurable benefits such as improved confidence.

Accordingly, SHU has sought to make sandwich placements available to all students on all courses, alongside an associated Applied Professional Diploma award, as a significant enabler to support students' graduate level employment. The new award offers five distinct work experience settings from which students choose to personalise their award. The Diploma provides a consistent and clear structure providing an opportunity for students to expand their applied learning and articulation of success through an impactful course and subject-relevant synoptic portfolio and associated academic and employer supervision.

3. Digital skills

In planning the initiative, access to digital skills for all students was considered to be of the utmost importance in helping them to work and study more effectively as well as supporting their continuing professional development. SHU's new digital skills vision aims to recognise the nuances and differential needs in students' capability within the digital skills landscape, and we are thus committed to delivering a dynamic digital skill focused curricular workstream that will apply to all students, regardless of course.

4. Career-readiness

The preceding initiatives are all designed to foster a coherent philosophy of career-readiness in all aspects of the curriculum, providing students with embedded opportunities to benefit from the structured thinking, planning and learning associated with 'future-proofing' oneself. Consequently, the University's Careers and Employability team have been empowered to drive this agenda and, where necessary, facilitate academic upskilling through an emerging applied learning curriculum model.

5. Graduate attributes

Developed in collaboration with students, staff and employers, a distinctive '3+3' Graduate Attribute model allows courses to revise, define and position their programme of learning in the context of a shared, institutional vision. Courses adopt three core graduate attributes (confidence, creativity and resilience), and then select an additional three from a suite of elective attributes. This forms an autonomous, but institutionally shared, approach to course identity, enabling staff to define their position within their chosen course, fields of knowledge and expertise, industries and communities. This dimension of the initiative looks to redress the oft-reported mismatch between higher education's interpretation of attributes needed and those demanded by employers (Osmani, et al, 2019).

6. Employer advisory boards

Developed in collaboration with students, staff and employers, the University's Employer Advisory Boards are another key enabler to help enrich curriculum development and drive improved graduate outcomes; every course is now aligned to at least one annual Employer Advisory Board. A series of co-designed resources and impact measures act to facilitate a results-driven approach to the boards which is progressive, meaningful and powerful.

Outcomes

This project is taking a long-term approach, reflecting on progress, and adapting and responding to local and external needs – for example, the 2020 global pandemic necessitated significant adaptations to the framework, including the design and delivery virtual placements. Yet, even in its initial phase, the strategy has resulted in such positive outcomes to date as:

- 1 Growing student involvement in external applied projects (from 2,719 in 2016-17 to more than 6,000 in 2020-21).
- 2 Completion by over 2800 students of a new 'transition' module introducing students to employability through their course.
- 3 More than 1500 face-to-face and virtual placements delivered.
- 4 All departments running the aforementioned Employer Advisory Boards, thus influencing curriculum content, designs and identifying employability opportunities.
- 5 All courses have identified their 3+3 Graduate Attributes and are embedding these in their course.
- 6 More than 630 students are undertaking a sandwich placement in academic year 2020-21, the current global pandemic notwithstanding. Three new year-long placements have been established with a 100% increase in recruitment and the involvement of cross-disciplinary teams to initiate projects.

- 7 The provision of a startup service, including a dedicated space for up to 150 student and graduate businesses with 56 new student and graduate businesses registered across a broad range of business sectors: creative industries; IT/digital; retail; services; food and beverages.
- 8 SHU has grown student enterprise interactions from 1,600 in 2016-17 to 3,200 in 2018-19, with projected growth to 4,000 in 2019/20.
- 9 Improved enterprise engagement, seeing a rise in graduate startups from 30 in 2016-17 to 56 in 2019-20.

We will continue to learn from curriculum success and setbacks, listening to students, employers, and staff to build, adapt and tailor the curricular and careers offer to support all students on their personalised 'future proofing' journey.

As a long-established civic university, SHU is engaging more with local SMEs; indeed, 98% of businesses in Sheffield are designated as SMEs. The principles around flexibility, agility, efficiency, student, and business focused and a core civic presence aligns exactly with this ambition and demonstrates the institution's commitment to its longevity. We need to use and learn from our key employers and business partners through Employer Advisory Boards to facilitate and drive change in a way that prepares students for an unknown future. Importantly, we need to ensure these six components complement rather than compete and we are ready to capitalise on the huge influx of opportunities and successes this will undoubtedly bring.

Much work is still to be done, and we seek to 'crack the employability code' by driving employability through all activity, enabling multidisciplinary and lifelong/lifewide capabilities concurrently (Bridgstock and Tippett, 2019). The next steps for SHU, and indeed for all HE providers, are to ensure graduates can respond to the fast-changing economic and social environment. Supporting graduates in this endeavour involves recognising the growth of portfolio and multi-phase careers and the need to retrain and reskill. Creative working with alumni as lifelong partners and 'employability learners' represents the next phase of an ambitious and ongoing employability project.

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Employability framework and personal development planning: closing the loop

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Background

The Open University's (OU) Employability Framework (EF) is a tool for embedding and making explicit employability within the curriculum and provides greater transparency in terms of the way employability is developed through a student's journey at the OU. The EF draws on key research alongside preexisting institutional and external frameworks (Hillage and Pollard, 1998; Knight and Yorke, 2003; Dacre Pool and Sewell, 2007; Advance HE, 2020) and was developed after close consultation and engagement with key stakeholders (students, academics, employers, alumni). It encapsulates the core employability skills and attributes that the University considers OU students need to support them in their personal, study and career development and can be contextualised according to discipline. Use of the EF is now integrated into curriculum design and review processes across the OU.

The EF (Figure 1) aims to reflect the unique nature of the OU student body, demonstrating a range of differing employability needs (Cooke and Meade, 2020). Additionally, the OU's open access policy means that students come from an unparalleled range of diverse backgrounds and start their studies at different stages in their careers – the majority are employed in some capacity as they study. The study motivations of OU students can loosely be classified as career starters; career progressors; career changers; and non-career related, for example community engagement or simply personal satisfaction.

As has been long documented in the core literature, employability is not simply about preparing students for employment. Every student's journey is unique; their experience, motivations and aims are individual and may change over time. Addressing the employability needs of OU students across the breadth of their aspirations, and linking these together in a coherent and holistic way, requires a range of interventions and a degree of customisation. Particularly challenging has been finding innovative ways of engaging with all students, regardless of study motivation and supporting them to "bring the outside in" (Jackson, 2011) as they engage with their studies. Enabling students to recognise that their previous work and life experiences form a significant element of their lifelong learning and that they can bring these experiences together reflectively to enhance their current studies is instrumental to the development of their unique employability narrative.

Figure 1 – OU Employability Framework



Approach

Mapping OU curriculum (across all curriculum areas) against the EF began with 10 early adopter qualifications in 2018, followed by a further 11 in 2019 (Figure 2).

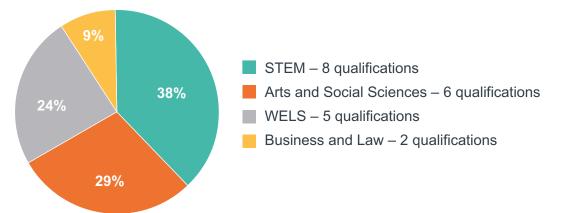


Figure 2 – Curriculum areas mapped against EF

The content of the modules within these qualifications was mapped against each element of the EF and examples of effective employability development in the different framework elements were collated. It was made explicit that there was no expectation that every module would contain every framework element but that there should be coverage across each qualification level. Each module was mapped by an academic from the module or qualification team and verified by a learning and teaching consultant from the OU's Careers and Employability Services (CES). Following verification, a red/amber/green (RAG) status was compiled for the qualification (Figure 3).

Figure 3 – Summary RAG diagram for a mapped qualification	Figure 3 – Summary	y RAG diagram for	a mapped qualification
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Employability element	X117	X119	X217	X313	X314
Core skills and competencies					
Problem solving					
Communication					
Collaboration					
Numeracy					
Digital and information literacy					
Personal attributes and behaviours					
Initiative					
Self-management and resilience					
Self-awareness					
External awareness					
Commercial and/or sector awareness					
Global citizenship					

The RAG rating system was an outcome of the initial mapping and subsequent verification (and advisory amendments) by the OU's CES consultants. This document was then used as a starting point for discussions with curriculum teams about their approach to employability, highlighting gaps and possibilities for curriculum enhancement.

By recognising the essential relationship that personal development planning (PDP) has with the EF and curriculum mapping, we can enable our students to reflect upon, articulate and evidence the core employability skills and attributes being developed and enhanced as they study. Led by the EF, FutureYOU (the OU's personal development planning tool) consists of PDP support resources contextualised by curriculum area, using the examples of employability development identified in the mapping. This 'plays back' to students the specific areas of their studies where they had the opportunity to engage with elements of the EF. FutureYOU is now integrated and accessible across a student's whole study journey, incorporating the development of study goals and planning across their lives in work, study and personal contexts. It has been designed so that it is relevant for students to use at any point in their studies. The tool contains a OneNote template which students can populate as they study, essentially creating a portable record of their unique employability narrative that they can take with them on graduation.

In May 2020, a survey was conducted to provide insight into students' perceptions and understanding of employability and evaluate the impact that introducing employability explicitly in curriculum and students' concurrent use of FutureYOU has had on working towards their goals (academic, career and personal).

A Jisc (2020) online tool was used to survey 3102 students who had engaged with FutureYOU over the previous year – 428 students responded (13.8%). The survey consisted of six questions, five of which were radio-button responses to a series of statements and one a free text answer. The first three survey questions explored student understanding of employability and development of skills and attributes, while the second three questions explored student use of FutureYOU. Analysis was provided by the online tool as well as qualitative analysis of the free-text responses (using NVIVO).

Outcomes

Student understanding of employability and development of skills and attributes

Encouragingly, 66% of students understood the development of skills and attributes in study as enablers to achieving employment/career goals, with over 75% of respondents reporting confidence in reflecting, articulating and discussing their skills and attributes (Figure 4). Many reported that engagement with employability in the curriculum had helped them to develop their articulation of employability in relation to all three study goals. It might be argued that one would expect to develop the core competencies in any academic programme of study but it may only be through familiarisation with these elements that students begin to recognise how they relate to their own career and personal goals – and it would seem that this student cohort recognised the elements of the EF and their value across a range of study motivations.

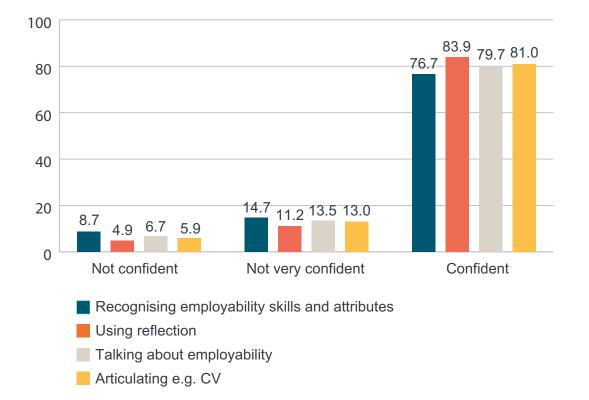
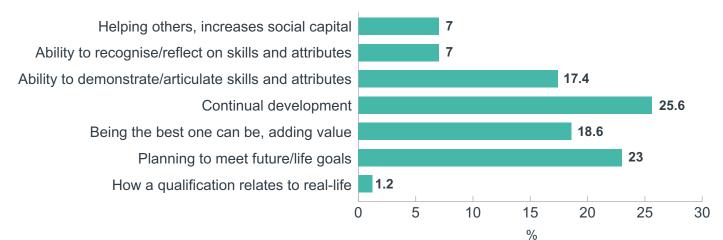


Figure 4 – Students' expressed confidence re employability skills and attributes

By contrast, when students were asked in the free text question (350 responses) to comment on their understanding of employability (rather than elements of the EF) most respondents (75%) associated employability primarily with employment. This is in itself not surprising, and much has been written about the use and usefulness of the term employability (Norton and Dalrymple, 2020; Songhurst, 2020), despite the OU (and wider HE) definition of the term as being about much more than getting a job or achieving career aims. However, we were encouraged that 25% of respondents considered that "employability is about more than employment" (Figure 5). Here, students talk about employability adding value, developing their ability to recognise, reflect upon, articulate and demonstrate skills and attributes and helping others.

Figure 5 – Student responses – employability is about more than employment



Employability is about more than employment (n = 86, 25% of responses)

Given that one of the main purposes of FutureYOU is to provide a mechanism through which students can develop their employability narrative, it is encouraging that, at this early stage in its implementation, over 50% report that the tool was useful/very useful in supporting the achievement of their goals. The below quotation from one respondent is representative of a wider view in the data:

"FutureYOU has definitely helped me to think about my goals and my employability. I am about to start my last undergraduate module with the OU and I really wish I could have had access to this at the beginning of my OU journey." (OU student, 2020)

This is encouraging, as it suggests that the examples of employability development identified during the mapping process do resonate with students and prompt their exploration, reflection and articulation of employability. Work undertaken to date suggests that the EF embedding process, supported by a tailored PDP tool, does support students to understand and value employability in a much wider sense and to recognise the value of engaging with employability throughout the course of their studies and into the workplace. Indeed, authors such as Yorke (2006) and Jackson (2011) make it explicit that employability is ongoing throughout one's life – and that personal, career and academic experiences all contribute to this 'work in progress'.

Conclusion/next steps

The challenge of finding an approach to employability that is engaging for a diverse student body, including interdisciplinary students, was outlined in the opening paragraphs and it is pleasing to note that the integration of an employability discourse throughout the curriculum in a staged manner does seem to engage students and support them in their personal development planning. Students report that their use of FutureYOU supports the reflection and development of their academic and personal goals as well as their career goals and aspirations. At the same time, colleagues engaged in the process of mapping their curriculum against the EF report that the approach is effective due to its relative simplicity – with clear guidance supporting them to map employability effectively across the curriculum. An additional benefit of embedding the EF into curriculum design and review processes will be that it will enable institutional tracking of the extent of curriculum engagement with employability and evaluation of its impact on students.

Further investigation needs to be undertaken to assess the approach at different levels of study – but it would appear to be a useful technique to support student engagement with employability throughout the student lifecycle, regardless of the subject/discipline(s) studied or method of delivery.

Going forward, four main areas of focus have emerged. The first is in relation to the currency of the EF and sensitivity to changes in external and internal contexts. For example: reflecting the needs of the university, students and employers in the light of the 2020 global health pandemic (Williams, 2020; GMB, 2020) and ensuring that it remains an inclusive framework. Here, Allen et al's (2013) work is increasingly relevant and merits further investigation in relation to BAME student success and subsequent career and life trajectory. Secondly, and related to this first point, is the need to ensure continual stakeholder engagement, sense-checking and horizon-scanning.

A third area relates to peer input and support – many commentators (for example, Sari et al, 2017; Jones et al, 2012) note the positive impact of peer support in encouraging student engagement in a range of situations and we are currently exploring the use of student and alumni voice to promote the benefits of using FutureYOU.

Finally, we are considering how we might optimise the data we are collecting and evaluating to support institutional reporting across a range of internal and external requirements including the Teaching Excellence Framework, Graduate Outcomes Survey and other external regulatory requirements.

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Developing innovative support for the most disadvantaged students: the Keele Connector Programme

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Background

It is widely acknowledged that disabled students and other disadvantaged students, including care leavers and estranged students, face barriers in achieving positive outcomes after graduation (AGCAS, 2017, 2018). Lack of social capital, professional networks and experience of the workplace are cited as key reasons. Research conducted by Macmillan, Tyler and Vignoles (2015) concluded that, despite decades of policies to improve social mobility, a student's family background still had the most influence on their job and their life chances.

Careers education, information, advice and guidance (CEIAG) within higher education is interwoven with employability and successful student outcomes. Given careers and employability support is central to this strategy, the Keele Connector programme is led, managed and delivered within the University's Careers and Employability team. Careers consultants are in a unique position to provide crucial support. The one-to-one guidance they offer is person centred and their engagement with the curriculum and employer partners gives a unique blend of professional expertise. Careers consultants gain an understanding of the barriers and challenges students face and can offer support to develop the skills and strategies needed to overcome them (Christie, 2016).

The main purpose of the Keele Connector Programme is to enable students from a wide range of diverse backgrounds to develop their employability skills through experiential learning and support from a network of connectors. Helping to build and establish networks is a crucial element of the programme, representing informal channels for identifying job opportunities and social connections (Rees, 1966), which can also be considered an important element of social capital (Loury, 1977; Coleman, 1990). Many theoretical contributions have modelled the influence of networks on labour market outcomes and results show that it is undoubtedly a low cost and effective way of generating opportunities (Montgomery, 1991; Calvo-Armengol, 2004, 2007; Casella and Hanaki, 2005; Granovetter, 1973, 1974, 1995).

Career Learning theories (Mitchell and Krumboltz, 1996) highlight the importance of direct and secondary learning experiences, and work experience has often been mentioned as an important contributing factor to students' employability (Jensen, 2010; Vasager, 2011). 'Work experience' has been shown to have a direct impact upon first destination data (Little et al, 2006). It is hoped that giving students the opportunity to complete a work placement will help with their career development by increasing their awareness of subsequent opportunities as well as building an invaluable employer network.

Approach

Building on the foundation of a previous programme that successfully supported students with Autistic Spectrum Disorder (ASD) to develop their skills through experiential learning, Keele University's Connector Programme was launched in the academic year 2018-19. The programme's first cohort recruited more than 30 students with a further 20 students recruited in each subsequent academic year. The programme represents a new, proactive way of supporting students and graduates with a disability or disadvantage. Uniquely, it bridges the transition from university into work or further study by offering a package of tailored individual support that extends beyond graduation.

However, the overall success of the programme is dependent on working in partnership with all internal partners from across the institution. These include professional service colleagues from Disability Services, Student Support and academic colleagues. These partners are crucial in identifying students who would like to engage and who can benefit from the package of support.

Students on the Keele Connector Programme are offered regular, tailored support from a 'Career Connector', a dedicated careers consultant, and regular communication with an 'Alumni Connector' via an online platform. Alumni are matched with the student according to academic discipline and/or career sector/profession of interest. The key aims of the 'connector' are to provide information, encouragement and to serve as a role model in supporting and enabling students and graduates to be successful at key transition and challenge points, such as finding part-time work, undertaking examinations, applying for placements, jobs and further study to starting employment.

Another valuable element of the programme is to enable Connector students to obtain a paid work placement, supported by Santander Universities. These placements are carefully agreed with employers ensuring that adjustments and support are offered according to need. Placements on the programme to date have covered sectors from software development, marketing and charities.

The overall aim of the Keele Connector Programme is to have a positive impact on individual student and graduate success. This includes developing confidence, ensuring integration into university and ensuring students can take advantage of all the opportunities higher education has to offer.

Outcomes

Some of the key highlights of the Keele Connector Programme to date have included working with three visually impaired students, one individual with cerebral palsy and several students with ASD. Of these students, the majority had no experience of the workplace and all were keen to receive support in considering and developing their career and life plan.

Student feedback is collected as qualitative data through an online feedback form and thus far, during the programme's first three iterations, it has been very positive, especially from those that have completed a placement. These respondents reported that they felt more confident in their skills and what is involved in the career sector they were interested in. Ariana commented: "It's given me a lot of skills and helped me gain an insight to office life, which has given my confidence a massive boost and I now feel more confident that I'm good enough for a job" while Kyle reflected: "It is important that you get that experience. Not only does it look good on your CV but it opens your thoughts to new ideas as to what you may enjoy doing or dislike for future career aspects."

The programme has also been very positively received by the University's employer partners, who are eager to support the students in obtaining experience of the workplace. They are finding students to be proactive, working to a high standard and are being seen from the start as an active member of their teams.

The greatest challenges that have emerged so far from the programme is the need to provide appropriate adjustments for students with disabilities on their placements. These have included ensuring the correct technology is in place to enable a student with a visual impairment to successfully complete their work experience. Katie commented: "My biggest success was an appreciation of my work when it was decided that instead of writing a series of blog posts, I was going to be contributing to a series of white papers."

Other challenges have been sourcing placements – finding an appropriate employer and career sector who will be able to provide support to the student and make any necessary adjustments. Increasingly the team has also been able to offer virtual placements, which in many ways have offered easier access to students by obviating the need to travel to the employer premises.

Particular highlights so far of individual impact include the following three vignettes (names below are pseudonyms):

Alex, a first-generation university student, completed a virtual internship for a charity during the summer and received a formal thank you on behalf of the Queen from the Lord-Lieutenant of Staffordshire for her contribution to this work. Upon completing the internship the student stated that the experience had enabled her to build on her confidence and she has since gone onto find a graduate role in retail.

Joel completed a 50-hour placement at a local charity. He reports that this placement not only helped him to gain confidence in his skills within the workplace but also helped his personal development as he used public transport for the first time on his own to attend the placement.

Aysha is currently helping to develop a book for children with ASD. Her placement has been extended at the request of the employer who reports how they have been deeply impressed by the quality of her contribution.

It is these individual success stories that offer early evidence that this approach to supporting the most disadvantaged students is effective and that this small-scale project can profitably be developed further.

Next Steps

As the programme matures, the delivery team are learning to adapt and develop. As next steps, we would like to offer students face- to-face and online development workshops covering confidencebuilding, networking and resilience; to develop the alumni mentoring programme further, expanding the number of students who engage with role models; and to continue to gain insights into the barriers encountered in placement contexts by individuals with disabilities so that we can optimise support to all students at Keele.

We also need to ensure that students, professional support colleagues and academics know about the Keele Connector programme so that referrals continue and the programme grows each academic year.

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TED-style talks to enhance employability

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Background

It is well attested that access to higher education plays a key role in driving social mobility and that the steady rise in UK student numbers since the 1970s (around 600,000 at the start of that decade compared to 2,500,000 in 2019), has involved increased access from traditionally low participation neighbourhoods. Despite this widening participation, a strong correlation remains between social class and likelihood of attending university, a 'gap' that may have widened because of rising tuition fees and economic instability (Milburn, 2012). The University of Salford (UoS) supports an inclusive environment and is proud to attract a large proportion of its students from Greater Manchester (UoS, 2019a). The proportion of 18-year-olds starting higher education (POLAR4 quintile data) in this region can change dramatically from one neighbourhood to another (Office for Students, 2020). A significant proportion of our students are from the lowest participating neighbourhoods and 40% of UoS students are from low-income backgrounds (UoS, 2019b). Furthermore, 30% of our students identify as BAME ethnicity (20% national average) and another 21% declare a disability (14% national average). The UoS is clearly making a significant contribution to widening participation and inclusivity.

The academic and career achievement gap experienced by students coming from disadvantaged or underrepresented backgrounds is well known but extremely difficult to address. Students who belong to groups that are underrepresented in higher education, devalued or stereotyped, struggle to feel they 'belong', which affects achievement (Baumeister and Leary, 1995; Strayhorn, 2012). Interventions that create cooperative learning can help overcome this feeling of not belonging (Buchs and Butera, 2015). Creating a strong community of learners and providing a safe space for students to develop professional social skills is invaluable to students. In our own practice at UoS we are interested in developing innovative teaching tools that help overcome the gap created by structural inequalities such as socioeconomic background, ethnicity and culture. The careerEDGE employability model highlights the importance of self-efficiency, confidence and self-esteem in successful employability (Dacre Pool and Sewell, 2007). Indeed, acquiring these attributes allows graduates to leave a lasting impression, facilitating interview success. It is important to note that characteristics such as confidence likely relate to the students' accumulation of "graduate capital" (Tomlinson, 2017). Of relevance to our students at the UoS, many of whom are from low socioeconomic backgrounds and the first in their families to go to university, interventions that support the development of social, cultural and psychological capital will be invaluable for enhancing employability. As discussed elsewhere, immediate changes to structural inequalities are unrealistic but new approaches using growth mindset may be more effective and appropriate in overcoming achievement 'gaps' rather than waiting for structural changes (Spitzer and Aronson, 2015). Related to this are the ceilings students may place on themselves.

According to Cordova and Lepper (1996), student achievement possibilities can be endless and to be able to imagine "an alternative possible self" is linked to greater achievement. Motivation may be affected if 'current' and 'possible selves' are at odds, and interventions which support students to create the 'desired future possible self' are powerful tools (Cordova and Lepper, 1996; Giddens, 1991). The ability to deliver a high-quality public lecture is one approach we took at Salford to enable our students to consider their 'desired future possible selves'.

In 2018-19 the UoS Biomedicine team launched a student public speaking competition called Salford BioFlash, funded by the Salford Advantage Fund. Students prepared and delivered high quality <u>TED-style talks</u> on a topic they were passionate about, winning prizes of up to £100 and the chance to present at the Future Health conference. The competition was a complete success and the academics involved noticed a positive change to students following the competition and were keen to quantify the impact.

Approach

The launch of the Salford Community of Excellence in Teaching and Learning (SCELT) provided us a second opportunity, this time to study the impact of public speaking on a range of self-reported outcomes, including employability. Funding was obtained to launch a second university-wide competition, called Salford Passion Flash. The UoS Ethics Committee granted approval to issue a Likert survey designed to assess the impact of taking part (STR1920). Survey questions covered factors such as: confidence; engagement; realisation of potential; aspirations; postgraduate plans and employability. Participants were also asked questions regarding interview and career confidence. Students prepared TED-style talks on a topic they were passionate about and auditioned before a panel and audience. A total of 35 students auditioned for Salford PassionFlash, with many more joining the audience and discussions after each talk. Most auditionees were undergraduates, but a couple of postgraduate taught students also contributed. A large conference-style finals competition event was planned for the end of March 2020, but due to the public health restrictions arising from the 2020 global health pandemic it had to be cancelled in the originally envisaged form. Nonetheless, we went ahead with assessing the impact of Salford BioFlash and Salford PassionFlash auditions. The survey can be seen here. Forty-five students were approached (from both BioFlash and PassionFlash) to take part in the survey, of which 24 agreed. Survey data was collated in Microsoft Excel and expressed as percentages.

Outcomes

The PassionFlash 2020 auditions event proved extremely exciting for both staff and students. Auditionees from 16 different degree programmes presented their TED-style talks on topics ranging from sleep paralysis to folk music. The breadth and quality of presentations showed considerable creativity and innovation, with many making use of props, costumes and even musical instruments. Feedback collected a month after the auditions event included:

"...I thought ... 'Wow, I can actually do this' and after the event, I started interacting with people more...It boosted my confidence in my strengths and motivated me to improve on my weaknesses."

(Student, cyber security)

"...Salford Passion Flash gave me an opportunity to meet people from other areas ... as well as improve my presenting skills, ... beneficial beyond my university experience ... would love to participate again."

(Student, wildlife and practical conservation)

"...It gave me a huge confidence boost in terms of public speaking which has helped me in my recent interview for SRFT."

(Student, biomedical sciences)

Analysis of Likert data showed that 96% of students who participated strongly agreed/agreed that the competition is a mode of enhancing student satisfaction (data not presented in graphs). The Likert survey included a series of separate questions on whether students thought the competition enhanced the following factors: confidence; engagement with their programme of study; realisation of potential; raising aspirations; pursuit of postgraduate plans and employability. As presented in Figure 1, most students strongly agreed or agreed that taking part in this TED-style public speaking competition had a strong positive impact on all factors assessed.

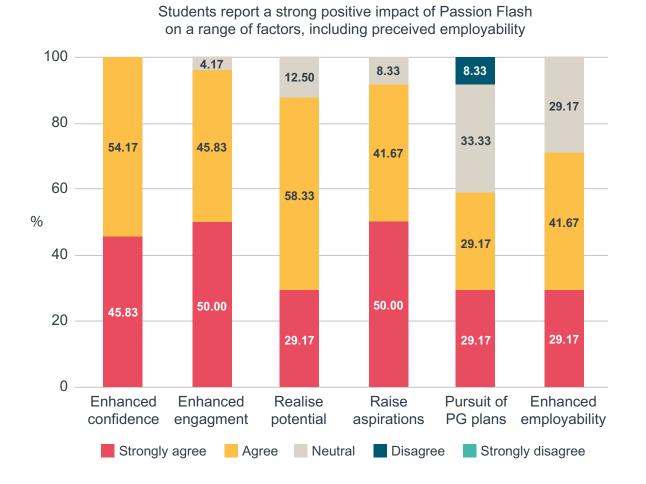
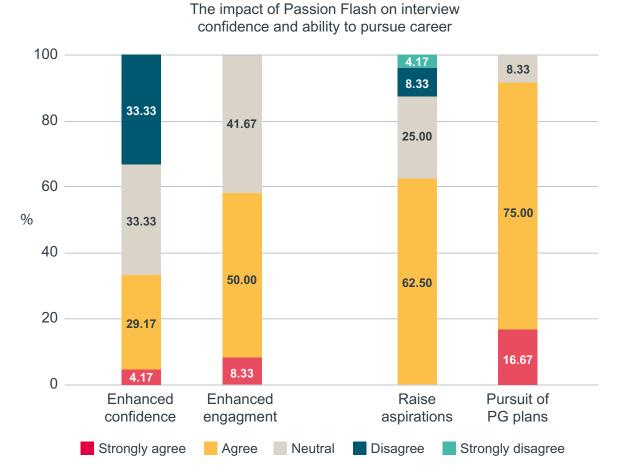


Figure 1. Students believe that giving Ted-style talks has a strong positive impact.

A total of 24 students who took part in the PassionFlash competition agreed to take part in the research survey. All respondents either agree or strongly agreed that taking part enhanced confidence. Furthermore, nearly 96% strongly agreed/agreed that the competition is a means to enhance student engagement with their programme of study. Over 87% strongly agreed/agreed that the competition is a means to help students realise their potential, while over 91% agreed it helps raise aspirations. Almost 60% strongly agreed/agreed that PassionFlash has helped them in their pursuit of postgraduate plans. The slightly lower numbers of studying. Of those who took part, 70% strongly agreed/agreed that the competition enhances employability.

In our experience, low confidence can be a major confounding variable in our graduates securing postgraduate positions. With this in mind, a series of Likert questions asked students to retrospectively consider how they felt about attending a career relevant interview before taking part in the PassionFlash competition. They were also asked a similar question relating to their pre-competition confidence to pursue their chosen career. This was followed by questions which asked them to consider their interview and career confidence while considering the experience gained from the public speaking competition. As depicted in Figure 2, the impact was once again a positive one.

Figure 2. Students report greater interview and career confidence following Ted-style speaking competitions.



Students were asked to retrospectively detail how confident they felt before PassionFlash about going for a career relevant interview and to pursue their chosen career. They were also asked to consider these factors, but while considering their PassionFlash experience. Regarding interview confidence, 33% strongly agreed/agreed that they felt "extremely confident" about going to a career relevant interview before passionFlash (Pre-PF).

Retrospectively, nearly 63% felt extremely confident about their ability to pursue their career. This figure rose dramatically to nearly 92% when students were asked how confident they feel now.

The authors have developed a novel and highly successful approach to engaging UoS students. Those who take part in the PassionFlash public speaking competition feel more satisfied, engage more with both life on campus and their programme of study and report feeling more confident. Of particular relevance here, surveyed students report that they feel much more confident about their careers and ability to go for interview, which undoubtedly will have a positive impact on employability.

The public health restrictions arising from the 2020 global health pandemic continue to affect us, but we are determined to continue to offer this exciting opportunity to UoS students. With support from SCELT, we are pleased to be offering this opportunity online for 2020-21 students. We will take a similar research approach as before, issuing a Likert survey before and after the competition and assessing the impact of taking part on a range of factors including satisfaction, confidence and employability. We will also extend our research study to include a follow-up survey six months after graduation to try to determine the impact of taking part on employment success.

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Bridging the gap: understanding and addressing the employer/student divide on graduate attributes

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Background

This case study is situated in the field of graduate employability and draws on the results of an action research pilot study. While some scholars argue that a disproportionate emphasis on employability undermines the nature of higher education (HE), the author acknowledges that policy has situated employability as a key component in the HE agenda for more than 30 years, and now with renewed impetus given the changing nature of the workplace. As Gwata (2019) asserted, the digitalisation central to the Fourth Industrial Revolution brings challenges for traditional employment and education and a need for interdisciplinary approaches. One challenge for HE is to find ways to develop students to see their future broadly and beyond specific discipline and economic output boundaries.

Graduate skills and attributes are a fundamental means of interpreting, framing and operationalising the employability field. For employers they serve to articulate what they require from graduates; in HE they are used to embed transferrable and sector-specific skills in programme content; and they allow students to track and communicate their development. However, their role in supporting stakeholders to develop a common focus is not without its issues, with scholars recognising the challenges in achieving a shared language and understanding of how attributes are developed (Barrie, 2006; Collet, Hine and du Plessis, 2014; Warhurst, Tholen and Commander, 2013). Others have tried to reframe the lexicon through broader notions such as graduate identity (Holmes, 2015; Jackson, 2016), graduate capital (Tomlinson, 2017), or career management (Bridgstock, 2009; Jackson and Wilton, 2016). However, students' views are often external to such studies as they seek to prescribe what students should possess or the processes they should navigate. Intervention literature tends to be sector- or programme-specific. It can also position students as distal to the development of the intervention in that universities and employers work to find solutions for them before applying the intervention.

By contrast, this action research situates students as key stakeholders in the graduate employability agenda to co-create with employers an intervention designed to support students in their understanding and openness to opportunities offered by a recognised digital skills need in the Leeds City Region (Leeds City Region Enterprise Partnership and West Yorkshire Combined Authority, 2019). This approach is informed by literature acknowledging the impact of the changing workplace on university education. Wenger-Trayner and Wenger-Trayner (2015, 15) noted, "professional occupations . . . are constituted by a complex landscape of different communities of practice" and indeed, in most jobs, there is now a digital community of practice present or looming. This study is conceptualised as a potential means to equip students to break through "boundaries of practice" (ibid, 17). Such an approach aligns with the notion of 'partnership pedagogy' outlined by Barrie and Pizzica (2019), which includes curriculum and resource co-design, co-delivery of the curriculum and

co-assessment with a range of partners. Barrie and Pizzica moreover identify the rapid development of technology as a key driver of disruptive innovation in the workplace and see partnerships as a way to keep HE connected to external changes.

Approach

The aim in this case study is to evaluate how co-created engagement can influence student perceptions of digital skills gap opportunities. To consider how this co-creation process could be approached, a pilot study was undertaken to establish how employers and students viewed a range of university-business interactions and graduate attributes taken from Artess, Hooley and Mellors-Bourne (2017).

Three considerations underpinned the study:

- 1 Prior to facilitating a co-creation event involving businesses and students, it was valuable to establish the extent of any similarities and differences in how both groups ranked graduate attributes to provide a basis for discussion in the following co-creation study.
- 2 Digital skills gap discussion tends to have a deficit focus what graduates do not have or do not offer. Part of the rationale for the pilot was to test a means of trying to establish what employers want.
- 3 Given the significant difference in experience between students and businesses, there might not be a naturally flowing dynamic across the two groups in the co-creation study. Difficulties may be avoided by introduction to one another through an understanding of each other's perspective at the start of the co-creation phase. A card ranking activity and its outcomes was seen as a way of providing an introduction and understanding of each other's perspectives.

Pilot data included:

- + Completion of a number of card sort activities involving the ranking of graduate attributes by students and employers
- + Three employer interviews
- + Three student questionnaires.

Participants were asked to rank graduate attributes (taken from a systematic review by Artess et al, 2017) and the results were analysed as follows:

- 1 The top five graduate attributes for employers and students were tabulated separately and analysed for common elements (Table 1 and Table 2)
- 2 The attributes included in the top 10 by all employers and all students were identified (Table 3)
- 3 The attributes outside of the top 20 for all employers and all students were identified (Table 3)

Outcomes

This snapshot of results will focus on the card ranking outcomes from students and employers and the semi-structured interviews with employers. As can be seen from tables one to three, there were some common views between the two groups but also some key differences. The differences and similarities in how the attributes were ranked provides a good basis for discussion in the following co-creation study. The pilot study analysis also provided a good basis for theoretical sampling (Urquhart, 2013) – that is, deciding where to sample from next. For example, the students' perception of the importance of 'aspiration' as a highly ranked graduate attribute needs further exploration. It was the only attribute all three students included in their top five but further exploration was not possible in the pilot study.

When analysing the employer interview data, Bazeley's (2013) advice to consider how participants tell stories alerts us to the following trends:

- + Employers tended to group and interlink attributes when they sort them, rather than viewing them individually
- + The attributes employers ranked highest are things they considered to be 'deal breakers' for employment of graduates and things they do not provide or expect to provide training for
- + The requirements in the digital sector have prompted employers to rethink what they ask for in new recruits
- + The process of considering the card sort activities prompted employers to reflect on both personal and business values.

Table 1: Top five attributes ranked by employers (green indicates attributes identified by all three; grey indicates attribute identified by two out of three)

Employer group – top 5 attributes				
	Employer 1	Employer 2	Employer 3	
1	Willingness (and capability) to learn	Work ethic	Work ethic	
2	Work ethic	Problem solving	Willingness (and capability) to learn	
3	Positive attitude	Team working	Positive attitude	
4	Team working	Critical thinking	Social intelligence	
5	Digital literacy	Creativity	Flexibility and ability	

Table 2: Top five attributes ranked by students (green indicates attributes identified by all three; grey indicates attribute identified by two out of three)

Student group – top 5 attributes				
	Student 1	Student 2	Student 3	
1	Willingness (and capability) to learn	Efficiency	Work ethic	
2	Flexibility	Professional knowledge	Aspiration	
3	Aspiration	Career management	Willingness (and capability) to learn	
4	Interpersonal skills	Work ethic	Positive attitude	
5	Communication skills	Aspiration	Self-management	

Table 3: Attributes in top 10 and outside of top 20

Attributes in top 10 – all employers	Attributes in top 10 – all students	
Flexibility and adaptability	Aspiration	
Positive attitude	Initiative and self-direction	
Team working	Willingness and capability to learn	
Willingness and capability to learn		
Work ethic		

Attributes outside of top 20 – all employers	Attributes outside of top 20 – all students
Language skills (particularly second language skills)	Language skills (particularly second language skills)
Presentation skills	Presentation skills
	Numeracy
	Writing skills

At a broader level, Gray (2004) emphasised the need to identify a story in data as part of the analysis process. This 'story' can also be viewed as what Flick (2006, 296) referred to as an 'anchoring point' for deciding how to move forward. In this instance, 'process' emerged as a key theme or anchoring point in the analysis:

- 1 In the *process* of considering graduate attributes, employers vision *the* future and articulate the significance of digital capabilities; students vision *a* future as viewed through the *process* of their academic journey but without the perspective of experience and knowledge of trends.
- 2 The skills gap has led employers to reflect on their recruitment *process*, both in terms of what they ask for and in terms of the training *process* they run for new recruits.
- 3 At the point of graduation, students should be able to articulate to employers the *process* they have been through to develop skills and attributes relevant to employment and what these are; if they are to access opportunities offered by skills gaps, they need to be open to the *process* of further development in graduate employment that might not be directly related to their degree.
- 4 Employers have an interest in being involved in the process of preparing students for the world of work.
- 5 Digital sector employers do not articulate the workplace environment / experience through the use and application of digital / technical skills; they articulate it through the *process* of 'problem solving'.

As this was a pilot study in an action research project, the data gathering and analysis was a step in a larger process of getting to know more about stakeholder views. The 'story' outlined above provides a pathway for moving forward to a co-creation process which will involve students and employers working together to design an appropriate intervention for students, with an emergent hypothesis that: employability work, and particularly work to engage students in the broader spectrum of opportunities, can only be truly effective if the work is carried out *with* students rather than delivered to students.

Note: The pilot study and main study referred to here have received research ethics approval from Sheffield Hallam University.

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Is this for real? Business community engagement and authentic learning

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Background

The University of Aberdeen offers an undergraduate module, *Working Together: Employability for Arts and Social Sciences,* which combines employability workshops with a work-based project hosted by a local start-up business, SME or third sector charity. The module was initially launched in 2015 and builds consultancy-style projects into the curriculum. It exposes students to real-world tasks and provides opportunities to apply their transferable skills, for example project management, problem-solving, communication and time management, in different contexts. The combination of on-campus workshops with project-based learning offers students an opportunity to engage with authentic, collaborative and interdisciplinary learning –all crucial for success in the modern workplace (Wornyo et al, 2018). Table 1 illustrates examples of previous projects, which, typically, are undertaken by a group of three or four penultimate year undergraduate students.

Organisation	Organisational size	Project title
Aberdeen Science Centre	Small and medium-sized enterprise (SME)	Developing STEM outreach activities
Turbinate Technologies Ltd	Micro-business	Commercial evaluation and marketing of an anti-pollution facemask
Aberdeen Council of Voluntary Organisations	Small and medium-sized enterprise (SME)	Giving in Aberdeen 2018: trends in corporate fundraising and individual donor behaviour
The Crafty Pickle Co.	Micro-business	Food waste networks for business

Table 1: Examples of projects offered by local organisations in Aberdeen and Aberdeenshire

This 12-week, elective module was initially proposed in 2013, by the University's Arts and Social Science Employer Board, to enhance students' employability and workplace learning across non-vocational degree programmes, including History, Politics, Anthropology and Philosophy. Behind the proposal lay the ethos that the module should be as inclusive as possible and that it should serve to raise awareness of the development of <u>Aberdeen Graduate Attributes</u> among those who participate in it. It was also agreed by the Employer Board members that such a module should also operate to enhance students' reflective practice, so that they could more fully articulate their engagement with the Aberdeen Graduate Attributes to prospective employers and recruiters.

The module is delivered through a three-way partnership between the University's School of Social Science, the Centre for Academic Development and the host project organisation. Typically, 30 undergraduates undertake the module each academic year. It is an exemplar of an interdisciplinary, authentic learning initiative, which encourages students and relevant stakeholders to work together across subject areas, aligning with the interdisciplinary strand of the <u>University's Strategic Plan 2040</u>. The importance of interdisciplinarity has been highlighted by Jacob (2015), who observed that societal, environmental, economic and philosophical issues and challenges are often so complex that it is impossible to fully understand them from a single perspective or knowledge framework. To address the range of project issues and challenges encountered within the module, students are supported via a series of employability workshops to develop their collaborative competencies. Workshop topics such as Belbin's Team Roles; Creative Thinking and Problem Solving; and Consultancy Skills are important to facilitate students' interdisciplinary learning and skills development. These approaches are also increasingly relevant to prepare students for the ever-changing employment landscape (CMI, 2018; UKCES, 2014).

Using Herrington's framework of authentic learning (Herrington and Oliver, 2000), this case study outlines how this theoretical model has been applied to further embed employability and adapt the module, *Working Together: Employability for Arts and Social Sciences* for online delivery.

Approach

Authentic learning explains how students learn through applying knowledge and skills in real-life contexts. Herrington's (2006) framework defines nine features of authentic learning, including: providing authentic tasks and activities, offering opportunities for student reflection, supporting the collaborative construction of knowledge and affording an authentic context for learning (Fig. 1). This framework has provided a valuable checklist for the teaching team to reflect, review and refine the students' authentic learning experiences in the module, Working Together: *Employability for Arts and Social Sciences*. The framework complements the University's quality assurance methods of gathering student feedback from module evaluations and Staff Student Liaison Committees.

The teaching team found the module review process invaluable, especially in helping to identify aspects of learning activities, external collaborations, and formative and summative assessments to refine. This process has enabled much closer alignment with Herrington's authentic learning elements. A plan to integrate these teaching developments into the new, online version of the module has been finalised for the 2020-21 delivery. In the context of the 2020 global health pandemic, increased attention has additionally been paid to the ways in which authentic learning might be conducted online.

That said, the teaching team anticipates the number of projects offered from start-ups, SMEs and charities may also increase to help businesses through the resultant economic disruption. Despite these inevitable challenges, we plan to adapt and evolve our partnerships with external organisations to embrace opportunities for pedagogical innovation and to further develop our authentic learning provision within the module, *Working Together: Employability for Arts and Social Sciences*.

Fig. 1: Nine elements of authentic learning (Herrington and Oliver, 2000)



Outcomes

Comments and feedback gathered from students during the six years the module has been running have been overwhelmingly positive. A small selection of illustrative responses is provided in Table 2:

Table 2: Student comments from the module feedback form

Respondent	Module feedback
A	<i>"It was a good personal development opportunity to work as a team because most other modules focus on individual tasks."</i>
В	<i>"I believe all students will benefit immensely if there are more interdisciplinary modules available."</i>
С	"This is a really good module and some aspects of it takes us away from the usual stressful structure of a typical module. The site-visits are really interesting."
D	"Great! Made new friendships and acquired new skills through attempting new tasks."

Specifically, students value the authenticity of project tasks and the assessed group oral presentations in front of their peers/project hosts, as well as the personal insights developed in the Belbin Team Role and Social Media employability workshops. The impact of the module on a student's learning and development are captured in this augmented reality video (Figure 2).

Figure 2: Zapcode – to preview the short video, download ZAPPAR from the Appstore or Playstore.



Adaptations to redesign the module, drawing on Herrington's authentic learning framework, include:

- Authentic context: a key component of the module, 1 Working Together: Employability for Arts and Social Sciences involves students undertaking a real-world project that is current and meaningful to a local start-up business, SME or charity. The traditional form of collaborative learning for this module has been face-to-face groups working together. As a result of adaptations made in the light of the 2020 global health pandemic, students now need to be able to work effectively together in an online learning environment. To help build effective groups for remote learning, the teaching team plans to offer additional academic support at the start of the module to help students understand how effective virtual groups operate (Figure 3). Given the growth of remote working in businesses, it also provides an enhanced authentic learning experience for students selecting this module.
- 2 Authentic assessment: students are assessed via a group oral presentation and an individual reflective report. Each project group is also given actionable feedback on their formative group oral presentation, with opportunities to address this feedback before the final, summative group assessment. However, both assessments occur in the later stages of the module. In order to align more closely with Herrington's scaffolding and coaching element of authentic learning, the teaching team plans to introduce a formative group progress report at an earlier stage in the module. The report will provide an opportunity to support students at the metacognitive level by asking questions about their plans, achievements, and their perceived project progress.

Figure 3: Working in virtual/ group teams [Infographic, Pryor and Perkins 2020]



3 Coaching and scaffolding: Herrington's guidelines for designing authentic learning environments are based on constructivist philosophy and approaches, and specifically on situated learning theory (Herrington and Herrington, 2006). In order to enable scaffolding and support for students where external partners are involved, the teaching team acknowledges the need to provide more detailed student feedback guidance for the SMEs and charities involved in the module. Specifically, we recognise the need to provide timely, supportive and constructive feedback to motivate student groups, thereby helping organisations to further understand their role in the virtual, project process.

In this case study, the role of authentic learning in enhancing students' employability has been examined. It is hoped that the narrative will help inspire academics looking to foster and further develop employability approaches within their own curriculum. More specifically, it is also hoped that the case study will stimulate discussion and debate around adapting authentic learning for blended and online learning environments, given the increased emphasis on online learning following the 2020 pandemic.

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'Sandwich placement: been there, done that'. A final-year to first-year student employability coaching and mentoring project at Bournemouth University

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We know it is crucial that UK higher education institutions offer suitable provision to prepare students for their future careers. Furthermore, it has become more challenging to do this due to various institutional pressures such as the effects of austerity on staff resourcing, frequent organisational restructuring, a decrease in student engagement, an increase in cases of student mental ill health, concerns around student retention and progression and, most recently, the impact of the 2020 global health pandemic. Concurrently, the results from the various league tables such as the UK Teaching Excellence Framework (TEF), the National Student Survey (NSS), and the Higher Education Statistics Agency's Graduate Outcomes Survey, among many others, point to an increasingly pressured and competitive environment. As a result, Bournemouth University (BU) has taken a lead in providing work-based and placement learning opportunities for all students, with an emphasis on sandwich placement experiences within the academic programme.

While the university's student employability preparation and support is mostly provided by professional services staff, it has become clear over the past few years that post-placement students themselves have extensive knowledge and experience that they can, and do, share with their peers. This very commonly takes place via formal activities such as guest lectures or less formally through social media platforms such as Facebook. As a Placement Development Advisor within the Faculty of Media and Communication, I am uniquely positioned to spot gaps between service provision and the student experience from pre to post placement. I took the opportunity to research any possible impact and effectiveness of peer-to-peer coaching and mentoring between undergraduate students who were undertaking the required academic component of a sandwich placement.

Currently at BU, an established peer assisted learning (PAL) programme has proved popular for a number of years, with first-year students being guided by their second-year student peers, confirming that this type of learning has been proven to improve the transition to university life and create greater confidence in students (Briggs et al, 2012; Gale and Parker 2014; Hughes and Smail, 2015). As the particular focus on employability and the transition to the sandwich placement has been less explored, my focus was on how a coaching and mentoring initiative can impact both firstand final-year placement students. For first-year students, my aim was to explore their awareness of their own employability, their sense of ownership of the placement search process, discuss resources available to them both on and off campus, and note any changes in confidence or knowledge as a result of being coached and mentored by a peer over a period of time. For final-year students, it was to explore how they could develop the coaching and mentoring skills necessary for enhancing their employability following graduation and to assess if there had been an impact upon their own development.

These research objectives drew upon the faculty of Media and Communication within BU as a case study and made use of a theoretical framework based upon Vygotsky's (1978) Zone of Proximal Development, Kolb's notion of experiential learning (1984), and Whitmore's concept of coaching for performance (1984) to underpin the study. This framework encompasses how students learn from their peers (Vygotsky), how they learn from doing (Kolb), and how using coaching and mentoring principles can help in the articulation and reflection of this learning (Whitmore). The literature has suggested that coaching offers a more cost-effective method of achieving greater student retention and course completion when compared to previously studied interventions (Baker and Bettinger, 2011). Accordingly, I used Whitmore's (2002) GROW 'Goal-Reality-Option-Will', model of coaching, as a model already being used within BU to support students. Using this framework enabled a range of issues to be explored simultaneously, therefore supporting a more holistic understanding of the whole experience for both student cohorts involved.

The project

Following a briefing to first- and final-year students in the department of Marketing and Corporate Communications, 14 volunteers came forward, consisting of seven first-year students on the common academic pathway and seven final-year post-placement Public Relations students, all of whom were required to complete a placement as part of their degree. The volunteers were randomly paired up, with each pair comprising an M-Coach and an M-Coachee (Mentoring Coach and Coachee respectively). As part of the preparation for the study, the M-Coaches were supported to provide both coaching and mentoring, dependent on the conversational and developmental needs of the M-Coachee. Each pair was then prompted to meet up either virtually (via email or Skype) or face-toface, once a month over a six-month period and were provided with questions and prompts around placements and employability to guide the discussion. Full research ethics approval was provided before the commencement of the study with a strong emphasis placed on students being co-creators.

In using an interpretive case study framework, (Cohen et al, 2018), face-to-face semi-structured interviews were held at four points during the project. The first interviews took place at the very beginning of the project, the second at the end, the third at the three-month mark following the project to establish the midterm impact, and the final point one year after the project to establish any long-term impact. Five pairs successfully completed the project.

Student feedback from the initial interviews was used in the development of the project, particularly in the number of intervention sessions, the timing of these interventions, content covered in the creation of session guidelines, and the timing of the interventions. Guidelines were provided to accompany each session highlighting services available to students on campus, both internal and external resources for placement search, tips for interviews, and how to stay positive in challenging times. It was at this time that the GROW coaching model was introduced as a key method to help improve resilience and increase confidence in mentees.

The rationale behind this project was to raise participants' awareness of the placement journey and of the resources available to them, both on and off campus. It was to encourage the reflection on one's personal journey for the final-year student and, in sharing with their junior peer, encouraging greater confidence and ownership in their future employability. Participants were also prompted to complete a short online survey following each intervention session to build up a timeline of their reactions and reflections to each session and gauge the extent of any incremental increase in their knowledge, skills and confidence over the course of the project. Additionally, one-to-one interviews were planned four months after the project finish date with further feedback sought one year later to evaluate the extent of any short, mid or long-term impact of the project on confidence, activities, aspirations and expertise upon graduation (M-Coaches) or commencement of Year 2 studies/sandwich placement experience (M-Coachees).

At the end of the six-month period, the impact was substantial for both participant groups with the M-Coaches reporting that they had gained a sense of pride in helping their young peers, that they intended to continue the relationship with their M-Coachee beyond the project, and that they experienced a greater sense of self-empowerment in their own abilities to support and mentor junior colleagues. The M-Coachees had also experienced a greater sense of awareness and confidence as they reported that they were the first among their peers to have work-focused LinkedIn accounts, proactively became more involved on campus, and actively sought out work experience opportunities. All students gained additional knowledge and skills for their future employability with perhaps one of the most interesting findings being the relationships that had developed between the M-Coaches and M-Coachees. This enabled them to have more meaningful conversations and exchanges than perhaps similar interaction with university staff in terms of discussing placement and employability issues in a more relaxed and egalitarian way.

Conclusion

One year on, the impact on the student participants has stayed positive and lasting in nature with the pairs confirming ongoing contact and engagement. The M-Coachees felt comfortable to contact their M-Coach during their sandwich placement search and two M-Coachees confirmed that they were investigating work experience opportunities within their now graduate companies for their M-Coachee.

There were key learning insights gained for the researcher, such as the need to distribute the session resources all together at the beginning of the project, refining the matching system between mentors and mentees, more training on the GROW model, and having increased contact between the participants and the researcher coordinator. There was unanimous feedback from all participants that this project could profitably be shared with institutional senior management as something to be embedded within the curriculum. It was also commented that regardless of the placement requirement, first-year students would find the opportunity to engage with final-year students on specific employability and placement topics very helpful. There were no discernible patterns in terms of variable outcomes for participants according to the subject discipline they were studying. Therefore, I could see this being only of great benefit to all undergraduate students on campus, regardless of study programme.

The results also suggest that an intervention that is focused around how students can learn from their peers, how they can learn from doing and how coaching and mentoring can encourage and support the reflection of this learning, from both first-year and final-year students, can be effective and impactful. Therefore, as universities across the sector are looking for resource-efficient yet innovative and effective ways to support students going into and coming out of work placements, this small-scale study suggests that peer-to-peer student coaching and mentoring may be one such route to build the confidence and knowledge of those preparing for placement and develop coaching and mentoring skills for those about to go into employment.

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How to develop career cartographies: embedding innovative online careers and employability learning through collaborative co-creative design with students and employers

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Stage one: background

This case study focuses on an institution-wide collaboration at Leeds Beckett University to create an online career development and work-integrated learning module for final year undergraduate students of English, History and Media, with the objective being to help them draw their own maps of different routes towards a range of linear and non-linear graduate outcomes. At the suggestion of one of the students who was part of the design team, the module is called Career Cartographies – a distinctive title that speaks to the aspirations of students of the humanities.

Driving forward Leeds Beckett University's vision, mission and strategy, this transdisciplinary project is based upon principles of co-design that address the needs of students, meet the challenges faced by the university's business partners in the northern economy, and embrace the insights of our university community. At the heart of a collaboration funded by the University's Centre for Learning and Teaching is a shared recognition of graduates from humanities disciplines as creative, flexible and digitally confident people who will help shape roles in Industry 4.0.

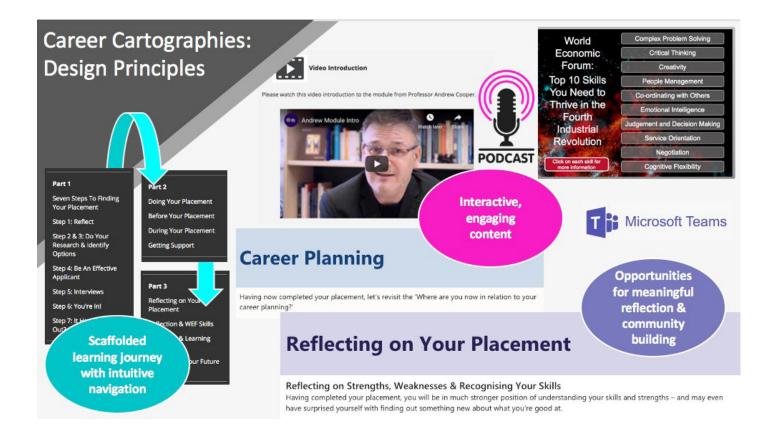
The design of Career Cartographies emanates from bringing together a team of careers and employability professionals, academics from the School of Cultural Studies and Humanities (including the Dean), students, employers and experts in digital pedagogy. Together we co-designed and introduced an innovative online learning module that articulates the workplace experience into the disciplinary nuances of students' engagement with humanities, and also disrupts traditional and linear expectations of what courses in these disciplines can contribute to the world of work. Most importantly, students on the module extend their understanding of potential non-linear career pathways and make maps that enable them to embark on those journeys.

Our design combines career development learning guided by the CareerEdge model of graduate employability (Dacre Pool and Sewell, 2007) with work-integrated learning, adopting and adapting Stephen Billett's seminal analysis of work-integrated learning practice across 20 Australian universities (Billett, 2011). Not only did we integrate work experiences and the study of a discipline through a curriculum offering that helps students reflect and build upon their understanding of the relationship between the two, but we also embedded the Careers Service's online career development learning assets (Abintegro) into the curriculum. This enables students to focus on subject knowledge, skills and understanding while also ensuring they are given opportunities to review and evaluate their experience. Through reflective online activities students are able to develop their self-efficacy, self-esteem and self-confidence – all crucial components for the transfer of learning and development of their own ability to articulate their capabilities (Moon, 2004; Dacre Pool and Sewell, 2007).

Stage two: approach

Our approach was shaped by the challenge we set ourselves: to create a module for students of the humanities that could speak to their academic interests, amplify their understanding of how the high-level skills they are acquiring can be applied outside academia, and also radically reset their understanding of what employment can look like for graduates of English, History and Media. In this endeavour we had several advantages. Students of these subjects are good at analysing and telling stories that accentuate agency; the School of Cultural Studies and Humanities had already worked with colleagues in Careers and Employability to introduce cross-disciplinary modules to help students relate academic knowledge and skills to professional contexts; and in addition to highly articulate students who were willing to join us, we also had access to a wealth of relevant expertise within and beyond the university. We found it most useful to focus on the shadowy presence of an overlooked figure: the humanities student who does not want to follow the predefined route to a stereotypical career as teacher, archivist or journalist. Foregrounding student experience and aspirations, disrupting notions of traditional careers, and creating agency through map-making became crucial elements of the module we were developing.

This online module is designed for flexible, asynchronous delivery of teaching content with students working at their own pace around placement commitments and able to revisit learning materials as needed. Mapped against Jisc's Digital Capability Framework, the online learning journey provides a scaffolded and structured pathway through module content to encourage independent learning and practical application of digital skills. The teaching content includes an engaging and inclusive mix of videos, podcasts and interactive activities, all delivered in manageable sections through the university's VLE, along with intuitive navigation and signposting to create a consistent look and feel. Microsoft Teams channels give students the opportunity to interact, reflect and share their placement experiences, fostering a module learning community and providing a mechanism for timely feedback and support.



Final-year students from History, Media, English Literature, and Creative Writing are now able to embark upon an integrated work placement experience supported by reflective online exercises, with Microsoft Teams promoting collaborative peer-to-peer learning. In completing the 20-credit elective module, they demonstrate expertise and confidence through a range of credit-bearing assessments such as video interviews, LinkedIn profiles and vlogs, each designed by the course team and employer partners to reflect features of Industry 4.0. Their video reflections tell us how they have set off on journeys to graduate outcomes along a variety of linear and non-linear routes, and developed the agency needed to create their own maps of different pathways as they make an impact in the world of work.

Stage three: outcomes

In actively shaping this project, our students were instrumental in introducing and then exploring with us the concept of 'career cartography' to help them navigate a future where linear career paths will no longer be the norm. This module enables them to articulate their stories in the context of work-integrated and career development learning, and also nurtures the self-belief and skills to shape their graduate futures with confidence that potential employers and the world of work will value the contribution they can make.

Achieving this was not without its challenges, as students on humanities courses are often told, by their parents and the media, that their degree only suits them to limited future career prospects. The real effort went into helping these students 'join the dots' for themselves so that they can connect their studies with a broad range of work experience. We wanted to give them new ways to understand the benefits and application of their skills and their knowledge of the academic discipline(s) they were studying. Talking with participating students at the design stage helped us to realise the best way to do this is to encourage them to share their experiences, frustrations and triumphs with the larger group - just as they would exchange views of texts, historical phenomena, or media activity. This is underpinned by effective application of innovative and authentic assessment strategies that facilitate personalised and inclusive learning, and are based on a shared understanding of the challenges faced by both students and academics working in this area. Our collaborative approach demonstrates there is value to be gained for both students and academics by positioning this type of learning within the discipline, and by encouraging students to take control of their career pathways in ways that complement their study of the humanities. The module demonstrates that the curriculum is a catalyst for enhancing the career development learning and employability of students, and is also fundamental to moving them through a process of self-reflection on to active mapping of their journeys.

A range of initial indicators points to significant impact on all those involved in this module: students, careers and employability professionals, academic staff, experts in digital pedagogy and employers. Student feedback is particularly positive. Indicative responses indicate a high degree of satisfaction with different learning and teaching approaches, and also provide valuable lessons for the future of the module. Three illustrative responses are as follows:

"The Career Cartographies module seemed expertly devised, with the crucial use of Microsoft Teams helping students every step of the way. It quickly became my favourite module, with the learning and assessment processes being hands on and enjoyable... and gives the opportunity to learn and complete work in a different yet effective way."

(Respondent A)

"After completing a placement, I found that this company has great values... I would highly recommend completing a placement with [them] if you want to get more information about SEO and the world of marketing, it has really benefited me and my degree!"

(Respondent B)

"Humanities students are not just good at reading and writing. Their focus is on people and society, both of which are essential to remodeling the way we work in the fourth industrial revolution. Graduates of Humanities provide the essential link between ever-changing technology and humans."

(Respondent C)

Career Cartographies evolved within the context of studying humanities, but from its inception the intention was always to explore trans-disciplinary potential. Through in-house events and participation in external conferences, colleagues from Leeds Beckett and other institutions working in a range of disciplines and work-based learning have commented favourably upon its application. In offering a template to develop, implement and embed innovative online career and employability learning solutions into the curriculum, this humanities-based module reveals how collaborative and co-creative design can be transferred to other disciplines and institutional contexts. We have already started working with colleagues at Leeds Beckett to commence the next steps of the project in implementing the key asynchronous career and employability learning components into other disciplines.

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Mapping skills for curriculum design using a programme level approach in a transnational education context

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Background

The ability of graduates to engage in jobs at the end of university studies has become an essential requirement of any educational offer, with the increasing focus on graduate outcomes creating opportunities for looking at curriculum design with renewed eyes. In this case study, the application of a programme level approach (PLA) in the design of the curriculum of the Materials Engineering and Science programme of the Queen Mary Engineering School (QMES) Joint Educational Institute (JEI) at the Northwestern Polytechnical University (NPU) of Xi'an, China, is presented.

PLA is based on constructive alignment theory (Biggs and Tang, 2011) where the intended learning outcomes are central to the learning system. PLA has been used with the intention to approach academic programmes from the student perspective (University of Sheffield, 2020). I propose a definition of PLA as a methodology for curriculum design that places a greater emphasis on the integration of graduate attributes with academic knowledge, skills, organisation and management, assessment and feedback to help students to achieve the learning outcomes of the programme. This requires mapping graduate attributes to content and activities, and ensuring that skills are truly embedded in the curriculum by design and are not an 'add on', thus centring the curriculum around students and their development.

I first developed and applied the PLA methodology in the design of the Environmental Sciences programme at the University of Sheffield (Romero-Gonzalez and Dyson, 2018) and use this approach here within the context of transnational education (TNE), demonstrating that PLA is a methodology that is transferable for the design of other curricula.

Developing a framework for curriculum design using PLA

The process of identifying skills and mapping them to academic content required the development of a framework for the application of PLA. The framework was built on the key principles of creating less modular and more connected content, articulating skills for employability based on graduate attributes. Each of these principles is integrated in Figure 1 below.

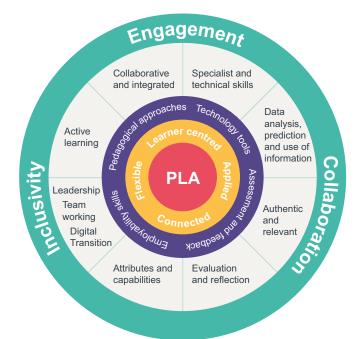


Figure 1. Framework for curriculum design using a PLA

Here, the inner circle shows the main attributes essential for curriculum design: connected, flexible, applied to the subject area and centred around the learner (Biggs and Tang, 2011; Crumly et al, 2014). This must be supported by pedagogical approaches and technology tools used for teaching and assessment. It creates a connected curriculum, encouraging the use of authentic assessment that promotes skills for evaluation and reflection of the learning process. The framework is largely based on the principles of employability practice: engagement, inclusivity and collaboration (Advance HE, 2016).

The implementation of the PLA framework was performed in four stages. Stage 1 involved a review of skills and definition of the learning outcomes, accompanied by a module audit to analyse current provision and identify gaps. Stage 2 focused on designing the 'ideal' model setting expectations from graduate attributes. Stage 3 consisted of participatory research with key stakeholders – students, staff, industry practitioners and professional associations – via focus groups and interviews. The integration of information was performed in Stage 4 by producing a map of academic content and skills.

Approach

The curriculum for this programme was inaugurated in 2017 and it was evident in 2019 that there were issues of disconnection, repetition and omission of academic content and a lack of clarity of skills. Although the administration of the programme is centred at NPU in China, the guidelines and regulations are set by both QMUL and NPU. The review was performed from January to June 2019. Data was gathered through two focus groups conducted with a statistical sample (140 students) representative of the whole student population (480 students) using a random sampling method. Staff and professional associations were consulted via interviews. The definition of the QMES

graduate attributes was done by combining the QMUL graduate attributes (QMUL, 2020) and the NPU educational requirements including the Chinese educational goals, set by the Ministry of Education of China.

Mapping skills

An audit of the module content and activities was used to identify existing and required skills. It is not necessary for every module to meet the full list of skills; on the contrary, using a map, skills were organised in a progressive manner (Figure 2) with fundamental skills positioned at L4 through to technical (L5) and professional skills (L6), extending the process to specialist skills at L7. Some students will exit the educational system at L6 and, therefore, it is critical to position the professional skills at this level.

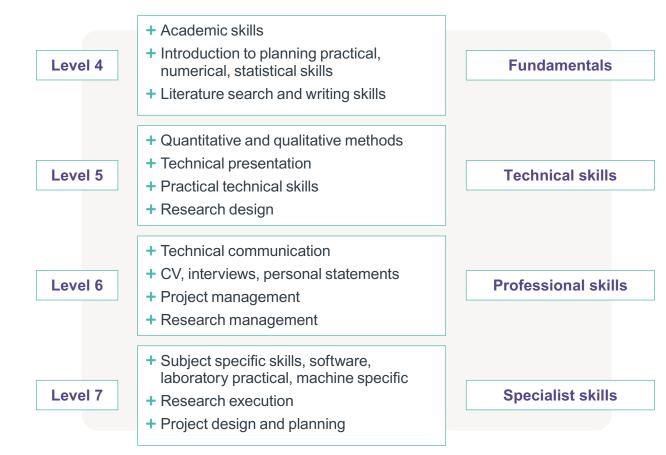


Figure 2. Skills curriculum structure using a PLA for Science and Engineering

Using this principle, matching skills to academic content is straightforward. Each module delivers one set of skills that contributes to each level and builds into a complete set at curriculum level. The whole summative approach streamlines evaluation and assessment, and simplifies the requirements of skills per module, thus reducing the number of assessments and staff workload.

Outcomes

The main key aspects improved in the new curriculum were progression of knowledge and skills in the programme. During the process of mapping, some modules required adjustment, and in some cases, missing skills were added, highlighting the need for an exhaustive module audit. A skills map was produced, providing a holistic view of skills and content across the curriculum (Figure 3). The essential skills were selected as shown in the icons in Fig 3. Information and technology skills were included through a wide range of specialised and non-specialised software used for research, data analysis and problem solving. A curriculum structure entirely based on skills and their progression as students move along the programme was then produced, based on the Framework for Higher Education Qualifications of the UK (QAA, 2014).

Skills categories							
Academic Level	Design and application	Problem solving	Research	Communication	Numeracy	International perspective	
1	Module 1				Module 5		
2		Module 2					
3			Module 3				
4				Module 4			

Figure 3. A template for mapping skills during curriculum design using PLA

A survey of students' perceptions of the review process was conducted with responses collected from 82% of the current cohort of students. The results of the survey showed that 78% of the students understood why the changes were required and a total of 81% of students agreed that the new curriculum structure was clear, with 78% of students agreeing that skills were clear within the academic content. These findings provide evidence that student participation is essential when conducting a PLA process.

The programme was implemented from the academic year 2020-21 and an evaluation is planned at the end of each semester. This will be conducted through a feedback survey, student attainment and graduate destination, since it is expected that graduates will be able to identify skills for career progression.

Lessons learnt

The process presented here demonstrates that a robust framework based on skills can be used for curriculum design. The review process must be collaborative, involving all stakeholders that participate in the learning experience – students, staff, university administration, industry, employers and professional bodies. For this process to be successful, an integration of a programme level view combined with a map of graduate skills is required. This task can be onerous but splitting it into small parts and working in collaboration with others makes it manageable.

The use of a PLA is a disruptive innovation that will challenge attitudes and likely face some resistance during implementation. This requires persuasion and buy-in from the different participants. The best way to address this is by keeping the process open, inclusive and transparent and maintaining frequent communication. This creates an environment of collaboration and increased confidence, fomenting recognition that the new curriculum structure is a step forward in enhancing the learning experience.

The flexibility in curriculum design achieved using a PLA allows its translation into other subject areas. The School of Engineering and Materials Science at QMUL has adopted this method in the review of programmes from Aerospace to Robotics engineering, demonstrating its wide applicability. As a potential next step, it would be valuable to explore the use of this method in the Humanities and Social Sciences, to truly demonstrate the value of this approach.

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Breaking the mould for placement delivery – the Peer Enhanced e-Placement (PEEP)

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Background

Placements

The 40% reduction in placements reported as a result of the 2020 global health pandemic (Sturley, 2020) has forced a number of providers to break the mould of placement delivery and consider innovative solutions for students to achieve their placement learning outcomes. Placements have become part of many employability strategies within higher education institutions (HEIs) with the recognition of the vital employability learning that the placement environment offers students, alongside the profession specific learning (Taylor, 2020a). However, many of these placements have been delivered relying on face-to-face delivery within the placement host organisation.

Traditional face-to-face placements for second year Occupational Therapy (OT) BSc students at the University of East Anglia were suspended with the arrival of the pandemic. In order for OT students to qualify in their respective professions there are a minimum number of hours that students are required to spend on assessed placements. To support our OT students to progress their studies, creativity was required to organise an alternative model of placement delivery that still achieved the usual placement learning outcomes required from the professional body placement standards.

Peer Enhanced e-Placement (PEEP)

A Peer Enhanced e-Placement (PEEP) was organised in response to the suspension of face-to-face placements, using the usual practice placement processes, paperwork and learning outcomes for consistency, but delivered online using a virtual learning environment. The PEEP was one of the first such online health student placements to have been implemented and evaluated, and was published as a case study on the Health Education England website as an exemplar of online placements (Taylor, 2020b).

The combination of human teaching and technology has been explored and published widely by Salmon (2011) who has developed the five stages of online teaching and learning model. Salmon's five-stage model, provided an underpinning pedagogy for the process of learning reported in the evaluation of the PEEP. Historically, health professions placements have been delivered face-to-face on a one-to-one student to supervisor model, with a focus on crucial clinical skills. However, placements are about more than clinical skills, with a raft of opportunities for employability development (Taylor, 2020a). A pivot change was needed in the culture to appreciate that different models of placement delivery are able to achieve the necessary professional specific placement learning outcomes, alongside the employability opportunities. Whatever model is used, placements need to have quality, personalised learning experiences, helping to equip students for lifelong learning (Clouston et al, 2018;Taylor, 2020c).

The PEEP offers a rich online learning ecosystem and a credible alternative to the traditional face-toface model of placement delivery, breaking the mould of traditional face-to-face placement delivery. The PEEP can be customised for individual requirements of a range of health and non-health discipline placements/internships.

Approach

Delivery of the PEEP

The PEEP was created over the course of 10 days in collaboration with a team of academics. The PEEP was delivered using the virtual learning environment Blackboard, enabling a whole cohort of students (37) to complete the PEEP at the same time. The cohort were divided into peer groups of roughly six members and worked autonomously and in their peer groups for the duration of the PEEP. The students received a comprehensive induction week contextualising the individual placement learning journey and outcomes to the PEEP model of delivery. During the middle weeks of the placement, students managed a caseload of patient case studies, enabling a breadth and depth of learning. Academics role-played live simulated sessions and ensured the level of the placement learning outcomes were achieved. The students wrote individual learning contracts to provide individual learning goals alongside the wider placement learning outcomes. Students had a mixture of whole cohort, peer group and individual learning, with synchronous and asynchronous learning when managing their caseload of patient case studies. Supervision by academic staff provided feedback and guidance for student learning, mirroring the usual supervision process on practice placements. A student e-handbook contained general PEEP information and guided reflection questions to consolidate and support metacognition of learning, and to build evidence for the placement learning outcomes. Students delivered a live presentation to their supervisor and peer group, evidencing their learning for their final assessment paperwork. A final assessment conversation with their supervisor also provided evidence to help determine whether the students had passed their placement or not.

Alternative placement options such as virtual projects should be considered (Isherwood, 2020) and Salmon (2020) highlights equivalence of learning from online provision, and that in some cases the learning can be more beneficial. The usual placement learning outcomes were achieved for the students on the PEEP, providing equivalence of learning, but also had the value added peer group learning reported in the PEEP evaluation.

Outcomes and impact

The impact of peer enhanced learning

The students evaluated the PEEP using three questions at the end of each week. The academics involved in the delivery of the PEEP also evaluated the PEEP. Overall, the feedback was overwhelmingly positive from both the students and academics and unearthed some unique learning for the PEEP model of placement delivery. The most useful learning themes that emerged from the evaluation were with the peer observation during the live simulation and the peer group work, which enhanced a depth of professional reasoning and implementation of the OT process. The additional reported depth and metacognition of learning from the peer group learning process may not otherwise have been achieved in such depth on a traditional face-to-face placement. The results of the evaluation unearthed the depth and breadth of learning from the PEEP online ecosystem delivery, including some important employability learning over and above the clinical specific learning.

Employability outcomes

The structure of the PEEP enabled a wide range of employability attributes to be developed (Taylor, 2020a). Students had to adapt their communication for the various contexts of the online learning environment. Reflection and self-management facilitated metacognition and a depth of learning and understanding. The guided reflections in the e-handbook actively supported this process of learning. The multidisciplinary visits in the PEEP assisted the students to develop their professional identity as an OT. Students used their initiative with the PEEP model of placement delivery. The PEEP required students to be flexible to adapt to the change in the model of placement delivery. The case study format of the practice placement harnessed the student's problem-solving skills, using their logic and judgement to manage the patient cases that they were presented with, which is crucial for their development as health professionals. Digital literacy is emerging as a crucial employability asset for students and the PEEP model supported the development of digital literacy skills.

Wider impact of the PEEP

There has been national interest in the PEEP and work has continued to further develop the PEEP initiative. PEEP fundamentals have been established, based on the peer learning and structure of the PEEP timetables, further shoring up the pedagogical underpinning of the PEEP learning process.

Dr Lisa Taylor and Professor Gilly Salmon have worked together to develop a PEEP acquisition package for delivery to the courses/institutions who are interested in implementing their own bespoke PEEP locally. The model of delivery is a flipped style of learning with pre-workshop preparation asynchronous activities, a half-day synchronous workshop to collaborate, customise and co-design PEEPs for local delivery followed by a short post-workshop activity. The workshop has been trialled on OTs, physiotherapists, dietetics, operating department practitioners, social work students and optometrists with very positive feedback.

Participants fed back that the PEEP model is customisable for their individual professional and local course requirements. Health Education England funding has recently been awarded to roll out the PEEP model of placements nationally for Operating Department Practitioner HEI courses, with the potential to impact positively on placement recovery, capacity and re-imagination, at a time when there is a significant lack of placement availability, due to Covid-19 and increased student numbers. Research ethics approval has been received to evaluate the process of the contextualisation of the PEEP for a wide range of healthcare professions through the PEEP acquisition package.

Although the PEEP has focused to date on health HEI student placements, interest is growing from non-health disciplines within the HEI sector, which are exploring how the PEEP model may be customised to be used with their student placements.

The current global health pandemic has forced us to break the mould in the way we engage and support students in their learning – translating to online delivery – and this has extended to placements. The PEEP model offers an online learning ecosystem for placement delivery, highlighting the importance of peer enhanced learning. The PEEP facilitates rich metacognitive learning, supporting students to work towards their placement outcomes alongside important wider employability gains. PEEP is not only a placement model for mid-pandemic placement recovery, but is a legitimate alternative model of placement delivery, offering a rich online peer enhanced placement learning ecosystem for students.

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Whose job is it anyway?: Inclusive approaches to developing work-ready students for the graduate labour market

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Work-readiness

The extent to which graduates are 'work ready' is seen as "indicative of their potential in terms of job performance and career advancement" (Caballero and Walker, 2010, 12). Finch et al (2016) provide a dynamic capabilities view of employability aligned to the conceptualisation of work-readiness, which proposes that work-readiness of students is based on: intellectual capital, personality, job specific skills and meta-skills.

The work-readiness development of a graduate is transient and relational. Environmental influences and interactions including university, work experiences, friends and family all provide spaces in which transformation of students can happen. It is here that students' employability capabilities are developed, preparing them for success in the workforce.

Work-readiness is shaped via the formation of professional identity (Hinchcliffe and Jolly, 2001), professional skills awareness and development (Sin et al, 2012) and self-reflexive understanding of the individual (Brown et al, 2004).

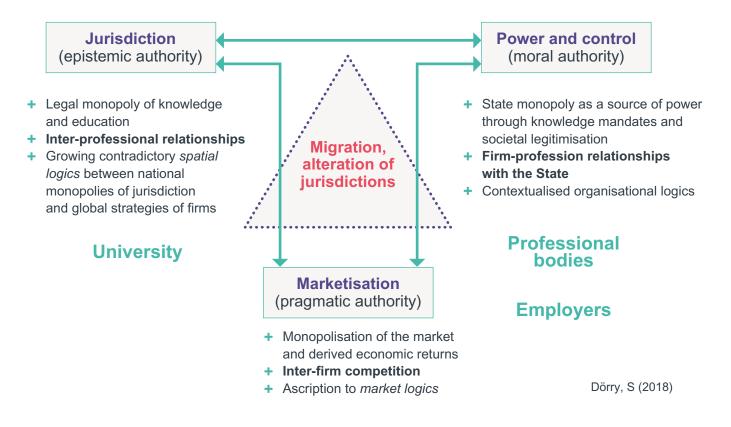
Work readiness - competing logics

The question of whose responsibility it is to develop work-ready graduates is a long contested and controversial issue (Barnett, 2000). Many employers and students believe that university education has the primary purpose of preparing students for work in the graduate labour market. It is reported that some students perceive that it is possible to develop work-ready skills simply by undertaking three or four years of university education (Crebert et al, 2004).

There is evidence of an apparent mismatch between employers' expectations of graduates and the skills of graduates entering the labour market (AC Nielsen Research Services, 2000; Precision Consulting, 2007). Similarly, it is clear that many graduates' expectations of employers differ from employers' expectations of new graduates (Bandow, 2004; Walker et al, 2012).

Business students, unlike say nursing students, do not interact with their professional statutory regulatory bodies (PSRBs) very much during their studies. Yet, the decision to undertake a chosen business course is often driven by PSRB accreditation (Gee, 2015). PSRBs have firm professional relationships with the state. Durkheim (1984) explains, "the fundamental duty of the state is laid down in this very fact: it is to persevere in calling the individual to a moral way of life" (p69).

Figure 1. Jurisdictions of work-readiness agents; universities, PSRBs and employers, adapted from Dörry (2018)



The competing logics between multiple agents (universities, PSRBs and employers) who have authority to develop students' work-readiness, make the spaces of transformation in which students can develop their work-readiness extremely difficult to navigate. Consequently, students migrate from different jurisdictions and have to reframe their understandings of work-readiness in preparation for entry into the graduate labour market.

Student voice - work-readiness development

This paper argues that the student voice is a critical voice within the conversations of responsibility and accountability of developing students' work-readiness. A dialogic approach creates opportunities for better understanding by universities of structures of opportunity (Roberts, 1977) and challenges in navigating these spaces, for different student groups. Career theory is used as a framework with which to scaffold the students' perceptions.

As such, the student voice is centred to allow the exploration of students' perceptions relating to where and with whom the responsibility lies for preparing them for success in the graduate labour market. The paper analyses students' perspectives to explore the power and responsibility dynamics between the different agents who are involved in developing the work-readiness of students.

Approach

This case study, undertaken at a Russell Group University, focuses on the baseline findings from qualitative data collected from students regarding the multiple agents with varying authority in the development of students' preparedness for the graduate labour market.

The participants of the study include Year 2 accounting/banking and finance students (n=87) and postgraduate business students (n=38).

Data collection

- An online questionnaire was circulated to Year 2 accounting/banking and finance students during November 2018 that asked questions about their development of skills awareness and understandings, achievements and identity formation
- + Four focus groups were run in July 2019 with postgraduate business students who were asked to reflect on their experiences during a five-day study tour in Zurich in which they visited six Swiss companies to learn more about business operations in Switzerland.

Data analysis

Qualitative data was collected from both student groups relating to authority and responsibility for the development of students' skills awareness, skills development, intellectual capital, professional identity and job-specific skills.

Career theories were then applied to draw out themes using the systematic six-step thematic analysis approach advocated by Braun and Clarke (2006). This requires an iteration of analysis from the data to the literature and back again to draw out themes.

Figure 2. A theoretical framework of this study, 'Whose job is it anyway – inclusive approaches to developing students' work-readiness



Outcomes – data results

The results below summarise students' perceptions identified from analysis of the qualitative data collected from the questionnaire and focus groups, of whose 'job' (ie responsibility) it is to develop their work-readiness.

The role of universities

- + A dominant theme that emerged is what Savickas (2012) refers to as 'life design'. This is the sense that students can be strangers in their own lives. Respondents felt quite strongly that universities should help them infuse their projects and experiences (often not job related) within their spaces of transformation with their own career development plans
- + Student respondents suggested universities are responsible for helping them understand and control their narratives. In practice, this means universities supporting students' articulation of aspirations, skills and career management strategies
- Students expressed that universities should place an emphasis on developing work-ready graduates who are competent within their discipline fields. They also recognise that, as graduates, they are required to possess the abilities necessary to negotiate a world of work that is in constant flux (Barrie, 2006; Nagarajan and Edwards, 2014)
- + Students asserted that universities should help develop their personal effectiveness (self-efficacy, agency, self-actualisation) (Quendler and Lamb, 2016; Schmidt and Bargel, 2012)
- Students perceived that universities are responsible for providing knowledge and education that prepares them for work tasks but also opportunities to change, flex and adapt in complex situations (Brew, 2010)
- (Postgraduate) students expressed expectations that personality and intellectual capability would be developed at university through interactions with 'stars' ie successful, impressive lecturers/students
- + (Postgraduate) students expressed that university spaces should provide spaces through interactions with staff and other students where students can learn how to be professional

The role of employers

- + Students suggest that it is the employer's responsibility to provide opportunities to develop taskfocused functions of the job and opportunities to apply education and knowledge
- + Students perceive employers can provide exposure to the 'real world' and an authenticity of experience to develop skills useful and valuable for work
- + Students sought validation and confirmation of their preparedness for success in the workplace from employers

- + Students expected employers to highlight areas of improvement of self and identify that students need to be successful in the workplace
- + Students perceive employers helping a shifting of mindset, through broadening of horizons, enhanced network capital and a sense of what is possible in their life design

The role of students

- + Personal trade-offs are consciously made by some students when making choices about what spaces of transformation to occupy to develop their work-readiness
- + Some students acknowledged that they need to take advantage of opportunities; to view them as an investment rather than a cost (expressed by postgraduate students)

The role of professional bodies

+ There was no reference in the responses to the role of professional bodies (PSRBs) by students when discussing whose job it is to develop their work-readiness.

Summary

Students perceive dichotomous yet overlapping responsibilities between multiple agents in developing their work readiness. The extent to which students engage with different spaces of transformation and extracted value from those interactions in terms of work-readiness development is influenced by their opportunity structures. This supports the theory that structures of opportunity influence the sense of agency that students feel they have and should have in developing their work readiness.

Students held an expectation that their professional socialisation starts within university and is validated by employers through tasks and development in authentic occupational contexts.

The data suggests there is an increasing expectation by students that universities should support their life design and the articulation of their work-readiness narratives. However, a strong view held by many student respondents was that it is employers who provide an insight into what is possible and help shape and reshape the narrative. This suggests that universities and employers could work together to help students 'write themselves into existence' – that is, to better understand what they need to get to where they want to be and what impact this will have on self and their identity. This will pose important questions about the extent to which students need to re-migrate within spaces of transformation, or indeed change elements of themselves and their identity.

Life design embodies developing students' personal epistemologies, their knowledge of themselves and their life narratives. Students perceive that university is not just a space where they develop knowledge and skills capabilities. They perceive that university is a place where they learn about their place in the world.

Conclusion

A conclusion from this study is that the academy needs to consider that students' ability to develop work readiness is influenced by their ability to exercise agency and engage with spaces of transformation. Some of these influences are structural and others are linked to their understanding of themselves and their employability capabilities. Students perceive that the role of universities in this context goes beyond creating spaces to enhance skills awareness and development. Students suggest that universities ought to support students' personal epistemologies.

Further developments

An area of future work for this study is to facilitate enhanced employer engagement and to look at radical epistemologies which encourage employers to consider a review of what Yosso (2005, 70) refers to as "community cultural wealth". This approach adopts a critical perspective of the foundations on which perceptions of work readiness are based. In doing so, the bias and prejudices associated with perceptions are surfaced. Meaningful discussions regarding how these biases and prejudices are embedded into graduate recruitment and selection processes can take place. These conversations are currently underway with some very large organisations and it is hoped that we will report on the findings at next year's Advance HE employability symposium (2021/2022).

In pursuing such conversations, we can better support students to navigate and take ownership of their life design in order to achieve the graduate outcomes that they deserve rather than being constrained by their opportunity structures.

Special thanks

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