Work-Like Experiences in the United Kingdom: Their role in experiential learning and industry-university collaboration.

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Abstract

Work-like experience (WLE) and real-world practice is becoming more important for students as skills gaps are widening. The effects of this gap are becoming more significant also, with negative consequences on productivity and social mobility. Nottingham Business School offers a number of WLE projects, with two options at postgraduate level being the Consultancy Experience Project and In-company Experience Project. This literature review aims to identify the range of similar projects offered across UK higher education, discussing findings around the value and impact on student learning and outcomes to identify potential gaps in knowledge. Among the significant conclusions drawn are the ideas that undergraduate year-long work placements are over-represented in existing research, while WLEs in general, particularly at postgraduate level have received less attention. Significantly, there is little research on the motivations of businesses which take part in these projects. This is even more significant given the growth in scale and the need to encourage more external clients to engage.

Key words: Consultancy, Work-like experience, Experiential learning

Introduction

Increasingly, universities across the UK expect students to partake in a significant amount of work-like experiences (WLE) during their course. For instance, data published by the Higher Education Statistical Agency (HESA) show that the percentage enrolling on sandwich courses, typically an four-year undergraduate course where a student spends the penultimate year on a work placement, rose by 26% between 2014/15 and 2018/19 (HESA, 2020). Beyond, work placements, WLE opportunities take many forms in both undergraduate and postgraduate courses including internships, student projects and company visits. Two types of WLEs delivered on postgraduate courses at Nottingham Business School, which is part of Nottingham Trent University, are the Consultancy Experience Project (CEP) and In-company Experience Project (IEP) (NBS, n.d.). As a credit bearing part of their postgraduate degree, groups of students or individual students, respectively, act as consultants working for several weeks on a challenge set by a real-life external client. Students are able to apply theory they have studied. Successful delivery of CEPs requires meaningful participation of external organisations who provide the real-life projects. Suggested topics include marketing, brand development, business development, financial analysis and competitor and industry analysis (NBS, n.d.). Project providers range from SMEs, not-for-profits and public sector organisations.

Since the primary aim of a WLE like the CEP/IEP is to provide experiential learning opportunities for students, a significant amount of literature exists on their benefits and impact upon student learning and graduate outcomes. Research demonstrates positive impacts on both. For example, Kerrigan, Manktelow and Simmons (2018) explain how placement schemes improve student outcomes while Crebert et al. (2004) illustrate how students assign value to specific skills gained in the workplace like teamwork and managing responsibility. Unfortunately, research suggests that skills gap exists within the UK. (Ball,(2022) suggests there are insufficient UK graduates with the skills needed to fill contemporary professional jobs. The findings of Luchinskaya and Dickinson (2019) support this, showing a widening skills gap which is producing lower levels of social mobility. WLE opportunities like the CEP/IEP projects offered by NTU and other institutions are offered as a potential remedy.

The literature review below will survey the existing research on CEPs, IEPs and other WLE opportunities. We will analyse the literature on the value and impact on student learning and outcomes to identify potential gaps. Further, as universities expand their provision of WLE opportunities, they must engage meaningfully with more external clients from all sectors. Part of that engagement and of managing that customer relationship journey will require an ability to demonstrate and build upon the benefits of WLE opportunities for providers. Therefore, it is timely to conduct a review of the literature surrounding the value and impact of WLE opportunities in general and on external clients specifically.

The review will be structured as follows. First, WLE projects similarly to the CEPs offered by NTU will be discussed. The next section will examine the literature around industry-university collaborations, before work-like experiences and their impact of student employment skills and outcomes are

investigated. Conclusions will then be drawn identifying gaps in the literature and areas for further research.

Work-Like Experience (WLE) Projects offered across UK Higher Education

Surveys of university websites and publicity brochures indicate that a number of institutions offer projects which are similar to the Consultancy projects offered at NTU. For example, postgraduate students at London Business School analyse challenges posed by a range of different businesses, including 'major multinationals, tech start-ups, social enterprises and NGOs' (London Business School, 2022). One example cited includes Zoomo, a producer of delivery vehicles. The students were asked to address issues relating to bike breakage and repair costs, for which the students suggested financial incentives, education and optimisation of management systems and hardware. These solutions addressed clients, employees, operations and product. Zoomo communicated that the solutions added value to their business, improved the quality of their service. In general, reported satisfaction of clients across the projects at London Business School is high - '96% of clients agreed or strongly agreed that the students' recommendations have had a positive impact on their organisation' (London Business School, n.d.). This feedback indicates that such projects can be of great value to client organisations.

Information on other examples of consultancy projects are provided by universities through publicity brochures. Unlike NTU and London Business School, these projects are delivered at undergraduate level. De Montfort offers a consultancy project with a business, aimed at encouraging students to 'harness the knowledge gained during their studies and apply it to a real-life scenario with a local company/employer' (De Montfort University, n.d.). The University of Stirling also has a similar offering, where they suggest that students can 'make a real business impact', suggesting that 'increasing your employability isn't just about achieving outstanding academic results. You'll want to gain as much real-world experience as possible to help accelerate your career progression.'. Among the benefits cited for students is the possibility of gaining confidence in their abilities, making professional connections, and enhancement of transferable skills (University of Stirling, n.d.). Helyer and Lee (2014) highlight similar projects at Teesside, Bedfordshire and Drexel Universities as good examples of work-like experiences. Lester and Costley (2010) praise the approach of Middlesex University through their 'Learning through Work' programme.

Evidently, work-like experience is offered across UK HE. However, based on our review of university websites and publicity brochures, it is not widespread, with limited credit-bearing opportunities at postgraduate level.

Industry-university collaboration, factors which influence success, and implications

WLE such as consultancy projects is part of broader industry-university collaborations (IUCs). While little research has addressed consultancy projects specifically, there is a literature strand relevant to this review which examines aspects of collaboration. However, the focus of attention has been identifying the factors which contribute to successful collaboration.

Rybnicek and Königsgruber (2018) conduct a systematic literature review to examine what makes this relationship a success. The authors recount how IUCs have increased in importance for management practice and research. This systematic review is used to create a conceptual model to organise and categorise factors that influence the success of IUCs. Rybnicek and Königsgruber (2018) highlight several motivating factors for collaborations: companies gaining from highly trained individuals in students or researchers, access to technology and knowledge, and access to research infrastructure which is expensive. Universities can, in turn, benefit from additional funding through patents, licensing or providing access to equipment. Rybnicek and Königsgruber (2018: 222) highlight an ambition of policymakers and universities for university-industry interaction to become the 'third mission', alongside research and teaching, with a push to "commercialise academic knowledge".

This literature identifies a long list of factors which influence the success of IUCs. Firstly, there needs to be clear roles and responsibilities in any partnership (Barnes et al. 2002). Secondly, there needs to be trust and communication between the two parties (Rajalo and Vadi, 2017). Thirdly, the parties need to be committed, with a culture which facilitates the collaboration (Attia, 2015). Finally, the quality of resources such as finance, time, staff and equipment are important (Rybnicek and Königsgruber, 2018). Furthermore, some external elements are important to success such as a conducive economic environment, government support tax incentives (Bodas Freitas et al. 2013; Flores et al. 2009) and geographical distance (Myoken 2013).

This work considers IUCs at a broad level. Yet, such partnerships can operate at different levels, in different subjects and take varying forms. Rybnicek and Königsgruber (2018) suggest that universities have different levels of connections with their industrial partners; university, faculty, departmental an individual. While, much attention has been on more strategic partnerships, an analysis of the impact of different levels of collaboration would be fruitful. Further, subject disciplines have different conventions and cultures, use different methods and instruments and have different emphases - applied research, practice and teaching. This should produce different results (Niedergassel and Leker, 2011; Cummings and Kiesler, 2007).

Further, the nature of the collaboration can affect success. Some are concerned with leadership and management, some are involved with research and some with work-like experiences. There has been little research of factors which make for successful collaborations through WLEs such as individual or group consultancy projects. Yet, such analysis is important since there is increasing emphasis in providing such experiences for students to address a perceived skills gap.

Work-like Experiences, Students' Skills and Employment Outcomes

IUCs involving work or work-like experiences have become increasing prominent in discussions around curriculum design across UK Higher Education. The reason for this, as Perusso and Wagenaar (2021) report, is a skills gap between what employers require and what graduates are equipped with. Moore and Morton (2017) found that between 2017 and 2022 around 2.4 million employees would lack the necessary cross-disciplinary skills. With students paying for degrees directly through a loan system in the UK, there is concern among policy-makers that universities are not providing value for money by failing to equip students effectively for work.

A strand of literature researches this gap and suggests work-based learning as the solution. Heyler and Lee (2014) state that universities are associated with more didactic teaching styles and passive learning. In contrast, the authors argue that work-based learning has the ability to alter and improve what happens at a university, because it offers a different way of learning with the potential to share new knowledge. Perusso and Wagenaar (2021: 1423) argue that "Globalisation, technological changes and the industry-to-service economy transition has produced dramatic changes in the labour market, thus affecting higher education". They suggest it is not enough for higher education to only provide disciplinary knowledge, graduates should be flexible, be able to adapt and innovate and that these competencies are better developed through practice. Work-based experiences are beneficial since they provide appreciation for practical knowledge.

With renewed interest in the employability of university graduates following the Wilson Review (2012), much attention in the literature has focused on work-based learning such as year-long placements and internships, particularly at undergraduate level. Such partnerships between industry and university are long established, particularly in vocational subjects. Research on employment outcomes demonstrate that the completion of work placements fosters career-related competencies which produces higher levels of employability (Brooks and Youngson, 2016). Helyer and Lee (2014) report similar findings for internships. Yet, as McCann and Hewitt (2022) highlight, a significant proportion of students do not complete work placements nor internships. Consequently, such students are offered work-like experiences such as consultancy projects or simulations to address the skills gap they face. Unfortunately, there is no established literature investigating these work-like experiences.

Another issue with the literature is the attention on undergraduate level. In relation to postgraduate study, the Wilson report (2012) observed that there is uncertainty about the suitability of postgraduate taught programmes given there is no loan system. Since there is one now, it could be argued that it is even more important to ensure value for money through maximising students' employability. This is emphasised in Wilson (2012) recounting research by the Higher Education Academy (HEA) which highlights that students' main motivation for undertaking postgraduate study is to improve their

employment prospects. The author also calls attention to the lack of research around employers' perspectives and postgraduate study, further stating that the research which does exist is contradictory: employers attach minor importance to postgraduate education, while also noting employers' reservations about the skills of postgraduates, particularly in leadership skills and work experience. Thus, there is a need for further research into the employability skills gap of postgraduate students.

The literature supports to the idea that employability and work-like experiences are more important than ever, while also spotlighting the lack of research around these topics, particularly at postgraduate level.

Conclusion

WLE, consultancies and in-company projects are a type of IUC that is becoming increasingly important to universities at undergraduate and postgraduate level, to students seeking to enhance their career profiles, and to businesses which looking to access knowledge and talent. Based on reviewing academic literature and promotional material for WLE by universities across UK Higher Education, we identify a range of different projects with various styles, with example institutions including NTU, London Business School and De Montfort University.

Our survey suggests that the academic literature considering WLE does not consider postgraduate study extensively. This may reflect the lower attention given to the analysis of postgraduate study generally because its scale is much lower compared to undergraduate study. Further, WLE comes in various guises and lengths, but undergraduate, year-long projects are overrepresented in research. There is a dearth of research into alternative WLEs, particularly consultancy-projects.

This review has also identified a seam of literature which analyses industry-university collaborations. However, research tends to focus on strategic level applied research and knowledge exchange. Our review found few studies which consider the perspectives of associated businesses. For instance, ,we found no studies which investigate the motivations of companies which take part. Research into these motivations could demonstrate potential benefits, improving the information provided to potential clients and a greater degree of understanding for universities and partner institutions and those involved in decision-making on WLE. It is timely to investigate this since universities are expecting such work-like experiences to grow in scale and will need to encourage more external clients to engage.

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