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Developments in the evaluation of work-based learning

A UK perspective

Ian J. Murdoch

Abstract: UK higher education institutions are now expected to be able to demonstrate that they are adhering to the Code of Practice for the Assurance of Academic Quality and Standards in Higher Education in Placement Learning. The responsibility for ensuring that a placement provides an adequate opportunity for its intended learning outcomes rests with the educational institution. This paper draws on the author's experience of the management and evaluation of placements in the construction sector. In recognition of the increasingly global nature of the business, a placement programme has been developed to meet the particular challenges of students operating in multidisciplinary and multicultural environments. Participation in the European Commission's Leonardo da Vinci Vocational Training Programmes and pilot projects has enabled the identification of further criteria for evaluating and disseminating experience gained in workbased learning across the frontiers of language and culture. However, the paper also identifies problems peculiar to the UK market for construction professions and higher education programmes in construction-related disciplines. A study by Northumbria University highlighted challenges for both industry and higher education arising from economic pressures on students and the positioning of construction-related courses in the higher education market. Given the global nature of the construction business, it is clear that there are significant benefits to be gained from taking a global view of relevant issues.

Keywords: work-based learning; sandwich courses; assessment in higher education; vocational training; recruitment; construction

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UK higher education institutions should now be able to demonstrate that they are adhering to the *Code of Practice for the Assurance of Academic Quality and Standards in Higher Education: Placement Learning* (QAA, 2001). The precepts of the code state that the manner in which institutions discharge their responsibilities will vary according to the nature of the placement, which itself can serve a variety of

purposes. However, the responsibility for ensuring that a placement provides an adequate opportunity for its intended learning outcomes rests with the institution.

The Code seeks to identify a comprehensive series of system-wide expectations covering matters relating to the management of academic quality and standards in higher education. It assumes that, taking into account nationally agreed principles and practices, each institution has its own systems for independent verification of its quality and standards and of the effectiveness of its quality assurance systems.

Furthermore, given the imposition of fees by UK institutions for the period of industrial experience under institutional supervision, there should be a clear and systematic method of identifying the added value of such experience.

Traditional view of cooperative education

In his study of the goals and achievements of cooperative programmes, McKenna (1985) identified the highest-ranking goals as:

- to provide practical experience;
- to develop knowledge and skills beyond the classroom:
- to explore career choices;
- to develop the ability to work with others; and
- to improve working habits.

The success of cooperative education is therefore dependent on a mutual understanding among the parties concerned of their respective roles and practices. However, this in itself is insufficient in a climate of economic volatility: a convergence of practice would deepen industrial partners' understanding of the educational process and improve educationalists' response to market forces.

Wilson (1985) examined the cost-effectiveness of employer participation in cooperative education. Three studies were undertaken to assess the employers' perspectives on important aspects of cooperative education programmes and the balance between costs and benefits. It was found that the underlying motive for employers' participation in such programmes was the recruitment and retention of graduates and the development of an ongoing relationship with the educational institution. (In 2002 a major UK contractors group confirmed to the author that 70% of its graduate recruitment was through cooperative/sandwich programmes).

Wilson (1985) also identified the most important aspects of cooperative education for small firms (defined as those with fewer than 100 employees):

- (1) The principal objective is to increase costeffectiveness by using students to release professional employees from sub-professional duties.
- (2) The most important characteristics for selection are (a) personal attributes and (b) field of study.
- (3) The most important criterion for placing students on job assignments is company need.
- (4) The programme's effectiveness is determined by student productivity.
- (5) The student's responsibilities are (a) to demonstrate willingness to learn and contribute and (b) to exhibit excellent work habits, job performance and attitudes.
- (6) The employer's responsibilities are to prepare students for the workplace and to provide planned, realistic work assignments.
- (7) The preferred frequency of contact with the higher education institution is 'as necessary' but with regular telephone contact and at least an annual visit.

Case example: placement experience at Northumbria University

The key elements of the industrial context of the 'Building Management' degree programme at Northumbria University's School of the Built Environment are its vocational relevance to the programme content and the preparation of undergraduates for employment. The degree includes a year of industrial placement, undertaken in the third year of the programme.

The guidance notes at the beginning of the student's 'Placement Record' set out the supervisory and organizational framework for the placement. The student is expected first to work with his or her employer in the drafting of a 'learning contract'. This agreement can be informal although the current preference among employers is to formalize it. In whatever form, it enables employer and student to determine shared expectations.

Once established in their place of work, the students receive a first placement visit by their visiting tutor. This has three main purposes: the tutor (a) counsels the student, who is often working away from home for the first time, (b) appraises the experience to date and (c) sets up or maintains a link between the university and the employer. This last element is in many ways the most critical, for it is the basis of the many 'repeat' placements that may be provided by the employer for the university's students. It also serves to provide the academic tutor with an opportunity to observe changing industrial practice and in this sense contributes to 'staff development'.

At the mid-point of the year a 'Mid-Placement Seminar' is held at the university. When circumstances allow, students are encouraged to attend and share their experiences with their peers and with second-year students. Their presentations at this stage are essentially descriptive. Towards the end of the placement period, the student and tutor organize a second placement visit, the purpose of which is to review the experience gained and consolidate the relationship between student, employer and university.

Finally, at the end of the year, the students return to the university and reflect on their experience at an 'End of Placement Seminar'. It is at this seminar that student feedback on the placements is obtained, which provides academic staff with a useful barometer of the general attitude of students to their recently acquired work experience.

Assessment of work-based learning

Benett (1993) concludes that the considerable reluctance in past years to move towards a formal assessment system for work-based learning – a system that would stand up to close scrutiny – was partly attributable to the perceived difficulties of achieving valid, reliable and comparable assessments given the complex interactions of human, social, technical and practical processes at the workplace. Some teachers question the extent to which the concepts of validity, reliability and comparability are applicable to assessment at the workplace – the argument being that each work placement is unique and assessments are necessarily based on projects that vary from placement to placement.

It is increasingly clear, however, that an assessment system is desirable. A current project under the European Commission's Leonardo da Vinci programme has highlighted many of the key concerns and is addressing the issue at a transnational level in the context of student and worker mobility.

The Leonardo programme itself numbers among its objectives:

- to improve the skills and competencies of people, especially young people, in initial vocational training, with a view to facilitating their integration and reintegration into the labour market;
- to improve the quality of, and access to, continuing vocational training and the lifelong acquisition of skills ands competencies; and
- to promote and reinforce the contribution of vocational training to the process of innovation, with a view to improving competitiveness and entrepreneurship.

It is in this context that Project ValeurTech was established. A transnational initiative involving eight countries and 35 partners, ValeurTech's main goal is to evaluate professional experience acquired during work placements abroad in sectors such as engineering and computing, where it is felt that the added value of such experience is poorly understood.

Three key activities have been defined to achieve this goal:

- analysis of the competencies required of young engineers (higher technicians) by SMEs;
- a study of current organizational and evaluation practices among the partner nations and companies in relation to work placements; and
- the development of training modules to prepare candidates properly to work in industry in other countries.

The work to date has defined a range of competencies, including both technical and personal transferable skills, with a view to devising a system of assessment for the acquisition of new skills and the strengthening of existing ones – technical, linguistic, cultural and interpersonal – and encouraging institutions to build work placements abroad into their cooperative programmes.

Conclusion

There are several reasons behind the growing awareness of the importance of assessing workplace learning. First, there is increasing acceptance of the value of the workplace as a learning vehicle. Second, there is a need to address the lack of labour mobility in the European Union which impairs the competitiveness of both member states and the EU as a whole. And finally, there are serious skill shortages in key productive areas of European economies.

There is a need, therefore, for higher education institutions to determine the added value of work placement experience. There is potential too in taking into account the work experience of part-time students or indeed of those undertaking distance learning while in employment.

Wilkie *et al* (2003) conducted a quantitative review of the outputs of the 58 UK university courses accredited by the Chartered Institute of Building (CIOB). They found that the number of graduates had remained relatively static, but estimated that, while in 1990 80% of all the students were graduates of sandwich courses, the proportion would drop to around 30% by the end of 2003 (see Figure 1). There is an urgent need to address issues such as recruitment, the

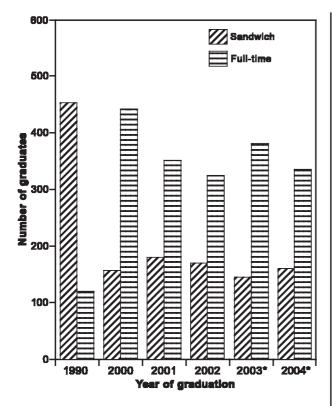


Figure 1. Numbers of students graduating from sandwich courses and full-time courses. *Source:* Wilkie *et al* (2003). *Estimated.

image of the industry, sponsorship, student debt, and the reluctance of 18 year-olds to commit themselves to vocational courses. As Wilkie *et al* point out, similar studies in other countries would help in the development of an understanding of the challenges in a global context.

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