Abstract: This paper presents an approach to the development, delivery and assessment of work-integrated learning which meets the needs of students of a large scale, distance-learning, higher education institution. The Open University is the UK's largest University and since the first students were admitted in 1971, over 2 million people have studied with the University. As HE practitioners based in the University's Centre for Outcomes-Based Education, we have developed an innovative work-based learning model which enables students to gain academic credit based on their ability to critically evaluate their own work environment and is therefore based on real work experiences. The model enables students to develop skills in the areas of independent learning, creativity, reflection and analytical thinking and is therefore able to prepare them to succeed in an increasingly international society. This model has been developmentally tested and we are currently working with Faculties across the University who are using this work-based learning model to offer work-integrated programmes of studies for their students.

Keywords: Higher education, work-based learning, creativity, analytical thinking, independent learning

Introduction

The Open University
At the Open University (OU), anyone who is over 18 years of age can study undergraduate courses without the need for prior qualifications or entrance requirements. Each course, if assessment is completed satisfactorily, is worth between 10 and 60 credit points depending on the amount of study involved (i.e. 10 credits = 100 study hours). Each course also has a level that is equivalent to the year of study at a full-time institution: that is, level/year 1, 2 or 3. These credit points can be accumulated at appropriate levels until the required number is reached for an award such as 360 credit points for an honours degree or 240 points for a foundation degree. Guidance and advice are available about progression from course to course and from level to level, and prescribed programmes of study leading to a named award are clearly set out in the OU prospectus. Alternatively, students may choose their own route to a degree by opting for their own choice of courses at the appropriate level and credit points.

The OU currently has over 8,000 part-time Associate Lecturers who work with students either face-to-face at monthly tutorials or via telephone, email or e-conferencing. The University has an excellent distance support structure for all its students which includes academic guidance, study and careers support, and website access to all aspects of OU study. The OU is constantly innovating in both the curriculum it offers and its methods of delivery; for example, some courses are now exclusively on-line courses.
Work-Integrated Learning

The UK government's White Paper on the Future of Higher Education (2003) highlights work-based learning as a significant initiative in higher education. This type of learning can also help to develop skilled workers who can apply their theoretical knowledge in a creative and entrepreneurial way in response to international challenges and opportunities (Cromie, 2000). In addition, higher education learning in the workplace can support social justice (Avis, 2005) by giving access to those who have not traditionally studied at university level. Work-integrated learning development in the OU's Centre for Outcomes-Based Education (COBE) seeks to achieve three goals:

- to enable those students already studying the opportunity to gain academic credit for their work experience;
- to encourage those who are not yet studying to use their existing work experiences to study at higher education level;
- to connect work and learning.

COBE is a small research and development centre, which works with faculties and schools across the University and we have therefore focused on the development of a work-based learning framework that has the potential to be applied to a wide range of academic/vocational areas. The driving force behind this development of meaningful work-based learning opportunities (Harvey and Slaughter, 2003) has been the search for a high quality, academically sound set of activities and support materials which are occupationally relevant to a diverse range of work settings. Running in parallel with this research has been the need to keep the student at the centre of activities and to broaden the focus on the experience of learning (Entwisle and Ramsden, 1983). It has also been important to design learning opportunities that are cost effective for all stakeholders (Arthur and Tait, 2005). Although higher education and work places have different 'knowledge cultures' (Eraut, 2004), our developments ensure that the student can achieve higher education credit points and be able to use this learning as part of a route into other areas of study and qualifications if they wish. The relevance of work-integrated learning for adults is supported by Knowles' theory of androgogy which highlights the fact that adults are 'self-directed' and are motivated by making their own decisions (Atherton, 2003).

Generic Work-Integrated Learning Framework

OU students work in a wide variety of work settings within particular subject areas. In Early and Primary Years they could be employed as child minders, nursery staff, or care workers or, for example in Information Communication Technology (ICT) areas students could be employed in technical, support or service roles. Although all these different areas will have their own particular occupational standards the aim has been to discover a generic assessment framework for work-based learning courses that can be applied across a wide variety of different employment sectors.

This generic framework has been devised by examining the different aspects of the working environment and by selecting the essential areas of relevance for most employees. Areas such as health and safety, access to resources, legislation policy, areas for workplace improvement and developing own learning can be applied to most work settings and can therefore form the basis of many work-based learning components. In addition, students will be using their workplace experiences as a basis of their higher education learning and this should help to promote a high level of self-motivation (Talbot, 2003).
Student Support

Our work-integrated learning model requires a deliberate, yet light touch input from the workplace, some supervisory and/or line-management guidance and the opportunity to experience activities in areas of the workplace where the student would not normally operate, and this helps to provide a positive learning environment (Billet, 2005).

Students are supported at three levels:

(i) Work based facilitator

Students are expected to document their performance in the workplace and to have this documentation authenticated. Other types of work-based learning routes use a system of mentors who are responsible for carrying out an observational and assessment role. However, these mentors are likely to be another member of staff who will have their own set of duties to perform in addition to this role. There are therefore many additional costs associated with this approach including the issues of mentor training, time constraints and quality assurance of mentor assessment.

By reducing the workplace role of the mentor to that of a facilitator, this model capitalises on the positive aspects of mentoring such as the provision of witness statements, general support, and guidance, whilst reducing the impacts associated with the full mentoring model.

In our model, the workplace facilitator is likely to be the student’s line manager and the work required of them would not be much more than the normal staff development role which that position requires. At the very least the workplace facilitator would be expected to authenticate the student’s work-based evidence and at most would be asked to offer general support and guidance within the work place.

(ii) On-line adviser

The OU is responsible for providing two of the three levels of support for the student. Each course has an on-line element which includes an on-line conference. Therefore one of the levels of support is the on-line adviser who will be responsible for moderating on-line conferences and offering advice on the relevant occupational standards. In this way the costs of providing occupational advice can be kept to a minimum and the student will have a chance to communicate with other students who will all be actively encouraged throughout the course to benchmark their evidence against the relevant occupational standards. In relation to the e-learning aspect of this support structure, the autonomy of the student is seen as crucial (Jamieson, 2003) and is encouraged through e-conference debates with both the adviser and other students.

(iii) Academic tutor

The OU is also be responsible for providing the Associate Lecturer who will fulfil the usual academic role including marking the students assignments and offering academic guidance.

Assessment Strategy

The assessment strategy for the work-integrated learning courses has a series of assignments which students are able to apply to their own work situation. Whilst acknowledging that all methods of assessment affect the kinds of capital they contain (Ecclestone, 2004), these assignments enable students to reflect on their own experiences and to demonstrate the higher education level skills of synthesis and analysis. Students also need to demonstrate that they
can apply theoretical knowledge, gained from reading academic texts, within their workplace environment and are expected to produce evidence to support this from relevant work-based activities. The supported open learning offered by the OU enables students to capitalise on their experiences which are directly relevant to their workplace (Rogers & Freiberg, 1994) in order to understand how academic theory can be used to expand their knowledge of different discipline areas. By increasing their knowledge from a sound basis of their own practical experience, students will be motivated to be an active participant in their own learning and development (Rainbird, 2002). A clearly set out study guide introduces students to the appropriate theories that they can refer to in order to explore and better understand their workplace experiences.

The findings of our developmental testing and current courses have shown that relevant assessment of learning in the workplace can have added value for students, employers and higher education providers. Students have described how they were highly motivated by the fact that their learning in the workplace was valued and could be used within their higher education award. Employers have been keen to support their workforce as students in this type of learning opportunity because it relates to their business needs and enables the skills development of their staff. Our developmental testing has suggested that for higher education providers the gains are likely to be more motivated and skilled students who will take ownership of their learning and show enhanced study skills. Experiential learning can be viewed as 'becoming wise through being-in-the-world' (Gibbs & Angelides, 2005) and as such relates strongly with the aims of education.

Achievements

Standalone work-integrated learning model
In order to develop a work-integrated learning course at undergraduate level 1 for students who work in Information Communication Technology (ICT) occupations, our developments have underpinned the design of a course which fulfils the following learning criteria:

This course enables students to:

- develop their ability to learn from their work;
- develop their skills in understanding their organisation and how it functions;
- apply their understanding and knowledge of ICT theory and practice with their workplace;
- evaluate and develop their personal and professional skills.

This work-integrated learning course is a compulsory component of the Foundation Degree in Information and Communication Technologies and can also count towards most of the OU’s other degrees at bachelor's level. It is therefore embedded within the Faculty of Technology's programme of courses and as such is recognised as being a valid learning opportunity at higher education level.

Sub-HE into HE work-integrated learning model
In order to develop a work-integrated learning course at higher education level 1 for students who already have a vocational qualification at just below higher education level our developments have enabled the Open University Business School to design a course to fulfil the following learning criteria:

- enable students to move into undergraduate study from sub-HE study
- enable students to use their own workplace experiences to develop an academic understanding of management
- develop students' study skills at higher education level
The course is for students who have successfully completed study at just below higher education level (e.g. in the UK this would be at National Vocational Qualification (NVQ) level 3 or equivalent). It begins with a brief outline of the type of learning and subject areas covered in the course. It then helps students to assess their own learning style and preferences, so that students will know how to tackle study on this course. Using a textbook, students carry out various activities asking them to compare the theories they are reading about with what they see around them in their workplace. Some of these activities have been designed to help them develop their academic skills such as critical reading, note-taking, recognising and evaluating arguments, and learning how to write clearly.

International Society

Skills
Developing workplace skills in an international society will need to take into account the diverse cultural and social norms which are specific to each country. Work-integrated learning therefore needs to acknowledge the particular requirements of the wider cultural setting of workplaces in addition to the cultural settings of each workplace (Sanders, 2005). Using our generic approach to developing work-integrated learning courses has the potential to enable each student to contextualise the learning activities and academic texts to their own unique experience in the workforce and thereby learning can take place within their own cultural setting.

Innovation and creativity is needed to promote economic development across the international society and to take on the challenges and opportunities of working across a range cultures and societies. In order to create new business enterprises countries need to enable the development of entrepreneurial skills by expanding the opportunities for new ideas to be explored and researched (Burton, 2005). Following the viewpoint of Gelderen (2000), enterprising behaviour should be seen as an achievable goal of everyone. Our work-integrated learning models can promote entrepreneurship within current companies by enabling existing employees to develop their academic knowledge so that they can broaden the application of their practical skills. Referring to the constructivist theory of Bruner (1996), learning is seen as an active rather than passive process which reflects on the construction of new ideas and concepts grounded in current and past experience and knowledge in a social and cultural context. Employees who have the opportunity to use their skills within their work role have also been shown to have more job satisfaction (Morrison et al, 2005) which ultimately increases the business performance of the organization.

In the UK both the Department of Trade and Industry (2005), and the British Chambers of Commerce (2005), regard skills and their development as key to maintaining economic and social stability in the UK. They also see trade and co-operative development overseas as one of the ways to increase economic growth. To create a workforce that has these skills both envisage a ladder of skills progression, in the form of education that has a vocational orientation and, for those already in work, one that is part-time and at a distance. The Open University is well placed to provide opportunities for a ladder of skills progression in terms of its part-time, distance-learning approach and its work-integrated opportunities.

Academic and business goals
The Open University is meeting both academic and business goals through such innovative programmes as the work-integrated learning developments undertaken in COBE. By providing opportunities for students to meet both occupational and academic learning outcomes, the Open University is enabling employers to achieve their business goals and at the same time the individual student is gaining qualifications at higher education level. Work-integrated learning enables students to critically evaluate their own work context and review their own personal and professional knowledge and skills (Friedman & Phillips,
The basis of this viewpoint is the current need for higher education to enable students to learn how to learn and become independent in their studies (Peters, 2000). Instead of students experiencing practice and theory as two different forms of learning as so often has been the case in the classroom (Raelin, 2000), work-integrated learning enables the practical experience of individuals to inform the understanding of theoretical perspectives.

Conclusions

The Open University is not the only institution which has students who are studying whilst carrying out paid employment. Many of these work experiences could be used to demonstrate skills that could be transferable to other work situations or to the work situations in other countries. By being given the learning tools to reflect on their work environment, students can gain valuable insights into their own skills and show that they can perform at higher education level. They can also add value to the workplace as they will have been given the time and the vocabulary to discuss appropriately, with their workplace, the new viewpoints they have gained by their higher education experience. Successful completion of work-integrated courses can give the student a greater mobility in the employment market, either in the UK or abroad. By developing a generic framework for work-based learning, where the emphasis is on the students' ability to critically evaluate the work environment, it is possible to use a wide variety of work settings to enable the student to gain higher education credit points for their work experience.

References


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