Work-based learning in undergraduate programmes:

A literature review of the current developments and examples of practice

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Abstract

This article aims to give an overview of the current literature on work-based learning at higher education level in the UK. It examines why work-based learning should be incorporated in the undergraduate curriculum, how it can be successfully designed and implemented, and how it can be more widely available to all students regardless of their discipline. More specifically, this review clarifies some key concepts and defines work-based learning in the context of higher education programmes. It provides the rationale for including work-based modules into the curriculum by discussing its impact on employability and effective learning. It identifies some principles of best practice in the delivery of work-based learning. Finally, it discusses some examples of work-based modules implemented at Higher Education Institutions in the UK that illustrate how work-based learning can be embedded into theoretical programmes of study or can incorporate the learning derived from students’ existing part-time employment.
Introduction

‘Work-based learning’ (WBL) is a term widely used in higher education to refer to learning that is derived specifically from taking on a workplace role. It is used to describe a diverse range of learning situations. Gray (2001) identified the following different forms of WBL:

- WBL used to access higher education programmes i.e. APEL; the previous experience of learners is recognised by higher education institutions as a valid form of learning.
- WBL as the primary form of study i.e. learners take on the additional role of student, where learning takes place within the workplace with support from higher education institutions.
- WBL built into higher education programmes as preparation for future employment and the real world i.e. a period of work experience is incorporated into higher education courses.

This review is only interested in this last category of WBL, since the focus is undergraduate students learning for, at, through or from work (Gray, 2001). Of particular interest in our discussion are accredited WBL modules that do not form a core part of a program of study i.e. as in nursing or teacher training. The motivation for this paper stemmed from the recent developments in WBL provision as well as the introduction of a new module at Oxford Brookes University, which recognises the value of students’ voluntary, paid or unpaid work in the community and is available to students in courses that usually do not have a WBL component e.g. humanities.

For this review, a substantial search of the literature was undertaken of articles describing and evaluating the use of WBL in higher education, and of case studies illustrating the implementation of innovative modules that embedded WBL into purely theoretical programmes or capitalized on students’ existing part-time employment. The review attempts to answer the following questions: why WBL should be incorporated in the undergraduate curriculum; how it can be successfully designed and implemented so that it can benefit the students; and how it can be more widely available to all students regardless of their discipline.

The rational for Work-based Learning within the curriculum

Employer, student and government expectations

Research on the outcomes of higher education has reported the existence of a gap between knowledge and skills needed at work and those gained through formal education (Eraut, 2004; Stenstrom, 2006; Tynjala et al., 2006). Acknowledging employers’ expectations and
the needs of students who are preparing to enter an increasingly competitive, graduate marketplace, UK higher education institutions have put employability high on their agendas. WBL has the potential to enhance students’ employability skills, and thus, it is inextricably linked to the employability agenda.

Government policies also push towards the same direction. In 2008 the QAA produced its Framework for Higher Education Qualifications which required degree programmes in all subjects to have transferable skills necessary for employment (FHEQ 2008, cited in Stibbe, 2012) generating an incentive for the design of WBL initiatives even in disciplines that are not traditionally employment-orientated e.g. humanities (Stibbe, 2012). More recently, the UK Government’s Green Paper on higher education (BIS, 2015) has urged institutions to provide even greater focus on graduate employability and proposed a Teaching Excellence Framework that should reward teaching practices in all disciplines ‘that are effective in developing students’ knowledge, skills and career readiness’ (p.32).

Moreover, the current economic climate has had an impact on the delivery of WBL and employability initiatives. Undergraduate students undertaking part-time jobs is a growing phenomenon, especially after the rise of tuition fees; in 2014, it was estimated that 61% of UK students work during term time, for an average of eight hours per week (Bradley, 2014, cited in McGregor, 2015). This growing incidence of part-time employment has put pressure on HE providers to rethink WBL provision and create opportunities to incorporate and explicitly recognise the learning derived from such work experiences into undergraduate programmes through academic credit, ‘making a virtue out of necessity’ (Shaw and Ogilvie, 2010).

**Increasing the employability of students**

The term ‘employability’ refers to a set of achievements, skills, understandings and personal attributes that can make graduates more likely to gain employment and be successful in their chosen occupations (Yorke and Knight, 2004). However, as Johnson and Burden (2003) suggest, many of the employability skills that employers are seeking can only be learned in ‘real life’ situations as ‘there is a limit to the extent to which educational establishments can ‘teach’ the necessary skills and attributes, even where extensive efforts are made to simulate the work situation” (p.39). Over the recent years, driven by the rise in tuition fees, institutions have increasingly recognised the many benefits of incorporating authentic work experience in the undergraduate curriculum in building graduate employability, especially as students are more likely to expect a return on their investment, namely, the real prospect of a job at the end of their studies (Pegg et al., 2012).

By offering students real-life learning activities, WBL can provide an integral link between education and employment. The literature has highlighted the importance of structured work experience as an effective way of providing undergraduates with relevant employment skills and awareness of employer culture. Of course one has to be critical of any claims since, as Mason et al. (2009) noted, ‘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). However, the evidence in favour of WBL is overwhelmingly positive.

Research has shown that work experience as part of higher education can make an invaluable contribution to the personal and professional development of undergraduates (Harvey et al. 1997), can better equip students entering their first full-time job after leaving university (Johnson and Burden, 2003), and provides measurable employment benefits for the graduate students, in terms of level of job, job satisfaction and salary (Blasco et al., 2002). Placement course graduates perform better in the workplace compared to their counterparts who have not undertaken placement courses (Bowes and Harvey, 2000; Harvey et al., 2003), are more committed and adaptable (Lesley and Richardson, 2000), have acquired superior transferable skills (Davidson et al., 1993; Ellis, 2000), are more responsible and confident (Wilton, 2008), and are more effective in a dynamic teamwork environment (Hall et al., 2009).

Moreover, research has shown that WBL approaches are key tools in developing employment opportunities for graduates. For example, it was found that graduates who had some form of work experience were significantly more likely to be in full-time permanent employment than those with no work experience during their studies (Blackwell and Harvey, 1999, cited in Little et al., 2006). Similarly, a study of the relationship between planned work placements (in the form of sandwich courses) and subsequent short-term employment outcomes found that sandwich students are advantaged in the labour market, at least in the early part of their careers (Bowes and Harvey, 2000). More recent empirical investigations confirm that sandwich placements are strongly and positively associated with employment status six months after graduation (Mason et al., 2003) and secured employment in graduate level jobs (Mason et al., 2006). The effects of structured work experience for students can also be relatively long lasting, including high-quality job offers for placement course graduates two or three years after graduation (Gault et al., 2010) and a 4.6% salary premium attached to participation in work experience three and a half years after graduation (cited in Lowden et al., 2011).

Developing effective learners

However, the case for WBL within the curriculum is not just about the needs of the economy and career management; it is also about effective learning. There is evidence that the whole environment, and not just the formal curriculum, contributes to learning in the undergraduate years (Pascarella and Terenzini, 1991; Astin, 1997). For many students, for instance, WBL may occur in the part-time jobs they take to finance themselves. However, what is of importance in this case is the ability to reflect on the experience gained through this job. As Brennan and Little (2006) argue, it is not the experience of work itself that is paramount but the learning that an individual derives from that experience and from reflecting upon it. That is, reflection is one of the key elements that distinguish WBL from training or the kind of informal learning that goes on in the workplace anyway.
Yorke and Knight (2004) suggest that WBL supports the development of qualities that are likely to make students more effective as learners as well as more likely to gain employment. In particular, WBL provides opportunities for developing skilful practices (i.e. key skills such as communication skills), efficacy beliefs, which appear to be an important factor in relation to motivation and the development of learner autonomy, and metacognition or reflectiveness, which can help students reflect on, not only what they learn from their experiences, but also how they learn, increasing, thus their self-awareness as learners. Nixon et al. (2006) propose that “students in the workplace can enhance their knowledge and understanding (both tacit and explicit) and exhibit significant changes in their beliefs and attitudes” (p.52). Dacre Pool and Sewell (2007) suggest that a process of reflection and evaluation on key inputs of experience and learning (i.e. career development learning, experience of work and life, degree subject knowledge, skills and understanding, general skills, and emotional intelligence) can help students to build self-efficacy, self-confidence and self-esteem (which, in turn, lead to their employability). As Yorke and Knight (2004) point out, there is a considerable degree of alignment between education for employability and good student learning. WBL contributes to education for employability and therefore also to good student learning.

Clearly, the workplace provides a different learning environment from the classroom. It enriches students’ existing theoretical knowledge and contributes to their academic understanding (i.e. ‘cognitive learning’) by the application of theoretical concepts into practice (Balta et al., 2012). Learning in workplace settings has proven to be an effective approach to teaching as WBL provides opportunities for students to find academic activities meaningful and worthwhile (Lee et al. 2010). Students who have undertaken a period of structured work experience may therefore prove to be more effective in their subsequent studies. Obviously, such a claim should be interpreted again with caution as it is not clear whether work experience makes students better in academic assessments or whether the more academically successful students pursue work experience opportunities (Mendez and Rona, 2010). Further research is required to establish the existence of definite causality.

Nevertheless, a number of studies have highlighted the benefits associated with work experience and students’ academic achievements. Internships or placements have been shown to have a significant positive impact upon academic performance (Rawlings et al., 2006) and there is evidence that taking a work placement year is associated with improved degree results (Davies, 2003; Rushton et al., 2005). Mandilaras (2004) has shown that participation in the placement scheme significantly increases the chances of obtaining an upper second or higher degree class, whereas Green (2011) has found that the completion of a placement year on average improves the final classification award achieved by students from 2:2 to 2:1. Finally, Gomez et al. (2004) further suggest that “on average, placement students gain an advantage of nearly 4% in their final year performance” (p.373). Experiential learning is clearly at the heart of work-based learning, providing opportunities to enhance student understanding through reflection and the practical application of their skills in real life contexts (Boud et al. 1985; Eraut, 1994). It can be motivational, encourages students to make
sense of their academic study by relating it to their own experience, and allows them to apply what has been learned in the classroom to the workplace and vice versa.

**Principles of best practice in the delivery of WBL**

However, despite the many positive effects associated with it, WBL is still a contested area. There is a considerable debate in the literature about how it should be delivered, accredited and assessed (Nixon et al., 2006; Brennan and Little, 2006), and one of the main criticism is the ‘messiness’ of its implementation (Reeve and Gallagher, 2000, cited in Wright et al., 2010). WBL is viewed as a challenge for many institutions as it is labour intensive, may lead to tensions for the students (due to the differences in culture and values between the workplace and university), and its assessment involves many difficulties that include issues around subjectivity, standardisation and quality assurance (Wright et al., 2010). If designed appropriately, though, it can bring about its numerous benefits for the students.

Blackwell et al. (2001) describe six characteristics of good quality WBL:

- students, employers and academic staff all understand the underlying intentions.
- the quality of work experience is enhanced by prior induction and briefing of all involved, by facilitation of on-going reflection and identification of learning outcomes.
- work experience is accredited so that it is taken seriously.
- students build up a work-experience portfolio so that quality is monitored.
- there is effective reflection, that is, students can explain what they have learned.
- formative assessment is used to support the process of learning.

These characteristics also mean that academic staff supporting or delivering WBL need to assume a role that differs from that of most subject-based tutors. Successful implementation of WBL, thus, also depends on staff being open and willing to act as facilitators, advisers and expert resources, as opposed to working in a more traditional academic role as subject experts (Boud, 2001; Boud & Costley, 2007).

Furthermore, McEwen et al. (2010a, 2010b) emphasise the essential role that employers can play in facilitating and assessing WBL initiatives. This is especially critical in work experience schemes explicitly organised by the institutions (e.g. placements or internships), where a formal tripartite partnership between the student, the university and the employer is required, and which usually involves a learning contract that sets out the agreed learning outcomes (Nixon et al., 2006). There are, however, many examples of WBL that do not necessitate this contractual relationship between the key participants (e.g. when credit is given for students’ part-time work, where only a standard employment contract or voluntary work agreement exists), and some of the case studies presented in the next section fall in this category.
Assessment in WBL draws on workplace activity and reflection upon it, and often uses generic criteria in conjunction with students’ own learning objectives. Brodie and Irving (2007) propose that, because of the interdisciplinary nature of this learning approach, assessment should focus on three components, namely, learning (i.e. ‘how to learn’ and make the most of learning opportunities); capability (i.e. what the student is able to do, which is potentially the most problematic to assess); and critical reflection (i.e. reflecting on learning and applying models and theories to aid understanding).

The inclusion of critical reflection in the assessment task is important for several reasons. It can help students develop their ability to apply and critique knowledge, not only in the workplace, but also as a skill for higher-level academic work. Critical reflection also gives students the opportunity to validate their learning by using a variety of evidence sources and to recognize their future learning needs. What is more, because reflection enables the potential for critical transformation, it can extend the value of a traditional curriculum’s focus on critical thinking (Brodie and Irving, 2007). Reflective practice should be supported through evidence-based assessment of progress and achievement. Thus, portfolios, learning logs, journals and diaries are commonly used tools to encourage self-reflection and as methods of assessing WBL (Nixon et al., 2006).

**Widening the WBL provision and issues of implementation**

As discussed earlier, recent developments in higher education have indicated the need for widening the provision of structured work experiences for all undergraduate students. In this section we review seven case studies that have been chosen as illustrative examples of how WBL can be more widely available to students regardless of their program of study and we discuss issues around its implementation.

There are many ways in which WBL can be delivered. The most common form is organised work experience as part of a programme of study, which has a long tradition in British higher education (Harvey et al., 1998; Little et al., 2006). This involves industrial placements or internships in sandwich courses, and practiced-based elements in subjects like teaching, engineering or nursing, and thus, appears to be restricted to students pursuing a professional degree. Other forms of WBL include organised work experience external to a programme of study or *ad hoc* work experience external to a programme of study (Harvey et al., 1998; Little et al., 2006). The first of the last two categories represents WBL initiatives often introduced in subjects where there may be a more indirect relationship between the theories and methods of the discipline and the learning that occurs in the workplace. The latter is of increasing importance as greater numbers of students undertake paid work during term time, which many institutions have started to acknowledge and formally accredit.

The case studies discussed here fall in the last two categories. They illustrate WBL opportunities for students from disciplines that are mostly theory-oriented and traditionally do not include a work experience element, such as humanities (Stibbe, 2012), law (Nicholls
and Walsh, 2007) or geography (Eden, 2014), as well as modules accrediting students’ part-time jobs (Oxford Brookes University; Blake and Worsdale, 2009; Ogilvie and Shaw, 2011; Wrennall and Forbes, 2002) (see Table 1 in the Appendix for a detailed mapping of the case studies). These seven case studies are successful examples of WBL modules implemented at UK undergraduate programmes that have been formally evaluated (except for Oxford Brookes’ newly introduced module, which is currently under evaluation) with empirically demonstrated benefits for the students involved.

These modules incorporate most of the principles of best practice outlined by Blackwell et al. (2001). First of all, they are all credit-bearing modules that use appropriate assessment tools to monitor the quality of the WBL experience. Also, despite the fact that the type or amount of academic work required in these modules varies considerably, there is a strong emphasis on critical reflection in their assessment that encourages students to consider the learning gained and draw links between their discipline and their job. In the case of Sheffield Hallam University, a final skills audit is also provided, which includes interpersonal, organisational, communication and problem solving skills, that additionally tackles the ‘capability’ component of WBL assessment proposed by Brodie and Irving (2007).

In all cases there is prior induction and briefing of all involved either in the form of a workshop/training organised by the employer (Nicholls and Walsh, 2007), a group discussion between the tutor and the students (Wrennall and Forbes, 2002) or a lecture/taught session (Ogilvie and Shaw, 2011; Stibbe, 2012). Moreover, they all provide ongoing student support, although this varies from occasional one-to-one meetings (Nicholls and Walsh, 2007), online tutorials (Ogilvie and Shaw, 2011) to weekly drop in ‘surgeries’ (Wrennall and Forbes, 2002). Additionally, the University of Huddersfield offers a number of workshops to facilitate the development of students’ reflective writing skills, whereas in the case of Glasgow Caledonian University students are also provided with appropriate reading material to further encourage reflection and links to the academic discipline.

An interesting issue that stands out is the lack of agreement about the required duration of the work experience. Some institutions specify a minimum period of work as a module requirement but this differs from case to case. It seems that further research is needed to clarify what is the optimal time frame to make a WBL experience worthwhile or beneficial, especially for the recognition of ad hoc work.

A further point for discussion in the implementation of WBL is how the work experience is organised and by whom. With the exception of the existing part-time jobs, the process of negotiating and securing employment differs between the case studies. At the University of Wolverhampton, for example, students can choose among opportunities created by the institution and a local organization whereas in the other cases students are strongly encouraged to find their own jobs (although often these end up being organised by the tutor). This distinction is of importance because taking the initiative (as opposed to being passively
placed in a prearranged position) appears to affect one’s learning experience (Eden, 2014) and the ‘ownership’ of it (Stibbe, 2012).

Another key issue is whether employers are involved and to what extent, and again this varies considerably between these modules. For example, at the University of Wolverhampton a formal tripartite partnership exists where the school works closely with the placement provider in the recruitment and delivery of the program. In the case of Hull University the employers are additionally involved in formative assessment, having a more crucial role as ‘key agents within the tripartite relationship’ as suggested by McEwen et al. (2010a, p.64). In contrast, in the modules accrediting students’ part-time jobs the employers do not have a formal role or obligation to participate. Wrennall and Forbes (2002) mention that this was a deliberate decision in order to simplify the process of securing a position and not jeopardise students’ current jobs. These case studies show, thus, how this form of WBL can be successfully implemented even in the absence of employers’ involvement. However, it is noteworthy that when students chose to informally engage their employers they reported an enhanced learning experience (Ogilvie and Shaw, 2011).

The case studies presented here demonstrate how WBL in the HE context can be extended beyond what has traditionally been professional practice to include students from more theoretical degrees as well as learning gained from part-time employment. They also demonstrate that, when implemented appropriately, WBL initiatives can have a wealth of benefits for the students that seem to go beyond generic skills to the development of personal competencies and discipline-specific knowledge even in the cases of ad hoc work recognition where students undertake low-level or non-degree related jobs.

**Summary and conclusions**

This review has shown that there is strong evidence to indicate that authentic work experience as part of higher education contextualises learning and has a positive influence on graduate employment. Moreover, learning obtained for, at, through and from work produces new knowledge which can be fed back to the classroom, facilitating the connection between academic theories and real-world experiences. Therefore, WBL modules that encourage students to use the workplace as a site of learning should be viewed as a positive addition to the undergraduate curriculum.

In order to maximise learning for employability and the academic subject it is important that WBL should be a structured and pedagogically supported experience with strong emphasis on critical reflection. For the design of quality WBL experiences both the university and the employers need to be involved in the development of a consistent framework to learning support and an integrated approach to recognising explicitly the learning gained.

Given the employers’ expectations, students’ need for better value for money for their tuition fees and the recent government policies about students’ job readiness in the graduate labour
pool (BIS 2015), it should be the institutions’ strategic objective to expand WBL provision and facilitate its development within all undergraduate programmes to include students from all disciplines. Universities should also take a wider view of the contexts of learning in which students are involved and integrate these more closely into course planning and development.

Furthermore, given the current economy and the ongoing debate about the imminent cap removal on student fees, it seems possible that the accreditation of existing part-time work could be a form of WBL that could be adopted more systematically. This could also be one answer to the proposals of the Green Paper on higher education regarding teaching excellence and employability. Thus, a last recommendation of this paper is the development of a more coherent approach for the formal recognition of ad hoc work.

As a final note, it should be stressed that this review is limited on WBL initiatives in the UK context. Future investigations in the implementation of WBL in undergraduate programmes should include researching best practices outside the UK.

References


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## Appendix

<table>
<thead>
<tr>
<th>Institution</th>
<th>Discipline</th>
<th>Type of work</th>
<th>Institution’s involvement</th>
<th>Employer involved</th>
<th>Duration of module/work</th>
<th>Level</th>
<th>Credit</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheffield Hallam University</td>
<td>Humanities (compulsory for English/elective for rest of Humanities)</td>
<td>Unpaid placements</td>
<td>Taught sessions and tutorials/Work occasionally arranged by the institution</td>
<td>yes</td>
<td>2 semesters, no minimum hrs of work required</td>
<td>2nd year/All levels</td>
<td>yes</td>
<td>Portfolio/ Learning log/Skills audit/Reflective Learning diary</td>
</tr>
<tr>
<td>University of Wolverhampton</td>
<td>Legal Studies (Law, Criminal justice, Social welfare law, Business law)</td>
<td>Placements (paid or unpaid)</td>
<td>Prior induction and regular workshops/Work arranged by the institution</td>
<td>yes</td>
<td>1 or 2 semesters, work at least 1 day per week</td>
<td>All levels</td>
<td>yes</td>
<td>Reflective essay</td>
</tr>
<tr>
<td>University of Hull</td>
<td>Geography, Environment &amp; Earth Sciences</td>
<td>Unpaid placements</td>
<td>Prior induction/Work mainly arranged by the institution</td>
<td>yes</td>
<td>1 semester, no minimum hrs of work required</td>
<td>3rd year</td>
<td>yes</td>
<td>Report/Reflective essay</td>
</tr>
<tr>
<td>Oxford Brookes University</td>
<td>Humanities &amp; Social Sciences (Education, Geography, English, Philosophy)</td>
<td>Part-time work (paid or unpaid)</td>
<td>Prior induction/Work arranged by the student</td>
<td>no</td>
<td>1 semester, minimum of 50 hrs of work</td>
<td>2nd year</td>
<td>yes</td>
<td>Portfolio/ Reflective Learning diary</td>
</tr>
<tr>
<td>University of Huddersfield</td>
<td>Business</td>
<td>Existing part-time work (paid or unpaid)</td>
<td>Prior induction and workshops</td>
<td>no</td>
<td>1 semester, minimum of 5 hrs work per week</td>
<td>2nd year</td>
<td>yes</td>
<td>Portfolio/ Reflective journal/Project report/Presentation</td>
</tr>
<tr>
<td>Manchester Metropolitan University</td>
<td>Business</td>
<td>Existing part-time paid work</td>
<td>Introductory lecture and regular online tutorials</td>
<td>no</td>
<td>1 semester, no minimum hrs of work required</td>
<td>1st year</td>
<td>yes</td>
<td>Portfolio/ Presentation/Business improvement report</td>
</tr>
<tr>
<td>Glasgow Caledonian University</td>
<td>Psychology</td>
<td>Existing part-time work (paid or unpaid)</td>
<td>Prior induction, reading materials and regular support</td>
<td>no</td>
<td>1 semester, minimum of 4 hrs work per week</td>
<td>2nd year</td>
<td>yes</td>
<td>Reflective journal/Presentation/Three reflective essays (reports)</td>
</tr>
</tbody>
</table>

**Table 1: Case studies illustrating the widening of the WBL provision**