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## In Search of Relevance: The Value of Work Based Learning

#### Introduction

It is a stimulating exercise for those working in higher education (HE) to reflect on where leaders, managers and workers learn the knowledge and skills necessary to succeed in the world of work. The most frequent finding will be that they say that they learn them at work rather than by way of reference to any formal education undertaken. Of course on reflection, many workers will recognize that the basic skills of literacy and numeracy that laid the foundations for later learning are acquired largely in the classroom. However, the finding that much relevant learning is informal and occurs in the workplace is a good reason to reflect on the teaching and learning strategies adopted in HE. At a time of increasing social, cultural and technological complexity, the workplace is both an outcome that many HE students strive to succeed in and a site of learning for those who seek to progress in their careers. In this chapter we explore the implications of this through the development of work-based learning (WBL) as a response to the imperative for more relevant HE in today's economy.

The first part of this chapter reviews the context that drives work oriented pedagogical developments in HE. A context where universities are increasingly expected to drive productivity and economic growth whilst at the same time ensuring that their students are well equipped to make the transition from education to the workplace and succeed in their careers. The second part of the chapter sketches out some theoretical foundations highlighting pragmatic, problem-solving and reflective approaches that lie at the heart of WBL pedagogy and the challenges that these bring to the traditional curriculum that universities offer. Whilst we locate the narrative in the chapter to the challenges facing Business Schools, many of the issues discussed are relevant to other disciplines and fields of study. Two case studies introduce very different forms of WBL: one describing a prevalent form of WBL founded upon project-based work placement as part of a course curriculum and another outlining a whole course representing a more radical challenge to the traditional academic curriculum delivered in the classroom. The next part of the chapter reflects on the case studies and wider literature to consider some key questions associated with the nature of WBL, the structure of such programmes of study, the integration of academic and practitioner knowledge and some factors that influence the adoption of WBL in HE. The chapter concludes with a challenge to traditional curriculum and a call for disruption and innovation through the introduction of more WBL in the HE sector.

### Context

The dynamic nature of economies and labour markets are key drivers of change in the HE sector (OECD 2007, EC 2012, Warshaw and Hearn, 2014). For example, there are more and more jobs both now and forecast in the future which require high level qualifications; globalisation is widening, deepening and speeding up connections across national borders; digital disruption is changing the nature of the labour market and developments in information and communications technologies present ever more significant opportunities for flexible and distance learning and employers of all sizes are increasingly seeking competitive advantage through a range of partnerships and strategic alliances with universities (DBIS, 2013).

Add to this a policy context where the role that universities play in achieving wider social and economic development objectives is increasingly recognised in many countries and the context for WBL can be viewed as more favourable than it has ever been in the past. Education policy in countries as diverse as the United States, Scandinavia, Thailand, South Africa and Australia has been encouraging the development of WBL for a number of years, calling for the use of innovative pedagogies to support workforce development and innovation (See various OECD Reviews<sup>i</sup>). In the UK, the Witty Review of universities and growth published highlighted a range of interventions to maximise the impact of

universities including the role of student placements, access to facilities and joint working with business as key contributions to be made to economic growth by the university sector (DBIS, 2013).

At the same time, central to employment and skills policy in many countries is smoothing the transition between education and the world of work. The Organisation for Economic Co-operation and Development refers to widespread opportunities that combine learning and work for young people as one of the key features of successful transition between education and work in a variety of national contexts (OECD, 2000). Increasingly complex work practices, greater job flexibility and interaction with consumers mean that employers are looking for a range of general skills to accompany technical skills. These 'employability skills' combine hard skills (project management, communication, creative thinking, problem solving and leadership) and soft skills (confidence, communication and reflection) of learners (DBIS, 2015; Draycott and Rae, 2011; Jones and Iredale, 2010) and are increasingly important because the labour market is intensely competitive and employers in all sectors are looking for people who are flexible, able to act on initiative, work in teams, have the ability to solve problems and undertake a variety of tasks in different cultural and work contexts. The way in which new university graduates are absorbed in the labour market has changed radically over the years with a decrease in the use of national mass recruitment programmes and an increase in non-traditional graduate routes into work including self-employment or employment in small and medium sized enterprises (Pollard et al. 2015; Personnel Today, 2015; 2015a). As a consequence of this there has been a steady rise in appreciation of the role that work based learning can play in pursuing policy goals in the UK and the introduction of an employer levy in 2017 is sure to promote the development and delivery of WBL through a range of HE apprenticeships (Universities UK, 2016).

The rates of innovation and change both now and in the future demand a more flexible and on-going relationship between industry and universities to ensure that organisations and economies remain competitive in the global economy. One of the trends apparent in educational reforms across Europe is enrichment of programmes meaning that the number of parameters addressed by university curriculum is increasing. Whereas curricula traditionally tended to reflect a body of disciplinary knowledge to be transmitted, they are now increasingly perceived as policy instruments setting a framework for education and training stakeholders, including not only lecturers and learners but other stakeholders from industry and professional bodies for example (Carswell et al. 2010; Psifidou, 2010).

Finally, in framing the context for WBL in this chapter, it is important to recognise two key institutional factors that influence WBL in different nations. Firstly, that HE systems at the national level are comprised of a range of universities with differing foci typically (but not restricted to) research-intensive and applied universities which may influence the attention paid to WBL development at the micro level of the organisation. The second factor is the role that the national regulatory framework plays in supporting or constraining the development of WBL in universities. In some nations, such as Finland for example, Universities of Applied Science are required by Law to provide WBL experiences as part of the curriculum for all learning programmes. In others such as Spain, the requirements of a centralised system and an emphasis on traditional forms of education can make WBL difficult to design and implement. In the UK, universities have considerable local autonomy and those institutions supportive of WBL can design processes to facilitate and encourage the development and implementation of WBL. Our case studies are both drawn from the UK and reflect this dynamic environment.

# **Theory/Definitions**

The theoretical foundations for WBL can be traced back to the influential educational thinker John Dewey (1859-1952). His ideas sprang from a philosophy of pragmatism where a central tenet of

education is its relevance to the lives of learners. For Dewey, learning is viewed as primarily an activity that arises from the personal experience of grappling with a problem. His view contrasted with the conventional view of learning at the time that was based on students receiving knowledge that was packaged by teachers, often in the form of textbooks and learnt largely by rote. This is echoed in the distinction between academic and practice based knowledge that has informed discussions and literature on the nature of business schools and the tension between the requirement for a robust, scientific approach to the production of knowledge and the requirement for practice based and relevant knowledge (Bennis and O'Toole, 2005; Thomas and Cornuel, 2012; Mingers, 2015).

Learning theories are embedded explicitly or implicitly in all curricula, but how these theories are applied depends on the larger social, cultural, economic and political contexts within which HE is situated. These broader contexts privilege some theories at the expense of others, determining what knowledge, which methods of instruction, assessments and learning objectives will dominate (Devins et al. 2015). The contexts and pedagogies show some similarities and differences both within and between nations and institutions. Complex questions related to how learning theories translate into educational practice are beyond the scope of this chapter and we choose to pursue a focus on intellectual problem solving activities and the development of cognitive skills to support further knowledge acquisition and active learning (Garrison and Archer, 2000; Fink, 2003). Through this lens, the educator is responsible for structuring a learning environment and facilitating collaborative learning with others rather than transferring codified academic knowledge. Teachers remain subject experts but also facilitate problem-solving by their student who are expected to think in a live work context where ambiguities and dilemmas provide a rich and dynamic learning environment. This perspective embraces notions of self-directed learning, recognition of prior learning and flipped classroom within a context of a more fundamental emergent WBL-related mind-set in HE (Boud and Soloman 2001).

Traditional campus based degrees in the business and management field are predominantly anchored around knowledge drawn from the scientific disciplines (academic theory). However, there is also a general understanding that there is a mode of knowledge relating to management practice. Management practice knowledge tends to be seen as implicit knowledge that manifests itself more often than not in the actual practice of management (Shin et al. 2001; Van De Ven, 2006). One of the challenges facing business schools who wish to blend academic knowledge and management practice in curriculum design is how to give a 'scientific basis' to articulated management practice knowledge. This leads some academics to focus on the integration of academic knowledge and management practice knowledge in curriculum design (Khurana and Spender, 2012).

However, integration is no simple task and there is no settled definition of either WBL or an integrated curriculum. The definitions are often highly dependent upon historical circumstances, pedagogical approaches and national contexts (Foster and Stephenson 1998, Costley and Armsby 2007, Graf 2016). A wide range of terms are used interchangeably for the concept of WBL in HE across the globe. These include cooperative education, work-integrated learning, workplace learning, work-related learning, vocational learning, flexible learning, experiential learning, situated learning, competence-based learning, problem-based learning, problem solving and many more. Each term embraces a range of variations and subtleties the explanation of which are beyond the scope of this chapter. Nevertheless, these terms capture the rich landscape of WBL whilst they also lead to some confusion associated with what WBL means in certain contexts and the form that WBL should take to achieve its learning outcomes. In order to illustrate some of the variations in form we draw on research undertaken for the Higher Education Academy in the UK which suggests several different models of WBL as summarised in table 1.

Table 1 Different models of work-based learning

Model	Typical attributes	
Work-based studies degree	Content negotiated with learner (which may have	
	some employer input), part-time degree whilst in	
	full-time employment	
Degree in cohorts with thesis based on work	Content designed with contribution of employer	
project	and learner, part-time degree, full-time	
	employment	
US/Canadian model	1 <sup>st</sup> year in HEI and subsequent years in work with	
	content negotiated with employer and learner	
Sandwich year, work-placement, work	Content designed with employer, full-time degree,	
experience, project-based, internship within	temporary work with employer (variable duration)	
programme of study		
In-house training/education	Accredited short courses influenced by	
	employer/professional standards	
Conventional degree programme to support	Content designed by HEI, often part-time degree,	
work role (e.g. MBA)	full-time employment	

Adapted from Costley and Dikerdem (2011)

Whilst there are many forms of WBL, the concept of curriculum has become broader, increasingly changing from a static document indicating the subject knowledge to be acquired at the completion of an academic year, towards a more dynamic framework embracing for example, occupational standards and defining learning outcomes, assessment, teaching and training methods (Psifidou, 2010). This leads to considerable differences between a traditional approach to curriculum where the learner has a largely passive role as a recipient of knowledge provided by the academy and WBL approaches to curriculum in HE where the learner has a more active, participative and reciprocal learning context. Several of the differences between traditional and WBL curriculum are summarised in Table 2 which provides an insight into some implications for pedagogy and curriculum in HE.

Table 2 Differences between traditional and WBL Curriculum

	Traditional	WBL
Location	Mainly university campus	Often employer's workplace
Mode of Delivery	Mainly face to face academic-	Often academic and practitioners,
	student	facilitation and blended (combination of
		distance and face to face) learning
Focus	Mainly academic – disciplinary	Linking theory and practice
Nature of	Significant theoretical and	Significant practice based elements
curriculum	conceptual elements	determined by employer/learner
	determined by HE	
Recognition of	Limited	Can be substantial
prior learning		
Teaching staff	Mainly full and part-time	Mixture of university academics, employer
	academic staff	trainers and third party tutors
Teaching	Developed and owned by the	Often shared between university and
materials university		employer
Learner support	Primarily university	University and employer
Assessment	Primarily academic knowledge	Mix of academic and practice knowledge
	assessed by university	Jointly assessed with
		employer/student/university

Adapted from Carswell et al. (2010)

In order to illustrate the nature of WBL curriculum more clearly we consider examples of two models introduced in Table 1. The first one represents a form of the most common mode of WBL i.e. placements within a programme of study IES/IRS/BIBB, 2012). The second example illustrates an institutional approach that provides a context for whole WBL programmes. Both cases focus on developments in WBL in undergraduate degree programmes that were first introduced over a decade ago and have proved to be successful and enduring examples. The first case reflects WBL as a module that can be used within several undergraduate programmes to provide experience of working with external organisations whilst the second case provides an insight into a more radical work-based degree where the whole curriculum is delivered to learners who are in full-time employment.

# Case 1: Project-based, work placement - The undergraduate consultancy project

This case study has been chosen to illustrate an approach that blends work-related and work-based learning in an undergraduate degree module. It is not an example of a typical placement with a single employer and it reflects an orientation towards an economy where non-standard employment (fixed-term, project or task-based) is becoming a significant feature of employment in many nations. The module was introduced in 2004 and is a core element in several Leeds Business School programmes and an elective in others. Typically more than eight hundred undergraduate students participate annually in the first and second semesters of year 3 (September to April). The module runs in several countries through franchise agreements in countries such as Hong Kong, Sri Lanka, Singapore and the UK. Students are usually assigned to a small group to work together on a complex open-ended problem facing an external organisation. The module leader at Leeds Business School suggests that "this module is one of the most challenging and rewarding that students' will study at the University".

The Business Consultancy Module provides an opportunity for students to learn some of the theory underpinning consultancy and to put into practice knowledge gained in other academic modules though a live problem or opportunity located in a specific organisational setting. It also provides an opportunity for students to develop key employability skills by learning informally from the experience of undertaking a project through collaborating with their peers and working with an external organisation. The first four weeks of the module engage the student body through traditional lectures drawing on work-related consulting theory designed to transmit multi-disciplinary knowledge. Students are subsequently assigned to a small group of 4-8 learners to identify and engage a potential client organisation within which to deliver a consultancy project. The group then work with the client to develop a project suitable for study at undergraduate level which is formalised in a project proposal agreed with the external organisation and the academic tutor assigned to the group. There is no syllabus underpinning the module beyond the requirement to reflect on the need to consider the stages involved in conducting a consultancy project and the adoption of an appropriate research methodology. Academic tutors work in a facilitative rather than teaching mode of instruction to support the learning experience. These tutors are expected to have experience of consultancy, research and project management as well as specific subject knowledge.

Students are expected to select projects that provide a context to apply theoretical models or frameworks gained from other academic modules in their course curriculum. The projects are particularly suited to the application of business and marketing strategy, communications and a variety of forms of process innovation in organisations. This provides a rich canvas for curriculum content and a wide range of consultancy projects in terms of aims, nature and site of learning occur each year. Organisations providing a site of learning for students include high profile companies such as Disney, Morrisons and Balfour Beatty along with local small and micro independent enterprises in a range of industrial and voluntary sectors. Examples of consultancy projects include market analysis and recommendations to increase brand awareness of a family firm (Johnson Motors), recommendations for the development of brand presence for a leading clothing retailer (Jack

Wolfskin) and the development of a digital marketing strategy for a leading health charity in the UK (The Children's Heart Foundation).

The module aims to develop the high level hard and soft skills necessary to initiate, co-ordinate, organise and manage a project addressing complex open-ended problems. It provides an opportunity to implement and test academic knowledge related to a range of disciplines and consultancy, project management, research methods and evaluation. Students typically encounter a variety of real world situations that include the challenges of specifying complex problems, clients that change their minds, managing stakeholder expectations and team-performance related issues. The module engenders a high level of independence as students are expected to identify and be responsible for their own learning needs and strategies. Specific learning outcomes include the ability to communicate effectively in a variety of situations and to make practical recommendations based on a rigorous and analytical approach to consultancy. The learning strategy also requires students to reflect on their own and others' performance and to offer feedback on this to each other. This peer assessment and the content of the consultancy report provided to the employer provide the foundation for the assessment of the module. Students receive a group mark, an individual mark and client-informed feedback on the performance of the consultancy project.

The module provides an opportunity for students to select a learning context that is relevant to future career aims. A survey conducted at the end of the module (100 respondents) reveals that students report a relatively high level of relevance and satisfaction with the learning experience. Almost ninety per cent of students undertaking a consultancy project report that the module was relevant and similar proportion report that the content was appropriate. More than eighty per cent report enjoying the learning experience with a similar proportion reporting overall satisfaction with the module (Higher than the average over business-related programmes more generally). The students value the practical knowledge that they generate and recognise the value of the soft skills they develop. For example, one student reflected that

"the consultancy project allowed me to develop written and verbal communication skills as a lot of communication with the client as well as group members was involved. I have also learnt what working in a team is like and how to solve problems and take leadership and ownership of certain situations."

### Another student noted

"The project definitely helped me develop my group work skills, I would also say creative thinking as we tried to make as many innovative ideas as possible that the company would like. I also developed my leadership skills as usually I take a back seat but in this situation I had to take the lead role to push the project forward."

These experiences help the students to build the employability skills that will be valuable in making the transition from education to work and subsequent progression in their careers. Anecdotal evidence suggests that by obtaining references from client organisations students are often able to build and strengthen their CVs by demonstrating the value of their placement experience.

Employers often value the business benefits related to student placement activity. They point to the fresh ideas they can bring into the workplace and an additional resource for specialist projects. More often than not, employers see the placement as an opportunity to assess the potential of students as future employees once they graduate. They also point to the wider benefits of working with a university. For example IKEA, a leading multinational furniture retailer employing around 10,000 people in the UK offers a range of opportunities for student placements and graduate jobs. The General Manager at IKEA in Leeds suggests that

"We have been working with Leeds Business School for six years now. In that time students at the university have given us ideas about how we can improve the way we do business and develop our service to better match customers' needs. In part, our success in the Leeds community has been because of Leeds Business School."

This case demonstrates the value of an innovative project-based placement opportunity where students are encouraged to apply academic knowledge and work together on a complex problem within a specific work context. It illustrates elements of curriculum design and learning outcomes that help to equip the student apply academic knowledge in a practical situation and develop the knowledge and skills likely to help them to succeed in the world of work. As importantly, it provides practical experience of high level consultancy that they can use to demonstrate their value to employers when they seek to gain work. The module is not without its challenges that require careful leadership and management; efforts are required to align employer and student expectations; there are times when projects may not present the opportunity to develop the higher level critical analysis skills required by HE and there can be tensions between group members associated with work distribution and individual contribution. Nevertheless, the relatively high level of relevance and satisfaction reported by both students and enterprises participating in the module provide a firm foundation for its sustainability and further development.

Clearly the consultancy project is not representative of placement oriented WBL in HE more generally. Some programmes may specify placements for one or two days each week for a set time period (e.g. semester or academic year) whilst others may be completed and assessed entirely in the workplace. Some may introduce placements in year one whilst others may schedule them at various times throughout the learning programme. A common variation appears to be for students to spend the third of a four year programme of study in a placement with a single employer. However, there does not appear to be a single 'best way' of harnessing the value of placements with the design of this form of WBL contingent upon a range of local conditions. Whilst placements are generally recognised as a valuable means of developing a range of graduate employability and enterprise skills, for some proponents of WBL seeking greater immersion in the work-place and integration of practical and academic knowledge other forms of WBL may be preferred as illustrated in our second case below.

### **Case 2: Work Based Studies Degrees in UK University Business Schools**

Work based degrees address the 'whole course' learning experience in contrast to individual module initiatives illustrated in our first case example. The narrative for our case illustration is drawn specifically from a UK business school context using the 'Degrees for Work' initiative at Anglia Ruskin University; the University has won many awards for its work based degrees all of which involve significant partnership with local and national employers<sup>ii</sup>. While work based degree models are by no means the 'norm', there are good examples of such degrees offered by other UK universities including Nottingham Trent University; Northumbria University; Manchester Metropolitan University; Durham University; Bradford University and Middlesex University.

Anglia Ruskin's work based degree with retail banker Barclays has now been running for over 10 years and this scheme has recently aligned itself to the UK Government's apprenticeship scheme for funding. The three year BA Business and Management Leadership degree involves A level students being recruited by the sponsoring employer (in this case Barclays) and then enrolled on Anglia's work based degree. The whole three year learning experience for the degree is defined by work experience blended with six one-week study blocks (two per academic year). In sum, work experience is not an

'add-on' but core to how academic knowledge is introduced in the degree and most importantly in defining learning tasks that involve the student in blending academic knowledge and management practice knowledge through work based tasks. The design principle behind this model is simple. It integrates work based problem solving as a key learning mechanism that adds integrity and rigour to the knowledge synthesis activity of the students involved in the generation of solutions to complex 'real world' problems. Students become highly engaged in the notion of being able to describe their learning in terms of 'solving' complex problems rather than simply knowing academic subject matter. It is important to emphasise that students on work based degrees still study academic subjects but the real learning happens in the knowledge synthesis work undertaken during work based problem solving and thereby ensuing measurable and tangible outcomes. In this way the practical learning context rather than academic knowledge is the defining characteristic of the curriculum and pedagogy.

Anglia's work based degree is fundamentally different from a conventional sandwich degree. The first obvious difference is the time spent in work effectively being equivalent to a full apprenticeship. More important is the pedagogic difference enabled in work based degrees by anchoring a significant proportion of the learning around knowledge synthesis activity (through making explicit the blending of academic knowledge and management practice knowledge). By way of contrast, conventional campus based degrees, including one-year sandwich degrees, present limited opportunities for knowledge synthesis based learning by students.

It is easy to see the major advantage of immersive work based degrees such as the BA Business and Management Leadership degree at Anglia Ruskin. Students graduate after 3 years with a degree and three years' work experience. Moreover, as the work experience period on the degree develops it is associated with students undertaking a range of different problem solving activities that place considerable value on not just spending time in an organisation but developing the ability to gain organisation traction and making an impact through problem solving. The integration of these problem solving tasks into the assessment of the degree ensures students perceive high relevance of their studies to working as a future practising manager. It is perhaps not surprising to find that graduates of such work based degrees significantly outperform conventional campus based graduates in the graduate job market iii. Indeed, a major motivation for both the sponsoring company and the student is the expectation that their management career will continue in the host company post-graduation.

Anglia's Degrees for Work initiative also includes a number of variations of the work based degree design and delivery methods described above. Another well-known example is the work based degree in retail with arguably London's most prestigious store – Harrods. Unlike the Barclay's model this involves Harrods placing existing employees on a 'top-up' final year for a retail degree. This model reflects the experience and qualifications of the targeted cohort of employees in Harrods. An equally interesting aspect of the Harrods top-up degree is the way the work based design involves blending Harrods' own internal 'practice based training and learning' activities within the validated degree design. This is explicit recognition in the course design for this degree that academic knowledge and management practice knowledge (acquired through internal training activities) can be brought together in course validation. This is indicative of an important feature of work based degree designs where academic knowledge is not necessarily the core anchor of the course design.

Both the Barclays and Harrods programmes are examples of single company work based degrees. There are examples of consortia based models where multiple companies participate in offering full placement degrees e.g. the BA Business and Management degree at Nottingham Trent. Single company schemes allow the opportunity for a higher degree of bespoking in terms of student assessments and project work focusing in one company. Consortia schemes work well where a

company may only wish to take say, one to three placement students; single company schemes like Barclays run multiple cohorts of circa twenty students per cohort. The primary motivation for participating companies in the type of work based degrees described above is to recruit 'work ready graduates'. The investment costs required of companies participating in such work based degrees (essentially a placement salary plus a degree of course fee sponsorship) compares favourably to conventional graduate recruitment costs. However, the most important benefit is the opportunity provided by the work based degree for the company to 'assess' a potential recruit over a three year placement and also knowing they have three years of highly relevant work experience of their organisation upon graduation.

In terms of course and curriculum design practice work based degrees offer the opportunity to create modules that blend traditional academic knowledge with 'management practice' knowledge drawn from the participating companies. This is particularly important in the common use of 'empty' project based modules that characterise such degrees. Indeed, you can see that some work based degrees have as much as a third of their content driven from company based project modules. This involves the team of university academics designing and validating any degree scheme working closely with key managers in the participating placement companies.

The characteristics of the course and its relevance in terms of the development soft skills are reflected in the testimonials provided by graduates on the Anglia website. For example, graduates report the benefits of the course which include 'giving me a breadth of knowledge about retail in lots of different areas which I was unaware of before starting', 'developing my confidence and presenting skills' and 'sharing knowledge with my colleagues and director of the business'. Several of the graduates point to the application of specific theoretical knowledge with one graduate drawing attention to the benefits of applying knowledge associated with the psychology of sales module on the shopfloor. From the corporate perspective, the Learning and Development Manager at Harrods suggests that the main benefits for the organisation lie in the recognition that the organisation is looking after and nurturing their sales team which helps the organisation retain the best talent and offer world class sales service to their customers.

Qualitative statements by students, tutors and companies that have been involved in work based degrees are numerous and can be easily accessed on Web based and other marketing materials communicated by the business schools delivering such programmes. A few examples are illustrative of both the content and tone of messaging from students who have studied on immersive work based degrees. There appears to be two common themes. First is the value attached to work experience as part of their degree studies – enriching the learning experience. For example, a student from the work based BA Business Management degree at Nottingham Trent University talks about blending work experience with completing university coursework

"...... It gives you the opportunity to combine academic theory with practical experience and helps you to understand how organisations work. 'iv

The second theme is students connecting the work experience gained on their degree with the career and job opportunities available upon graduation. For example, students from a work based degree at Anglia Ruskin state

"I was a Sales Assistant and now I am a Store Manager. Since I got my degree my salary has doubled"

"During my interview ...... they pointed to my CV and said .....'you'll will bring something new to the business ..... they were pointing to my [work based] BA Sales degree." \(^{\text{v}}\)

For companies the major benefits highlighted in work based degrees focus on the relevance of the degree content to the development of (future) employees and secondly the recruitment of high calibre graduate talent. For example, a participating manager on the University of Bradford's BSc Management and Business degree for Morrison's states that the degree will have far reaching consequences by "creating a highly-skilled workforce at the top of the business." Similarly, a senior Barclays' executive argues that the Anglia Ruskin work based degree apprenticeship developed in partnership "supports our vision of allowing anyone who has the right attitude and aptitude to progress and develop their career no matter what background they are from." "vii

### Discussion

Two important and interwoven themes are highlighted in this chapter for developing our understanding of WBL and its practice in HE. First, is the broader institutional context that encourages or inhibits the development and implementation of WBL. Second, is the theoretical understanding and variety of pedagogical practices that underpin it. WBL has a long tradition in many countries and has been a central element in areas of HE such as medicine and teaching for many years. countries it is well established in multi-disciplinary areas (such as business) but in other countries it is far less prevalent. In the current UK context and in countries as diverse as Finland, South Africa and Australia we are seeing increasingly active Government policies driving new WBL practices in universities. At the time of writing, the UK Government policy is encouraging a more radical approach to WBL in HE with incentives being offered through new apprenticeship frameworks likely to foster significant growth in WBL. In the current context, WBL is premised on the view that a university degree can and should focus on preparing a graduate for the world of work. However, it is important to realise that any discussion and comparison of WBL with traditional campus based learning needs to acknowledge the difference in purpose of these contrasting educational models. Clearly both models of learning can and do co-exist within institutions and across a national HE sector/system (See for example OECD, 2014).

Traditionally many UK universities would see their teaching and learning models premised on the purpose of a degree as being to develop the knowledge and minds of students along the lines of 'reading for a degree' and there are a number of philosophical, social, economic and cultural objections to WBL which continue to hamper its development and implementation in some HE systems. For many in HE, disciplines lie at the core of academic activity and the traditional emphasis on pedagogy as a means to transmit the knowledge that students are to master remains a dominant focus for curriculum design. This view is underpinned by the ascendency of the academic, campus based model of learning where students develop knowledge of disciplines through engaging with subject knowledge and academic tutors. This maintains a longstanding intellectual high ground that favours traditional academic knowledge based degree design. The model for undergraduate degrees founded on academic knowledge where the majority of the learning is undertaken in the classroom and predominantly delivered by career academics can nonetheless be challenged through the introduction of WBL. This can be achieved through an evolutionary approach, with elements of WBL being introduced into parts of the traditional curriculum (through placements for example) or through the introduction of WBL degrees that represent a more radical challenge to the equilibrium model in business schools.

A departure from the equilibrium model is not to the detriment of the learning experience, rather WBL is a necessary component to prepare the student for the life of work. WBL may be considered as an inferior form of HE and continues to be viewed negatively by some in the academic community. This appears to be influenced by wider prejudices associated with the esteem attributed to academic and vocational learning and a nervousness associated with ceding greater influence over the

curriculum to employers. However, adding engagement with the workplace environment both physically and academically should not be seen as dumbing down HE, rather as a necessary move to reflect the needs of students and employers.

The case studies in this chapter provide an introduction to two successful and enduring examples of WBL that illustrate contrasting models of learning design whilst at the same time sharing common philosophical positions. They illustrate learning and teaching strategies that join the worlds of academia and work and the different levels of influence that the two worlds exert on WBL pedagogy. The influences provoke transformations in curriculum, as academics implement more active methods of teaching, research, learning and assessment to integrate student, employer and policy interests. The first case study represents a variation on the typical placement model with a single employer to provide an illustration of a model that reflects an orientation towards problem solving whilst working in non-traditional (i.e. project-based, temporary) employment. The second case provides an illustration of a more radical whole programme approach to WBL. Both approaches bring challenges for academics and have implications for pedagogic practitioners. For example, WBL often necessitates a need for a multi-disciplinary approach to address real-world problems and this can challenge some academics with a strong single disciplinary orientation. At the same time, WBL necessitates the tutor role changing from a traditional approach founded on the transmission of academic knowledge to facilitation of learning that reflects the interests of the academe, learners and employers to varying degrees. The academic tutor may be required to collaborate with employers or learners to specify learning outcomes and negotiate a pluralistic assessment with peer review, collaborative written reports, reflective reviews and oral feedback from the external organisation providing a portfolio of inputs. The tutor also has an important role to play in ensuring a productive and positive relationship develops and is maintained between the participating organisation, students and the university. WBL requires all stakeholders engaged in the process; learners, tutors and those providing administrative or pastoral support to develop shared beliefs and behaviours that contribute towards successful WBL development and delivery (Devins et al 2015). Some academics and stakeholders may resist these changes and innovative ways to engage and reward them may be required to encourage participation and develop the capability to deliver WBL effectively.

Studies identify a range of barriers to the development of WBL in HE including a lack of senior management strategy and support, staff capability, inflexible quality assurance systems, assessment practices, employer engagement, responsiveness and lead-in times (Medhat 2008; Tallantyre 2010). Perhaps as a consequence of this, linking with the world of work practice is generally not seen as a priority in the design of university degrees and few universities have developed a compelling theoretical narrative around the knowledge synthesis learning activity undertaken by students on WBL degrees (see for example Bennis and O'Toole, 2005; Khurana and Spender, 2012). As opposed to academic knowledge being seen as the primary design anchor and management practice knowledge being loosely coupled with the curriculum, learning in the work environment can drive whole course design and implementation, increasing the relevance of provision whilst maintaining academic rigour. A core purpose of WBL degree designs is to enable learning whereby students blend/integrate academic knowledge and practice knowledge. This knowledge synthesis activity is not without a knowledge outcome. That knowledge outcome relates to learning that takes place in 'solving' complex and messy real world problems. In sum, it is both a theoretically derived and context specific knowledge artefact that has been defined elsewhere as 'practice intelligence' (Minocha and Reynolds 2013). In practice, intelligent management practitioners evolve their Practice Intelligence as they gain experience of solving problems in many and varied contexts. WBL offers the opportunity for students to not only learn about discipline based academic knowledge but also to develop their practice intelligence through problem based learning activities that take place in the work place. it is the student's experience i.e. their acquired practice Intelligence - that makes them highly employable to employers. The offer of real-life learning experiences through WBL enables HE to

provide an effective link between education and employment and enhance its relevance to the economy. There is considerable evidence associated with the positive role that WBL plays in the personal and professional development of undergraduates and in measurable employment benefits for graduate students in terms of level of job, job satisfaction and salary on leaving HE (Blasco *et al.*, 2002; Wilton 2008; Gault et al 2010). However, as Mason et al. (2009) note "it is difficult to say whether work experience makes students more employable or whether the more employable students are more likely to choose, find and successfully complete work experience opportunities" (p.23). Nevertheless, the balance of the evidence is in favour of the positive contribution that WBL can make to the employability of students. In addition, a number of studies have highlighted the benefits associated with a period of work experience and the positive influence this has on academic progress and achievements of learners (Mandilaras 2004; Green 2011).

Although other models of WBL exist we selected a work-based degree design in the business and management field to illustrate key principles and themes underlying disequilibrium models of curriculum. The structure of these degrees typically involves the learner spending the majority of their degree working in-company and attending intense study blocks at the University. These degrees provide an illustration of the flipped classroom where the majority of the programme curriculum is developed and delivered in the workplace with students problem solving whilst in work and the university campus playing a relatively small role as a site of learning (Lage et al., 2000). This highlights one of the first principles of such degrees where typically 80 per cent plus of the degree involves learning in the work context and a much reduced level of learning in the classroom. This shift from 'content to context' means these degrees stand out from the normal three year campus based degree and ensure students develop a graduate employability offering that gives a distinct advantage in the market for graduate talent.

In some instances, the introduction of a work-based degree has led to a Business School offering a full set of work based variations where one, two or all three years of the degree are in the workplaceviii. While there are nuances and variations between these models at Anglia Ruskin and other successful examples in the UK (see for example; Northumbria, Middlesex, Chester and Durham) there are design similarities that inform them all. These include pedagogies that seek to develop and apply new knowledge, collaboration across academic disciplines and across different domains of practice and partnership working with employers. In terms of the choices of methodologies underpinning WBL provision, these do not tend to be different to those that might be used in conventional academic offerings in similar contexts and there is an understandable inclination to use action based methods to focus on work-based problems and to build conceptual models, develop interventions and evaluate impact. These include problem-based learning, action research, action learning, inquiry based learning, case study, ethnography, cooperative learning and reflective practice (Van Gyn and Grove White, 2004; Costley and Armsby, 2007). However, WBL assessment processes often differ from those associated with more traditional pedagogies where assessment mainly requires reproduction of the prescribed curriculum content with a low level of application (Fink, 2003). More recently, it is becoming increasingly unusual for WBL not to be formally assessed in some way, particularly if it is seen as a means of demonstrating attainment of National Occupational Standards or satisfying the membership requirements of a professional association. Assessment is increasingly associated with reflecting on action (Schon, 1983) and encouraging an exploration of thoughts and feelings; looking for insights; and maximizing self-awareness. A wide range of artefacts can be used including reflective essays, learner portfolios, diaries, industrial and academic supervisor reports (Helyer, 2015; Helyer and Kay 2015).

A final comment we would like to make relates to the drivers of WBL in HE. Many WBL innovations have been encouraged through a variety of funding mechanisms often provided by government or their associated agencies. Critics of 'sluggish UK universities' in terms of university-business

engagement would argue that certain areas (including business and management) could find their traditional classroom based degrees seriously challenged by the introduction of the Apprenticeship Levy in April 2017. As a result it is reported in the press that half of employers are planning to turn their graduate recruitment schemes into apprenticeship programmes in order to reclaim money from the Levy (The Times 9<sup>th</sup> February, 2017). This could represent the biggest single injection of funding to support WBL that the HE sector has seen in the UK. However, other innovations have been prompted by private sector initiation and co-production in the past. For example the School of Management at the University of Bradford has a long standing BSc Management and Business degree developed and delivered in partnership with a private sector company - the retail store chain Morrisons. Indeed, the retail supermarket sector in the UK has been a significant driver of WBL related HE activity with for example, Tesco and Asda also partnering with UK universities (Manchester Metropolitan University and Middlesex University respectively) to establish similar work based degree models. As can be seen from both university and corporate web sites for these degrees, a theme at the heart of work based degrees is their relevance to the businesses in the economy and the emphasis given to blending theory and practice by having students develop and apply their knowledge in the workplace context.

## **Conclusions**

In conclusion, it is important to acknowledge that the discussion in this chapter reflects our particular understanding of what WBL is in HE and also the varied practice models of WBL in different institutional contexts. Both of the case studies have universities at the centre of the discussion and we have not critically questioned the assumption about the role and purpose of universities. Authors such as Jarche (2013) offer a different perspective arguing that 'work is learning and learning is work' and present a philosophy of learning that might be radically at odds with the traditional models of what universities do. Furthermore, our case studies are not representative of the wide range of WBL activity either in the UK or in many countries across the globe. The nature and prevalence of WBL within and between countries is difficult to capture and a limited and partial picture of activity often emerges. This is partly due to the conceptual ambiguity of WBL and the fact that it not reported on as a distinct entity in strategic documents guiding HE policy. Where WBL does feature, the reported data does not allow a full understanding of its nature in the HE context nor its incidence, funding or impact.

Protagonists for WBL not surprisingly straddle the evolution-revolution spectrum illustrated in our two case studies. They can draw on an increasing evidence base highlighting the benefits of WBL in terms of the development of employability and enterprising skills-sets, graduate employment and careers as well as productive employer-university partnerships. However, WBL can involve change and innovation where student, university and employer have various and often new roles to play in learning. Consequently, whilst the benefits in terms of student employability and closer university-industry relationships can be realised, it may require pedagogical innovation and investment in programmes that may be more expensive to design and deliver than traditional forms of HE. Rigorous assessments of the cost-benefit of WBL appear to be largely absent and an area ripe for further research and development.

Our final point considers that WBL, in terms of thinking and its practice, continues to evolve across different education systems. In large part we cannot understand this development without reference to the institutional context. Leadership from national governments and their relevant departments has a key role to play in providing a vision and incentivising change within national systems. HE policy and funding need to clearly identify and reward the different roles and expectations of institutions, so that missions, strategies, and funded practice reflect policy priorities. Currently, an interesting case in the formative stages of implementation lies with the UK Government's policy on apprenticeships

through to 2020. This is unambiguously a call by Government for universities to work with companies to establish a significant number of undergraduate and masters level degrees that are work-based and in contrast to traditional three-year campus based degrees. Our own university has recently designed and launched Degree Apprenticeships in the areas of Digital and technology solutions and Business Management Practice with more planned to follow. Time will tell if this marks a new dawn for WBL in HE or a minor disturbance to the equilibrium curriculum.

#### References

- Bennis, W.G. and O'Toole, J (2005) How Business Schools lost their way. *Harvard Business Review*. May Vol 83(5): pp 96-104
- Blasko, Z. with Brennan, J., Little, B. and Shah, T. (2002). *Access to what: an analysis of factors determining graduate employability*. Bristol: Higher Education Funding Council for England.
- Boud, D. and Solomon, N. (eds) (2001), Work-Based Learning: A New Higher Education? Buckingham. Society for Research into Higher Education and the Open University Press,
- Carswell, M., Maguire, D. and Mooney, M. (2010) *Developing the ability of academic staff to work successfully with employers: enhancing expertise and creating opportunities* in F. Tallantyre (ed) University management of work-based learning. York. The Higher Education Academy
- Costley, C. and Dikerdem, M. (2011), *Work Based Learning Pedagogies and Academic Development*. A Research Project Funded by the HEA Subject Centre for Education, ESCalate, Institute for Work Based Learning, Middlesex University, London.
- Costley, C. and Armsby, P. (2007), Work-based learning assessed as a field or mode of learning, Assessment and Evaluation in Higher Education, Vol. 32 No. 1, pp. 21-33.
- DBIS (2015) Entrepreneurship skills: literature and policy review. BIS Research Paper, No 236, [online accessed June 2017]

  <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/457533/BI-5-15-456-entrepreneurship-skills-literature-and-policy-review.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/457533/BI-5-15-456-entrepreneurship-skills-literature-and-policy-review.pdf</a>
- DBIS (2013) Encouraging a British Invention Revolution: Sir Andrew Witty's Review of Universities and Growth. Department for Business Industry and Skills. London. Crown Copywrite. [online accessed March 2017] https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/291911/bis-13-1241-encouraging-a-british-invention-revolution-andrew-witty-review-R1.pdf
- Devins, D. Ferrandez-Berrueco, R. and Kekale, T. (2015) Educational orientation and employer influenced pedagogy Practice and policy insights from three programmes in Europe, *Higher Education, Skills and Work-Based Learning*, Vol. 5 (4) pp.352-368
- Dewey, J. (2009) *Democracy and Education: An Introduction to the Philosophy of Education*,WLC Books, New York, NY (original work published 1916).
- Draycott, M.C. and Rae, D. (2011) Enterprise Education in Schools and the role of competency frameworks, *International Journal of Entrepreneurial Behaviour and Research*, Vol 17, No 2, pp 127-145
- EC (2012) Rethinking Education: Investing in skills for better socio-economic outcomes.

  Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions. Strasbourg.
- Fink, L.D. (2003), Creating Significant Learning Experiences. An Integrated Approach to Designing College Courses, Jossey-Bass, San Francisco, CA
- Foster, E. And Stephenson, J. (1998) Work-based Learning and Universities in the UK: a review of current practive and trends. *Higher Education Research and Development*, Vol 17 (2), 155-170
- Garrison, D.R. and Archer, W. (2000), A Transactional Perspective on Teaching and Learning: A Framework for Adult and Higher Education, Pergammon-Elsevier Science, Oxford

- Gault, J., Leach, E. and Duey, M. (2010). Effects of business internships on job marketability: the employers' perspective. *Education and Training*, **52**(1), 76-88.
- Graf, L. (2016) The rise of work-based academic education in Austria, Germany and Switzerland Journal of Vocational Education & Training, Volume 68, (1), 1-16
- Green, J. P. (2011). The impact of a work placement or internship year on student final year performance: an empirical study. *International Journal of Management Education*, **9**(2), 49-57.
- Helyer, R. (2015) Learning through reflection: the critical role of reflection in work-based learning (WBL), Journal of Work-Applied Management, Vol. 7 Issue: 1, pp.15-27
- Helyer, R. and Kay, J. (2015) *Building capabilities for your future*, in Helyer, R. (Eds.), The Work-Based Learning Student Handbook, 2nd ed., Palgrave, London, pp. 31-50.
- High Flyers. (2017) The graduate market in 2017. Annual review of graduate vacancies and starting salaries at Britain's leading employers [online accessed June 2017] <a href="https://www.highfliers.co.uk/download/2017/graduate\_market/GMReport17.pdf">https://www.highfliers.co.uk/download/2017/graduate\_market/GMReport17.pdf</a>
- IES/IRS/BIBB (2012) Study on a comprehensive overview of traineeship arrangements in Member States. [online] Accessed June 2017 http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=6717
- Jarche, H. (2013) *Learning is the Work* [online accessed June 2017] at http://jarche.com/2013/10/learning-is-the-work-2/
- Jones, B. and Iredale, N. (2010) Enterprise Education as Pedagogy, *Education and Training*, Vol 52, No 1, pp7-19
- Khurana, R. and Spender, J.C. (2012). Herbert A. Simon on What Ails Business Schools: More than 'A Problem in Organizational Design'. *Journal of Management Studies*, 49(3), pp 619-639.
- Lage, J., Platt, G.J. and Treglia., M. (2000), Inverting the classroom: a gateway to creating an inclusivelearningenvironment, *The Journal of Economic Education*, Vol.31, No.1, pp.30-43
- Mandilaras, A. (2004) Industrial Placement and Degree Performance: Evidence from a British Higher Institution, *International Review of Economics Education*, vol. 3, no. 1, pp. 39-51.
- Medhat, S. (2008) The progress of Work-Based Learning strategies in Higher Education engineering programmes.

  Online accessed March 2017

  <a href="https://www.heacademy.ac.uk/system/files/wblreportfinalv4.pdf">https://www.heacademy.ac.uk/system/files/wblreportfinalv4.pdf</a>
- Mason, G. and Williams, G. and Cranmer, S. (2009). Employability skills initiatives in higher education: what effects do they have on graduate labour outcomes? *Education Economics*, **1**, 1-30.
- Mingers, J. (2015) Helping business schools engage with real problems: The contribution of critical realism and systems thinking. *European Journal of Operational Research*, 242 pp316-331
- Minocha, S. and Reynolds, M. (2013) The Artistry of Practice or the Practice of Artistry Embodying Art and Practice in a Business School Context. *Journal of Management Inquiry*. Vol 22, Issue 2, pp 173-192
- OECD (2014) *The State of Higher Education 2014*. Paris. Organisation for Economic Cooperation and Development.
- OECD (2007) *Higher Education and Regions. Globally Competitive, Locally Engaged.* Paris. Organisation for Economic Cooperation and Development.
- OECD (2000). From Initial Education to Working Life: Making the Transition Work. Paris, OECD.

- Personnel Today (2015) *Graduate recruitment: the end of the milk round?* January [online] accessed March 2017 <a href="http://www.personneltoday.com/hr/graduate-recruitment-the-end-of-the-milk-round/">http://www.personneltoday.com/hr/graduate-recruitment-the-end-of-the-milk-round/</a>
- Personnel Today (2015a) Graduates shunning regular work for freelancing and self-employment
  October [online] accessed March 2017
  <a href="http://www.personneltoday.com/pr/2015/10/graduates-shunning-regular-work-for-freelancing-and-self-employment/">http://www.personneltoday.com/pr/2015/10/graduates-shunning-regular-work-for-freelancing-and-self-employment/</a>
- Pollard E, Hirsh W, Williams M, Buzzeo J, Rosa Marvell, Tassinari A, Bertram C, Fletcher L, Artess J, Redman J, Ball C. (2015) *Understanding employers' graduate recruitment and selection practices*, Research Paper 231. London. Department for Business, Innovation and Skills
- Psifidou, I. (2010) Learning outcomes approaches in VET curricula: a comparative analysis of nine European countries. Luxembourg. European Centre for the Development of Vocational Training
- Schon, D.A. (1983), *The Reflective Practitioner: How Professionals Think in Action*, Basic Books, New York, NY.
- Shin, M., Holden, T. and Schmidt, R.A. (2001) From knowledge theory to management practice: towards an integrated approach. *Information Processing and Management*, Vol 37(2) pp 335-355
- Tallantyre F. (2010) *University management of work-based learning*. York. The Higher Education Academy
- Thomas, H. And Cornuel, E. (2012) Business Schools in transition? Issues of impact, legitimacy, capabilities and re-invention. *Journal of Management Development*, Vol 31 (4) pp329-335
- Universities UK (2016) *The future growth of degree apprenticeships* [online] accessed March 2017 http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/future-growth-degree-apprenticeships.aspx
- Van De Ven, A.H. and Johnson, P.E (2006) Knowledge and Practice. *Academy of Management Review*, Vol 31 (4), 802-821
- Van Gyn, G. and Grove-White, E. (2004), *Theories of learning in education*, in Coll, R.K. and Eames, C. (Eds), International Handbook for Cooperative Education. An International Perspective of the Theory, Research and Practice of Work Integrated Learning, World Association for Cooperative Education, Boston, MA, pp. 27-36.
- Warshaw, J.B., and Hearn, J.C. (2014). Leveraging university research to serve economic development: An analysis of policy dynamics in and across three U.S. states. *Journal of Higher Education Policy and Management*, 36(2), 196–211.
- Wilton, N. (2008). Business graduates and management jobs: an employability match made in heaven?. *Journal of Education and Work*, **21**(2), 143-158.

<sup>&</sup>lt;sup>i</sup> Various OECD Reviews are available at http://www.oecd.org/edu/skills-beyond-school/oecdreviewsofvocationaleducationandtraining-learningforjobs.htm

Readers interested in a more detailed account can visit <a href="http://www.anglia.ac.uk/business-employers/professional-courses/degrees-at-work">http://www.anglia.ac.uk/business-employers/professional-courses/degrees-at-work</a>

iii Illustrations of enhanced career opportunities for graduates from work based degrees can be found at, for example, Nottingham Trent: see <a href="https://www4.ntu.ac.uk/nbs/courses/undergraduate/work-based-degrees/index.html">https://www4.ntu.ac.uk/nbs/courses/undergraduate/work-based-degrees/index.html</a>. Anecdotally work based degrees were found to result in over 95% retention on graduation compared with over 60% retention for conventional placement/sandwich degrees

iv See NTU web site: https://www.ntu.ac.uk/study-and-courses/courses/our-students-stories/business/ug-profiles/aidan-keyworth

Yee ARU web site: https://distancelearning.anglia.ac.uk/courseDetail.php/sales-136/

 $<sup>^{\</sup>mathrm{vi}}$  See the University of Bradford web site: http://www.bradford.ac.uk/management-and-law/our-people/students-and-graduates/undergraduate/management-and-business-morrisons-plc/nigel-boyle/

vii See ARU web site http://www.anglia.ac.uk/business-employers/professional-courses/degrees-at-work/whowe-are-working-with/barclays

viii See Nottingham Trent University for example https://www4.ntu.ac.uk/nbs/courses/undergraduate/work-based-degrees/index.html