

Teaching Research in an Employability-Focused Undergraduate Curriculum

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Abstract: Employability has emerged as a key part of many universities' strategies, with initiatives to integrate work with employers, and input from professional careers advisers, into course material. This is especially relevant for business and management courses, and particularly at the undergraduate level offers some scope for courses to be differentiated through the nature of the interaction which they provide with employers. Undergraduate students are expected to learn some research techniques and to demonstrate an ability to carry out a measure of independent inquiry as part of their studies. Superficially these research techniques can appear to represent a very different facet of academic study from employability, and be seen as training in purely academic techniques. This paper explores the potential to build connections between research and employability and to harness students' knowledge of research methods when working on practical business issues. This paper is based on experience of developing a series of projects which students in their final year of an undergraduate degree can carry out in partnership with employers. These projects are on a smaller scale than independent projects that students have worked on in the past and allow for more focused aims and more structured supervision than other student research projects. While the original motivation was to increase the structure and certainty for students their final year the approach has evolved to be aligned with the university's policies around practical experience and employer engagement. Therefore the project, while not mandatory for students, is positioned as one of a number of possible ways to gain practical experience, with the expectation that students will take up at least one of these options so that they will graduate with this experience. Setting up these projects has depended on collaboration between academics, careers advisors, and others involved with employer engagement including the team working with alumni. The approach has been implemented across a range of business, management, and finance degrees and has proved effective in creating a connection between independent research and employability.

Keywords: Employer engagement, Curriculum design, Relevance, Independent research, Undergraduates

1. Introduction

Employability is a key element for any vocational degree course. Undergraduate students taking Business and Management degrees are typically very focused on how, at a practical level, their degrees will prepare them for the workplace. Careers guidance is a well-established part of a university's activities but in recent years there has been a trend towards integrating this increasingly closely into courses, typically through career specialists and academic staff working in tandem and recognising that they both have a contribution to make.

Universities have also for many years offered opportunities for students to include internships and other formats for part-time work into their courses. For Business and Management this is particularly relevant because the opportunity to observe and participate in an organisation contributes directly to students' understanding of their discipline. At a practical level graduates entering the workforce with experience from internships or the equivalent typically have an advantage in seeking employment so the opportunity to participate in them is an integral part of universities' preparation of students for their careers.

As an aside Business and Management degrees attract students whose ambitions are to be entrepreneurs and a significant number who have an expectation of going into a family business, so any employability agenda needs to acknowledge needs beyond those relevant to those of students expecting to spend their careers working for an organisation.

One avenue to build up students' employability is to incorporate a connection with employers into the final project that students take as part of an undergraduate degree. Typically the project is framed as an opportunity to carry out independent learning and to address an identifiable problem relevant to the course content. This implies that there is a chance to use research methods to address that business problem and the preparation that students receive before carrying out such projects usually includes an introduction to research methods. So the intersection of the employability agenda and the individual project raises questions about students' needs to learn how to operate as researchers. To what extent do employers and academics have different ideas on what constitutes research? How much is this a difference in the language used and how much is it a difference in the actual meaning of the term? And what is the scope for employers and students to benefit from each others' ideas of research?

This paper is based on experience from ongoing development of the way that final projects function within a UK business school with a successful undergraduate programme (success in this context being represented by an undergraduate intake increasing in numbers by 40% since 2018 and a gold award in the Teaching Excellence Framework for student outcomes). It addresses the challenges and immediate impact of revising the approach to projects in the light of a major impetus to build a curriculum around employability.

2. Background and Selected Literature

Much of the current approach to building experience with employers in higher education can be traced to the evolution of sandwich courses – courses with one or more significant periods spent working for an employer – over the years. Silver (2007) discusses the development of technical education in the period following the second world war, a time when universities were expected to adapt to a changing workforce with an increasing need to develop skills in what at the time was termed ‘applied science’ and there are repeated references to sandwich courses, typically in the context of institutions which were set up as Colleges of Advanced Technology and which subsequently attained university status in the 1960s. The ability to include a year’s placement with an employer within a conventional three-year degree is typically classed as a thick-sandwich course, while a thin-sandwich course would offer more than one shorter period of work. Interestingly Brunel University in London, which was originally a College of Advanced Technology and in its early years as a university adopted a format with multiple periods with an employer as the norm for undergraduate degrees, continues to offer thin-sandwich courses as an option (Brunel University, 2024).

Over the years a greater range of options for students to gain experience has emerged. Shorter internships are widely offered: Kim et al (2012) survey business schools in the USA and establish the benefits of internships and the types of offering that they relate to are mirrored in the UK and other countries. Fowlie and Forder (2018) focus on a UK post-1992 university and also on experience from Germany in documenting the benefits of a placement, typically a whole year, spent in industry. While there are limitations in the data available to carry out detailed analysis of students’ career trajectories there are strong indications that taking an internship gives students multiple advantages through their career (Brooks and Youngson, 2016; Jones et al, 2017).

Yorke (2004) discusses student perceptions of employability, noting the importance of work experience and the need for universities and employers to work together to make this effective. He uses the initials USEM, for Understanding, Skilful Practices, Efficacy Beliefs, and Metacognition to unpick what exactly is meant by employability. He identifies students engaging in work experience and identifying then filling gaps in the knowledge that they have gained through formal instruction at university – the U in USEM. He gives examples to represent the S in USEM of instances where the practices followed within an organisation do not necessarily align with those which might be expected on the basis of students’ formal learning. For self-efficacy he gives the example of a student who, emboldened by the need to prepare themselves for employment, pursued the careers service very tenaciously to secure some help that they needed for a CV. The M in USEM is discussed in terms of self-knowledge, for example understanding their strengths and weaknesses and how to apply these in the context of their studies.

A typical honours degree in the UK includes a final year project of some sort based around a measure of independent work (Webster et al, 2000). This can take many forms but for a typical Business and Management degree includes an element of research and requires students to undertake some learning of research methods. A perennial challenge which Webster et al discuss is to attain some sort of consistency between different projects which could represent considerable variations in the difficulty that they present to students: there is a tension that needs to be managed between providing a range of individual projects and ensuring consistency and fairness for students. Dingus and Milovic (2018) give an account of client-based projects focused on marketing within a US university to demonstrate the extent to which a project conducted by students in conjunction with an employer can achieve one of the key objectives typically associated with an independent project within a taught degree course: that is to cement the connection between theory and practice in anticipation of a student’s transition into the workforce.

3. Creating Employability-Focused Projects

This account covers the move towards employability-focused projects in a UK business school with over 2000 undergraduate students spread across three years of a degree course. In line with the approach taken by most in the sector, students enrolled on a three year course but had the option to extend it to four years by taking either an additional year studying with an overseas partner or by taking a year in business. Combined with the options for students who fell slightly short of the entry requirements for the main degree to take an additional

foundation year at the start, and the fact that the undergraduate degrees formed the largest feeder for the school's specialist masters degrees aimed at candidates coming straight from a first degree, the option was there for students to spend as long as six year studying in the business school.

Many aspects of the school's activity were informed by the interplay of the school's priorities and those of the university as a whole. The business school was highly research-intensive and committed to research-informed teaching. Some, though not all, the teaching of research methods to undergraduate was conducted by active researchers who had typically worked in areas which undergraduates could be expected to find compelling and were able to promote the benefits of research. They worked in tandem with PhD students whose research was often also very interesting to students and who were expected to carry out tutoring to undergraduates as an integral part of their role, and also with more education-focused academics who nevertheless had some familiarity with research and who were well attuned to how best to present it to a group of undergraduates, who might approach something that looked like an obscure academic concept with some scepticism.

The university also had a commitment to employability. This was expressed partly by providing not only the option for students to work in industry for a full placement year to create a thick-sandwich course but also by a number of options for shorter placements and internships. Students who took the placement option covering the whole year were usually extremely satisfied with the experience. Moreover the negative comments that did arise were typically associated with deficiencies in administrative processes either at the university or in the employer where they were placed, and typically did not detract from the learning that the students attained. The process was highly structured with students and their managers contacting tutors at the university on occasion to monitor progress (a requirement for a placement was for the student to have a designated line manager), students keeping a log, and employers committing to ensuring that students did something close to a graduate-level job.

Nevertheless the take-up of placements was low, with fewer than 20% of students choosing to take a year in industry. Despite this being heavily promoted on the basis that students would build up the same amount of work experience and studying experience whether or not they took a placement year, it became apparent that many were deterred by the prospect of taking an additional year and in response to this a number of options around internships, typically up to three months over the summer, and micro-internships, which could be as short as five or six weeks, were developed. These were university initiatives though in general enthusiastically adopted by the business school.

In recent years the university's employability strategy has become more ambitious. One key element of this has been to strengthen the careers-focused material in the first year of an undergraduate degree. Part of this is to provide students with very specific skills and knowledge relevant to seeking a job. In Yorke's classification this would embrace S – skilful practices in context would include knowing how to approach an assessment centre and knowing how to deal with the recruitment practices and industry structures in various sectors. It would also cover a certain amount of M – metacognition would extend to building students' self-awareness in terms of understanding the sort of careers that they would like to pursue. Another part was to generate awareness of the careers specialists within the university, since in student surveys conducted later in their studies a consistent pattern was that a tail of students did not even know that the careers service existed. Student feedback on this was generally positive but tempered with some opposition to this being delivered to first year students, partly because the skilful practices were perceived as more relevant to later stages of their study and partly because of a sense that resources from the careers service could be dedicated to providing more tailored guidance to final year students who were applying for graduate roles.

Additionally the university took a significant step to introduce an aspiration that every undergraduate student should have some experience within an employer as part of their degree. This was built on a recognition that in a typical course students would have a number of different potential approaches to choose from in achieving this. The placements and internships already mentioned offered one possible route, but a range of other activities including a module based around consultancy skills and a module in which students trained as mentors were also designated as suitable employability components.

So where does research and independent scholarship fit in to this approach to employability? Students who took a placement in industry have typically been at an advantage in working on independent final year projects. They are strongly encouraged to draw on their working experience as part of their projects, something that they can do in many cases through having access to a live organisation facing real problems which can in turn inform their choice of subject or the project. Often the organisation where they worked can be a source of primary data which in turn ensures that the project is distinctive (students who want to do a project based purely on

secondary data are typically warned that this is not an easy option because it makes it hard to establish exactly what differentiates their work from a purely descriptive account of the subject). Given that they have already had an opportunity to spend time in a workplace and to apply concepts from their course to that workplace, they have some training in understanding connections between theory and practice which in turn forms the basis of a research mindset.

This provides an opportunity to develop the current final year project into a much more worthwhile experience for many students than it has been before. An outcome of the teaching team's evaluation of the final year project was that it had been a worthwhile exercise, and a good introduction to research skills, for a proportion of students but that a large number of others had not internalised the connections between theory and practice or the understanding of how to carry out research that had been hoped for. Connecting the final year project to a wider range of experiences with employers offers opportunities for more students to develop and investigate research questions based on their previous experience.

The next step towards increasing employability has a direct impact on the final year project. This is to involve employers directly in the project itself. For a strong and ambitious student this could be achieved by the student in effect being embedded within the employer for part of each working week while producing the project, and using their experience while with the employer as primary data for the project. This would result in a project being distinctive, relevant, and authentic. It is valuable but for similar reasons to the placement year attaining only a limited take-up is not something that could be expected to attract more than a minority of students.

The challenge, then, is to create a project structure which offers both employer engagement and research experience and additionally for students cements the idea that research is not purely an obscure academic activity but is applicable to businesses as well. The applied industry project has been introduced on a small scale and the response from students and employers alike has been positive. It depends on a number of students working with one employer and one academic supervisor, sharing their understanding of the context but each having a distinct focus. It was initially introduced for students specialising in finance, partly because a number of employers within the finance sector were interested in participating in the initiative but also because it proved possible for employers to make a certain amount of data available to a group of students and to ask each member of the group to take a different approach to analysing that data with a view to addressing a different problem facing the employer. The supervisor was able to conduct group supervision sessions which provided valuable opportunities for students to exchange ideas and the students were offered training in the use of statistical techniques, principally multiple regression which could be used to construct models of financial data.

Cautiously it appears possible to expand this to more management-focused projects and also to those which are based around qualitative and quantitative approaches alike. For qualitative projects the initial data could be collected through interviews or surveys, and techniques covered in training include coding and thematic analysis. There is an extra level of complexity associated with the collection of primary data and there are ethical issues which need to be approved by both the university and the employer – typically the primary data and the research question can be carefully chosen so that the exercise is unambiguously low-risk and the university's process for approving research ethics recognises this.

It has proved possible to engage a number of employers in these projects despite the teaching team's initial concern that they might be expected to source data and contacts for many more students than the employers could cope with. If anything, it has enhanced the relationship between the business school and employers and built up a certain amount of momentum. Also at the level of research associated with an undergraduate degree the employers' expectations do seem well aligned with the students' abilities.

In terms of Yorke's classification, these projects address U, S, and E. U is undoubtedly present because students learn about research concepts and understand their relevance. S appears because they can develop their own skills in the context of an employer's requirement and they make their understanding applicable outside an academic environment. E is present because they learn to apply these skills effectively in a context where they are working towards a clear aim.

4. Next Steps

The applied industry project is still in its infancy. It requires commitment not only from students and from industry partners but also from academic staff willing to supervise and from professional staff able to provide administrative support. It does depend on students providing work of a reasonable quality and it does carry a reputational risk if students do not act professionally when with industry partners although this risk will decrease as the process becomes more established.

It also forms a key part of the business school's efforts to align with the university's employability strategy and to ensure that the aspiration for every student to gain experience with an employer is reached. The role of the careers service in sourcing the projects and supporting the relationship with employers is crucial and this reflects close collaboration between careers professionals and the academic staff supervising the projects.

By being implemented with both finance-oriented and business-oriented projects it has already proved adaptable to different contexts and it would be worth looking for further opportunities to adapt the overall approach.

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