Research article

Fostering practically based learning spaces through industry-engaged higher education models

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Abstract

This article aims to identify settings where joint working in third space occurs between academics and other professionals supporting educational outcomes and through the development and sustainability of unique learning environments that link academic provision and work-related learning. Specifically, the focus of the article is on the preparation of higher education students for the world of work, facilitating links between academic studies and practical experiences. It aims to unpack the ways in which higher education institutions respond to the complexities of the changing labour market and develop approaches when moving their academic provision towards a more work-related provision to enable students to engage with industries and learn alongside professionals. An explorative, qualitative case study approach was employed, using semi-structured

interviews with staff members from two universities. Findings indicate that the crossover between theoretical learning, practical experiences and employer engagement involves continuous boundary crossing of in-between spaces (for example, intersections between higher education and work) to foster the effective development of skills and expertise of students necessary for the contemporary world of work. The case study universities showed that engaging with third spaces contributes to integrating academic and practical learning, and introduces students to industry-engaged higher education, enhancing employability skills. Through these spaces, students can experience unknown challenges in the context of a constantly changing world of work. The findings suggest that this requires an enabling learning ecosystem, underpinned by a range of components, including continuous stakeholder collaboration, curriculum development and integration of theory and practice.

Keywords higher education; employability; work-related learning; employability skills; crossing boundaries

Introduction

The higher education sector in England demonstrates a tendency towards diversification of provision, specifically through developing practices to meet the needs of both contemporary students, by facilitating graduate employability, and employers, by developing work-ready graduates. Higher education graduates' employability remains a significant topic, both in England and globally. Contemporary policy and research debates (DfE, 2021; Kornelakis and Petrakaki, 2020) highlight a crucial issue concerning the work readiness of higher education graduates. Innovation and diversification in higher education are increasingly interconnected with the goal of enhancing employability, improving life chances and expanding career opportunities for students. Within the context of this research, the term 'practically based learning spaces', introduced in Kersh and Laczik (2022), refers to spaces that contribute to integrating 'academic' and 'practical' learning, thus enhancing graduate employability and work-related skills development. This is within the context of assumptions that university provision is not always aligned with the needs of the labour market (Tomlinson, 2012), and therefore the significance of work-related experiences within higher education and practically based learning spaces needs to be developed to ensure that students' employability is fostered. Definitions and debates around employability have been numerous and evolving, particularly to take into account the changing nature of work in the early twenty-first century (Emms and Laczik, 2020). One interpretation of employability which still has currency is outlined by Small et al. (2018: 4): 'the capacity to be self-reliant in navigating the labour market, utilising knowledge, individual skills and attributes, and adapting them to the employment context, showcasing them to employers, while taking into account external and other constraints'. At the same time, as Cook (2022) highlights, employability is more complex than merely getting into employment. It involves lifelong and lifewide learning and development, with employment being just one of its many possible outcomes (Cook, 2022). Other commentators also stress the complexity of the process of becoming employable and developing employability skills (for example, Green, 2016; Siivonen et al., 2023; Succi and Canovi, 2020), where employability may be understood as a process that is actively realised and enacted by the interactional spaces that graduates move through when they enter the labour market (Siivonen et al., 2023).

To unpack the role of unique learning spaces in graduates' journeys towards developing employability and work-related skills, this article considers two higher education institutions (HEIs) in England which aim to incorporate practically based elements in their provision to enhance employability and career development for their higher education students. These provide examples of industry-engaged models which involve crossing boundaries between academic and practical learning, and creating spaces for communication, stakeholder engagement, knowledge sharing and bringing together different dimensions of learning (Akkerman, 2011; Edwards, 2011), specifically through cross-disciplinary contextually relevant curricula. The article considers such spaces and their potential for integrating working and learning.

The article considers two main research questions:

1. How do universities develop and sustain a unique learning environment that links higher education and industry, and learning and practice?
2. In what ways do HEIs develop approaches and strategies when moving their academic provision towards a more work-related provision, to enable students to engage with industries and learn alongside industry professionals?

These questions will be answered in relation to two HEIs in the north of England, which mainly recruit students from their local areas. As such, due to the demographics of the local area and the mobility of students, the universities have higher proportions of students from lower socio-economic groups.

The changing concept of learning space in higher education: the role of in-between spaces

The notion of the learning space has undergone significant changes over the past 20 years in response to the developments of contemporary society (Kersh, 2015; Kersh and Evans, 2017; Malloch et al., 2022). The learning space has been reconceptualised, and it is no longer perceived as a singular place where teaching and learning take place. Instead, it is viewed as a multidimensional space that overlaps with other contexts, such as the workplace, community and home. This leads to individuals continuously crossing boundaries between these spaces. The notion of 'boundary crossing' has been described as the process of recursively moving through varied contexts, communities of practice (Wenger, 2000) or activity systems (Engeström, 2001) to establish action and maintain interaction across differing practices (Bakx et al., 2016). The concept has been applied within the vocational education and training research field, and it has been described as a process through which individuals or groups can bridge different social, cultural, professional or organisational boundaries (for example, Akkerman, 2011; Engeström and Tuomi-Gröhn, 2003; Guile, 2011). Crossing the boundaries between learning and working spaces has been conceptualised as a complex process (Akkerman and Bakker, 2011), with a potential for integrating working and learning, through providing learners with opportunities to relate their 'situated knowledge in the workplace to the codified knowledge acquired in school' (Tuomi-Gröhn et al., 2003: 7) and vice versa.

Applying this concept to higher education offers fresh perspectives on the evolving higher education landscape and brings attention to the complexity of the process, specifically contributing to the emergence of new 'in-between' learning spaces that we, the authors, conceptualise as third spaces. Third space was first conceptualised in the field of cultural studies by Bhabha (1994), a prominent postcolonial theorist. Bhabha's 'third space' is envisioned as a space for the interaction, negotiation and transformation of different cultures and identities. This theoretical thinking challenges the notion of fixed identity, and 'the limits of the self in the act of reaching out to what is liminal' (Bhabha, 2011: 10), and it brings attention to the nature of cultural identity as not fixed but rather fluid and constantly evolving through third spaces. Consequently, these spaces provide affordances for individuals and communities 'to negotiate and translate their cultural identities in a discontinuous intertextual temporality of cultural difference' (Bhabha, 1994: 55). As observed by Tatham (2023: 4), it was conceptualised as a 'space of transformative potential where people are not restricted to adhering to one or other set of dominant values and traditions'. Engaging with third spaces and reconciling seemingly oppositional points of view and different types of knowledge (for example, academic and practitioner) can often generate both new understandings and enhanced practices (Martin et al., 2011).

Subsequently, the notion of third space has gained increased attention beyond its origin in postcolonial studies (Ikas and Wagner, 2009), and, as observed by Soja (2009: 49), the concept offers a 'different kind of thinking about the meaning and significance of space and those related concepts that compose and comprise the inherent spatiality of human life: place, location, locality, landscape, environment, home, city, region, territory, and geography'. In this interpretation, central to the understanding of the third space is the conception 'that there is not just one single definition of space and spatiality but rather a multitude of approaches and perspectives' (Soja, 2009: 50).

The multidimensional concepts of space, spatiality and 'third spaces' have gained increasing attention over the past 20 years, and they have been applied across various research fields, including higher education research (Whitchurch, 2008). In the context of higher education, as observed by Veles and Danaher (2022: 7), third space became 'a metaphorical description of the new ways that academic

and professional (administration services and support) staff work together, crossing, disrupting and at times transcending the boundaries of their respective professional roles and identities.'

In our study (Kersh et al., in press), the third spaces approach serves as an analytical perspective to illuminate instances and patterns of crossing boundaries and co-creating new forms of learning spaces 'in between' higher education and industry, where students integrate academic knowledge with practical skills. The notion of third space, while highlighting how individuals navigate a range of spaces, extends beyond mere boundary crossing and contributes to the creation of new forms of spaces.

In the context of our study, operating in newly created spaces requires blending theory and practice in creative ways, and it is most effective when supported by strategies that promote and encourage a culture of stakeholder engagement, partnership and collaboration. Therefore, these developments emphasise the significance of new interactions and collaborations within the 'in-between' or 'third spaces' of academic and practice-based learning within a learning ecosystem. In this study, the concept of third spaces helps to enhance our understanding of how individuals, networks and institutions interact and co-create third spaces for integrating theoretical and practical knowledge in the context of higher education to enhance students' learning and experiences. Leach (2015) observed that for students, proactivity in and building careers in these in-between spaces can involve crossing physical, cultural and psychological boundaries. As pointed out by Veles and Danaher (2022), third space collaborations encourage all actors to challenge their pre-existing ideas in order to become open to new possibilities through creative dialogue. Such new communications among different stakeholders shape the learning ecosystem that connects work, academic studies and lifelong learning (Buchanan et al., 2017; Grainger and Spours, 2018).

Methods

The aims and research questions are addressed through an in-depth exploratory case study (Yin, 2009) of two universities in England. The bounds of each case were the undergraduate provision of the university, and the interviews attempted to cover a broad and diverse range of the undergraduate provision. In this article, data from these two case studies are used to provide points of comparison, allowing for reflection on the development and implementation of new strategies aimed at making academic provision more practically based in response to the changing labour market. The two cases have been selected to identify both common and diverse approaches that facilitate graduate employability by embedding work-related provisions into the higher education curriculum, exemplifying the changing landscape of higher education. Purposeful sampling was used to identify universities that had recently developed their institutional strategies with one of their focuses being employability of their students.

The research examined the views, practices and experiences of key stakeholders from these institutions including pro-vice chancellors and other members of the senior leadership teams, heads of schools, lecturers and staff members with either a university-level or school-level professional role, such as employment engagement officers. We undertook seven in-depth semi-structured interviews at University 1 (U1). Five of these were in-person interviews during a day-long visit to the university. The other two were conducted online. At University 2 (U2), four in-depth semi-structured interviews were conducted online. A summary of the interviewees can be seen in Table 1. All interviews taking place in-person and online were recorded, transcribed and anonymised. Contextual data, such as the skills and employment profile of the local area, were also analysed for the institutions to give deeper understanding of the universities and the local context in which they are situated.

Thematic content analysis was used to identify themes and subthemes from interview data. A combination of both inductive and deductive approaches was used (Fereday and Muir-Cochrane, 2006). Deductive content analysis was based on themes from our theoretical framework (similarly, the interview schedule). Our inductive analysis ensured that further relevant themes were identified and added to the existing ones. Inductive analysis allows the development of a deeper understanding of the data, and it leads to identifying patterns and themes in addition to those from the theoretical framework. In addition to these approaches to analysis and to increase validity, data and emerging themes were discussed by the research team.

The research was conducted in accordance with the British Educational Research Association's (BERA, 2018) ethical guidelines, and it received ethical approval from UCL's ethical board. Some responses may have been professionally sensitive for individuals and/or for the institutions; therefore,

we have omitted any information that may indicate identities, while still ensuring that we uphold the original meaning of any quotations or phrasing.

Table 1. Interviews conducted at Universities 1 and 2

	University 1 (U1)	University 2 (U2)	Total
Academic senior leaders (includes pro-vice chancellors, deans and associate deans, heads of department)	5	1	6
Professional services (includes leaders/managers from professional services and other professional services staff)	2	1	3
Lecturers	0	2	2
Totals	7	4	11

The research has some limitations due to the small number of interviews that were conducted and the fact that the research only encompasses insights from two universities. The interviews were conducted with university staff members, and therefore perceptions are limited to a single stakeholder group. Interviews with other stakeholders, such as employers, students and graduates, would provide a richer insight into the topic. However, we ensured that interviews were conducted with a broad range of staff members, across subject areas and professional services, and with staff at a range of seniority levels.

Findings

Both universities participating in this study emphasised the importance of employability and the development of 'work-ready graduates', and these were central themes in their curriculum for undergraduate students. For the purpose of this research, we focused on undergraduate and non-apprenticeship programmes (Level 6 in England's Regulated Qualifications Framework [see SQA, 2024]). The reason for excluding degree apprenticeships was that we wished to consider programmes that were not necessarily aligned to a particular occupation to see how work-related elements were encompassed into the student experience for non-vocational degrees. In this section, we consider several ways in which the two institutions linked higher education and industry, and learning and practice, to create stimulating cross-boundary experiences for their students to develop the skills, knowledge and behaviours which prepare them for professional life after graduation, whether this be employment, entrepreneurship or a blended portfolio career.

The role of university staff in fostering cross-boundary learning

The continual dominance of employability within the higher education agenda has led to the expansion of roles within the university and the development of existing roles to include employability development or graduate prospects, and associated activities, within their remit. This has meant developing brand new roles at the university and departmental level solely dedicated to improving graduate outcomes, which include bridging the gap between industry and the academic world. These developments were highlighted through our interviews in both universities. Interviewees discussed the central careers team growing in numbers and prominence over the past few years, as well as the development of specific staff within subject departments, such as 'employer engagement officers'. We spoke to one specialist who explained 'I'm the lead in the school around sort of embedding employability in the curriculum, and therefore, I kind of was the main author of the School's employability strategy' (Middle leader, U1). These types of roles not only consist of engaging employers of all descriptions to work with the university for multiple purposes, such as contributing to curriculum development that has industry relevance or ultimately offering permanent graduate positions, but also of supporting incidents that might lead an undergraduate to find permanent work. Staff in these newly established, mainly non-academic job roles therefore become facilitators of relationships and a first point of contact between an employer and the

university which begins to bridge the gap between industry and the academic. The importance of this role was highlighted by interviewees; one described themselves as speaking 'fluent industry, but I can also engage with academics and be a bit of a translation between the two' (Senior leader, U1). Such a mediator role between employer and university suggests that a particular know-how of dealing with two different types of organisations is vital in developing and nurturing cross-boundary relationships.

The second development that these institutions have experienced is the expansion of the remit of existing staff and job roles to include responsibilities related to the work-readiness of graduates, and to ensure that work-related provision is at the core of student experience. This can challenge existing entrenched identities relating to what the role of an academic is, as emerging discourses, interaction, negotiation and cultural exchange may lead to the formation of new or hybrid identities (Bhabha, 1994). Through these processes, the role of academic staff goes beyond what may be considered the traditional academic role (Macfarlane and Yeung, 2023) of acquiring (through research) and distributing (through teaching) knowledge. Instead, academic staff may now have a responsibility to bridge the gap between knowledge acquired at the university and its relevance in the outside world through the additional responsibility of engaging with employers, thus contributing to the co-construction of third spaces. This may be achieved by ensuring that the curriculum is relevant to the workplace, arranging projects and assessments that are based on real-world examples and enabling placements to take place. However, several challenges arise with this, which were discussed by participants. First, these additional roles bring an increase in workload for staff; academic staff are required to do more within their full-time job, whether that is taking on new official roles for a proportion of their time, such as one day a week as an academic executive, or the general expectation that academic staff must do more to make their provision 'industry-ready'. Second, as alluded to above, the language of business is not the same as the language of academics, having different expectations, objectives and ways of operating, and therefore negotiating between the two parties may present problems. This highlights that the role of specific non-academic staff working as meditators or enablers is crucial in complementing the role that academic staff play in embedding 'work-relatedness' into the curriculum. The third challenge is that external organisations and employers may be approached by different staff members from different areas/disciplines of the university. As one lecturer (U2) explained: 'we'd have three or four or even more academics getting in touch with [the same employer] asking the same questions and frustrating the people on the other side because "I just spoke to your colleague last week about it. Do you not talk to each other?"'

Academic staff may build a relationship based on a pre-existing personal link with an individual from an organisation. This can be nurtured and used for drawing the organisation into departmental activities, for example, for setting up placement opportunities or attendance at career fairs. However, this may lead to making requests and contacts from multiple channels of the university to the same employer, making the relationship difficult to manage and coordinate. This was referred to as 'knocking on the same employer's door': 'the danger is that we all have the potential to knock on the same employer's door at the same time on a particular day. So, we don't have, at the moment, oversight of everybody's activity' (Senior leader, U1).

Stakeholder communication and partnerships have been highlighted as key factors contributing to boundary crossing between academia and industry. Our interviews indicate that third space, fostering the integration of academic and practical knowledge, is constructed and co-constructed through collaboration among key actors: university staff, industry representatives and students. These complex processes contribute to the creation of third spaces, achieved through what has been referred to as mutually beneficial partnerships between universities and industry.

The configurations of third spaces, constructed through industry–university cooperation, may take different forms, for example, placements, joint projects and employer involvement in curriculum development. Both case studies have indicated that industry engagement is one of the key aspects of strategic development to enhance student employability. The ambition is to develop partnerships that are both sustainable and mutually beneficial, building trust between academics and industry, specifically small and medium-sized enterprises.

Challenges of working in third spaces

Sustainability emerged as a key issue and challenge through our interviews, and some successful partnerships represented one-off examples of good practice rather than long-term sustainable patterns of communication and collaboration: 'We had lots of transactional engagements as a university where

individual academics had built a relationship with a company around a specific project … but none were really strategic and didn't engage outside of just either one academic or one school or one department' (Senior leader, U1).

Sustaining and building on existing and emerging patterns of collaboration were recognised as important aspects of the employability strategy in both universities. Interviewees spoke of the need for a strategic oversight of the various employer relationships, yet neither of the universities believed that this has been successfully achieved yet. Despite these challenges, interviewees stressed the importance of academic staff aligning themselves with industry, and the benefits this in turn had for bridging the gap between the curriculum, the border student experience and the world of work.

To overcome some of these challenges, academic and non-academic staff with industry experience were sought after. Drawing on academic staff from industry alleviated, at least in part, the issue of language, as staff are already attuned to the workings of industry and its expectations and needs. Furthermore, staff who already have industry experience may more naturally be able to embed work-related learning into the curriculum and delivery without much additional workload. However, it is also important to ensure that this industry relevance keeps abreast with changes. Both case study universities discussed that many staff continued to practice professionally while in their academic role with the university. It is argued that this retains the currency of their industry knowledge. One lecturer explained a common employment set-up across the university:

> I have been at [U2] in the capacity at first as more like a freelance academic tutor since roughly 2009. And then, in 2020, I was doing various amounts of, like, part-time equivalents with regular work … So I've gotten between point six and point eight as lecturing … And I run two businesses, social enterprises, and that's been my primary focus anyway. (Lecturer, U2)

For both academic staff and other staff specifically enrolled to focus on employability of students, an important role has become the management of 'third spaces', bridging the gap between academic and professional, or the theoretical and the practical learning. These third spaces also include work placements or simulation environments that emulate the workplace. The role of these third spaces will be explored in the following section.

Bridging the classroom and the work environment: creating third spaces in the university?

The importance of bridging the classroom and the work environment was highlighted by all the stakeholders in the research. Employers place high value on skills and behaviour developed in the workplace. However, there are issues concerning the availability and reach of meaningful work experience for all students. These are discussed below. Instead, universities try to emulate workspace environments and create spaces for employer engagement and interaction in other ways in an attempt to reach similar goals of work placements. Examples of these will be explored in this section.

The need for these third spaces is explained by the fact that for the case study universities, the acquisition of knowledge is not the end point of the degree, but an ongoing activation of knowledge and disciplinary skills in a real-world setting. One informant gave the analogy of moving away from the concept of knowledge as being central to a degree and instead placing the student at the centre of a wheel, explaining that 'at the centre of the wheel are those attributes, behaviours, attitudes and skill sets delivered through the prism of disciplinary and interdisciplinary knowledges' (Senior leader, U1).

Alongside this, students are facing uncertain futures. The world of work is rapidly changing, as is the world beyond the workplace, due to major disruptors such as digital technologies and AI, and environmental and demographic changes. Therefore, the case study universities discussed having the responsibility to prepare students for uncertainty, arguing that it is not easy to prepare them for the unknown. To ease the transition from university to the workplace, third spaces, representing the space between the classroom and the workplace, can bring in elements of the outside world to help support students to develop resilience and the skills for dealing with the unexpected, and to give them the opportunity to solve issues in a safe environment. This illustrates how third spaces can motivate and generate new understandings and enhanced practices (Martin et al., 2011). For example, one interviewee discussed a departmental law clinic where students engage directly with the community and provide pro bono legal advice about unique real-world challenges that clients from the community

face. The practice gives students exposure to authentic examples from the real world, while still being supported by the university staff or external qualified solicitors. Shadowing within the university is another approach to provide students with opportunities to engage in practical activities in a safe and familiar environment, which has been transformed into intermediary third spaces, bridging academic knowledge and work-related activities: 'if there's any chance that students can shadow people who are already working in the university, that in-house process makes it so much easier because you don't have to worry about the external documents and paperwork' (Senior leader, U2).

A number of practices were described which sit outside the traditional curriculum, or, as one participant described, 'these spaces that are super curricular but work through curricula' (Head of department, U2), meaning that they are closely entwined with the content and act to enhance the experience of the curriculum. These include a community radio station run by media students, which is also Ofcom regulated, ensuring that students are introduced to professional expectations but within the university and student community. It also allows opportunity to practice the skills and knowledge acquired through the core curriculum in a live environment. Similarly, art and design students access a professional commissioning studio used by wider regional creative industries. Students engage in live briefs commissioned from the public and private sectors. The space gives students opportunities to pitch and create pieces of work for real clients, and it opens access to potential jobs. In such real working spaces, students are supported with advice from both academic staff and professionals to deliver high-quality professional work. There are expectations of professionalism that are expected in working with real external environments, yet they are still supported by elements of a safety net. The students' road to professionalism was described as a 'continuum of safe danger', whereby:

> at Level 3 [and] 4 it's relatively safe, and students will get exposure to employers or exposure to the landscape, but we should always allow students the right to fail productively, fail forward – it's the safe end of the spectrum. As they progress in the levels, the stakes get higher and higher, to the point where now on that path to professional, the nurses are, you know, out in practice. And perhaps some courses do it earlier, some courses do it later, but they'll be increasingly exposed to live briefs, then off on placement. (Senior leader, U1)

Activities such as job fairs and guest employer lecturers were also mentioned as opportunities for employer engagement and developing professionalism, which would act as these first levels of exposure to build students' confidence before scaffolding the student towards more challenging environments, where the stakes of failure are higher. These activities can act as third space where students use what they have studied while still applying skills needed in a professional environment.

Challenges to the success of third space environments between the classroom and work

A significant issue that was discussed in terms of these extra-curricular activities, which support students on the path to professionalism, is that for the most part they sit outside the curricula, which means that they are non-compulsory elements for students. This raises the question of how equal access and equal opportunity can be ensured, in particular for disadvantaged students. The benefits of all these activities, particularly work placements, were highly revered in terms of the personal and professional development of the students who participate in them, and subsequently for the positive effect that this has on their graduate outcomes. One interviewee explained:

> when [a tech company] have a placement for, say, six weeks, that's really where they recruit from. It's their main source of recruitment because obviously they understand the student. They can see the personal values of the student but also their professional attributes. That really is the pipeline that they'd like to see and they value the most. (Middle leader, U1)

Despite the clear benefits, staff stressed that inevitably there are students who are difficult to engage, and therefore they do not take advantage of the full campus experience, perhaps because they commute, have caring responsibilities or work part-time. These students are likely to be more disadvantaged, and they are further disadvantaged from not engaging with experiences which would support their professional development. Increasing numbers of students are taking part-time work because of the cost of living and high university expenses, hence they engage minimally with anything beyond their

timetabled delivery and anything that is not linked to the assessment. As one participant noted, 'If students can't see a clear link between whatever this is A and their assessment B, they are extremely unlikely to engage in that' (Head of department, U1). Often, this part-time work is unrelated to their studies, nevertheless, as third spaces, this could support the development of employability. Some interviewees explained that this particularly affected the take-up of work placements, as students could not afford to forfeit part-time work, which in some instances even paid more than prospective placements that were more meaningfully linked to their courses. The debate therefore arises as to whether to make some of these activities compulsory elements of the curriculum. Some participants argued that students can be reluctant to take part in placements because of their special circumstances and their lack of confidence. Requiring students to participate ensures that all students access the benefits of their industry, and it 'can be the key to unlock their confidence in so many cases' (Middle leader, U1). However, the principal argument against making placements mandatory was that it would force those who cannot participate for good reasons, because of caring responsibilities and part-time work, to leave the programme, as it would not be viable for them to complete such elements.

Another challenge is that there are not sufficient relevant and high-quality placement opportunities, meaning that there is not enough capacity in the industry within the universities' region. Staff members additionally highlighted that their cohort of students is not particularly mobile, and they face significant barriers in seeking placements in wider regions. The solution for most was to ensure 'industryness' was always closely entwined in the core curriculum, rather than being extra-curricular, so as to bring the realities of the workplace into the classroom and assessment. For example, involving employers to set briefs for projects based on real industry issues and then support students through these live projects, and involving employers in the assessment of these projects. Some described going beyond employer assessment and involving the wider public and other stakeholders as assessors: 'For instance, in our sports rehab, and our podiatry, those are open to the public, and the public are involved in the assessments. So, the public will give feedback to the tutor on how the student has managed their pain' (Senior leader, U1). Other methods of integration of industry relevance discussed included incorporating a career event into a module, as well as assessing mock interviews which have been practised in the classroom with peers along with employer input.

The strategic direction of the case study universities was to ensure that all degrees incorporate the development of transferable skills as well as broader professional development. However, how these are interpreted and practised need to be tailored to the individual sector that is relevant to individual students. In other words, all courses should be developing students' pathway to professionalism, yet this is manifested differently for different disciplines to ensure that it is relevant and closely links the theory to practice. For instance, in the business school, students must establish a LinkedIn profile and begin to form professional networks through it while at university. In contrast, the professional landscape exists very differently in arts and media, and professional networks are not established in the same way. Students in arts are taught the skill of networking in person, and conversational skills. Third space activities in this discipline have included practice dinner parties, with the aim of collecting others' business cards. The activities in these two examples are vastly different, but both help build the social capital of the student which has the most currency for their industry.

Third space environments include the spaces that have been discussed so far, such as a student radio station, public-facing law clinics and simulation environments that emulate a professional workplace, such as a medical facility for the training of nurses. In these instances, the physical environment supports the experiential learning of the students. These are safe environments in which students can practise what they have learnt in the classroom in an active and collaborative manner. Staff are also an essential component in supporting students to bridge this gap between their studies and employment through the management of these third spaces, and through their development of employer relationships.

Finally, interviewees discussed the role that virtual reality and digital experiences now can offer in creating new and innovative third spaces. One example given included a virtual reality software system where students can practise employer interviews or a customer service environment. The software can play back the experience to students and staff, allowing students to self-assess their performance, which helps to build individual confidence, as well as to develop other key transferable skills and attributes. These types of spaces also tackle some of the issues around equality of access. If universities can provide these tools to their students, they overcome issues of not having sufficient employer contacts to meaningfully engage with all students.

Discussion

HEIs are increasingly under pressure to prepare their graduates for a labour market in flux, and more specifically for the complex world of work. It is in the interest of both students and employers that graduates are work-ready and employable, and can be immediately productive after graduation, either as an employee or self-employed. Graduates' destinations have become a measure of HEIs. HEIs have been responding to this demand, with many developing strategies that embrace academic studies and practical (work-related) skills, that is, they link theory and practice. There is a tendency in England for HEIs to diversify their provision, in many cases including work-related opportunities to fulfil this demand from the students and the 'world of work'.

Findings were drawn from two case study universities, and they indicate that the crossover between academic studies, practical experiences and employer engagement involves continuous boundary crossing across in-between spaces (for example, intersections between higher education and work) in order to foster the effective development of student skills and expertise necessary for the contemporary world of work. Figure 1 displays the area of overlap between academic/theory-related learning and work-related learning, which characterises many of these third space activities that are used by the two case study universities for the professional development of their students. These professional development activities, such as simulation activities and employer-set live projects, discussed below, show how academic and work-related learning interact to create third spaces and cross boundaries.

Engaging with these spaces, students are developing skills that enable them to meet unknown challenges in both a safe learning environment and in the context of a constantly changing world of work. A unique learning environment is sustained through a growing recognition that the learning space should not be perceived as a singular place where teaching and learning take place. Our data indicate that the co-creation of new forms of spaces, conceptualised as 'third' spaces provide opportunities to integrate academic and work-related dimensions.

As considered through our cases, engaging with third spaces contributes to integrating academic and practical learning, and introduces students to industry-engaged higher education, enhancing employability skills. The complexities of entering the labour market highlight the uncertainty of graduate employment and the skills they need to develop (Green, 2016). The employment premise of matching individuals to jobs is disappearing due to various societal factors, such as digital development, machine learning and artificial intelligence, meaning that increasingly 'individuals cannot maintain their employment, and therefore, they must maintain their employability' (Savickas, 2011: 256). Therefore, learning and developing skills to be adaptable to the changing employability landscape is proving to be an important factor in making the transition between education and work. As our cases indicate, third spaces can introduce elements of the real working world to help support students in developing resilience, adaptability and skills for dealing with the unexpected within the protected environment, and equipping students with these skills has been linked to enhancing their employability after graduation. Consequently, the diversification of higher education and the development of third spaces contribute to graduate employability by supporting boundary crossing and fostering these essential work-related skills.

As our cases illustrate, third spaces provide affordances for both students and other stakeholders (for example, employers and university staff) to renegotiate their identities (Bhabha, 1994) as they engage with new activities and assume new roles within third spaces, to bring together different types of knowledge (Tatham, 2023), such as academic and practical knowledge. This involves finding new ways of working together, while crossing the boundaries of other professional roles (Veles and Danaher, 2022). The research found a number of issues that can arise in the development and nurturing of these third spaces, such as:

- Increased workload for staff
- The need for mediators to bridge academic–industry gap (expectations, language)
- Strategic oversight and coordination of multiple and competing employer relationships across the university needed
- Sustaining strong employer relationships
- Non-participation in extra-curricular activities, because of:
    - part-time jobs taking precedence
    - care-giving responsibilities

    o activities not linked to assessment
- Insufficient quality placement opportunities in region.

Figure 1. The intersection between academic and work-related learning in the creation of third spaces which support the professional development of students
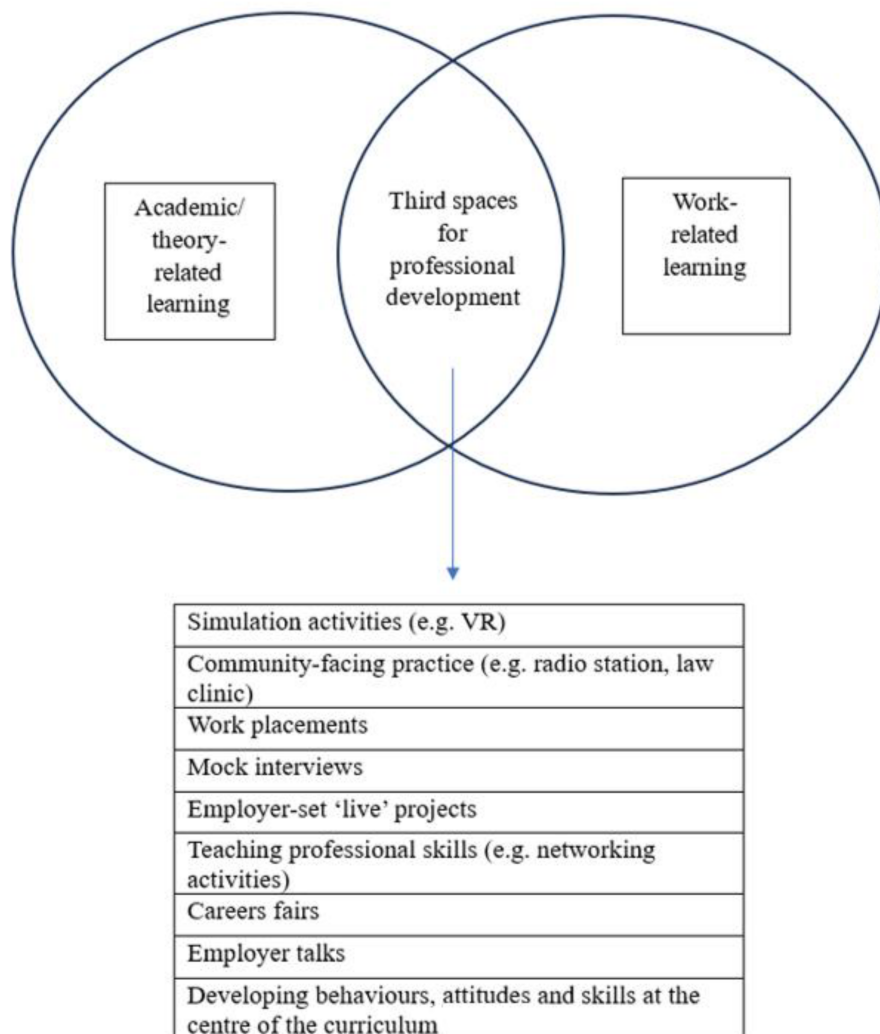
Conclusion

Our findings indicate that all key actors, such as university staff, industry representatives and students, are continuously contributing to the co-creation of multiple third spaces, which represent new forms of spaces that bridge academic and practical (work-related) dimensions. This requires an enabling learning ecosystem which is considered as the core to develop work-ready graduates. This learning ecosystem was investigated in the two case study universities, which demonstrated ways in which individuals, networks and institutions interact and cross boundaries between learning and working spaces. It was argued that third spaces integrate academic knowledge and practical skills, and therefore boost students' learning and experiences.

  This article has argued that the concepts of crossing boundaries and third spaces may contribute to the development of employable graduates, as these concepts encompass academic and practical learning, and theory and practice. The article's specific contribution to knowledge is in exploring the potential and role of third spaces in considering how universities develop and sustain unique learning environments that link higher education and industry while transitioning their academic provision towards a more work-related focus. The process of creating and co-creating third spaces has been highlighted

as a complex development that requires individual motivation and creativity, as well as collaboration between stakeholders at the intersections of higher education and industry. Employable graduates fulfil both their own and their employers' expectations in the workplace, but they ultimately also contribute to national economic growth. The exploratory nature of this study indicates that further research is needed on how different types of HEIs develop and sustain unique learning environments supporting students' employability. The two case studies suggest that other universities in England may redevelop their strategic plans, incorporating third spaces to place their students in an advanced position in a competitive labour market. Investigation of these approaches and practices would contribute to further understanding of how students' employability is developed in contemporary HEIs.

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Declarations and conflicts of interest

Research ethics statement

The authors declare that research ethics approval for this article was provided by UCL's ethics board.

Consent for publication statement

The authors declare that research participants' informed consent to publication of findings – including photos, videos and any personal or identifiable information – was secured prior to publication.

Conflicts of interest statement

The authors declare no conflicts of interest with this work. All efforts to sufficiently anonymise the authors during peer review of this article have been made. The authors declare no further conflicts with this article.

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