RE-EVALUATING THE PLACEMENT EXPERIENCE OF BUILT ENVIRONMENT UNDERGRADUATES

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Considerable experience with undergraduate built environment placements has led to the development of assessment using appropriate professional competencies as a guideline. Students are able to reflect on their experience through the identification of those competencies which most closely match their experience. Students then create a portfolio of experience explicitly claiming development in identified competencies, supported by evidence from their workplace. The experience itself is also disseminated through seminars given as part of the briefing process for second year students, and interviews with academic staff. These seminars and interviews revealed that the students often considered the development of 'soft skills', such as maturity, confidence, and making contacts, as being at least as important as the development of the professionally identified competencies. Although this revelation may simply confirm a long -, and widely - held view, it does shed light on the process of placement and placement reflection, and should not be overlooked.

Keywords: education, placement, soft-skills.

INTRODUCTION

The value of work experience in vocational education, such as Built Environment courses has long been established and accepted (Dearing 1997, CIOB 2005). The notion that the graduates from courses which have incorporated work experience are better prepared for the world of work is recognised, most importantly by employers. (Anon 2002) The experience gained through work placement is accepted as being vocationally directed, that is, associated with the role the graduate expects to be involved in upon graduation.

Hence, the placement experience provides a 'rehearsal' for the real occupation to be embarked on later.

The notion of work – based learning has been explored in many academic aspects (e.g. Boud and Garrick 1999) includes many international authors noting that this has become a mainstream activity in many countries. Beard and Wilson (2002) develop the notion of experiential learning, whereas Lave and Wenger (1991) explore the central meanings of behaviour acquisition between initiates, experienced practitioners and 'masters'.

One of the understandings of learning is that the behaviour of the individual will be in some way modified after the learning has taken place. That is to say the behaviour will be different after the learning to the behaviour before the learning. This 'learned'

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behaviour, or learned response will in turn be appropriate to the circumstances in which it is applied. (Billett S 1999).

Linked through all of these works is the notion of contextual knowledge (Portwood 2000). This is explained as knowledge which has reference to and relevance in its' context (Hill 2002).

Some undergraduate Built Environment Programmes, encompassing Construction Management, Quantity Surveying, Construction Commercial Management and Building Surveying, have explicitly integrated the placement experience into the assessment of the degree (Hill 2001).

This immediately posed problems, in that the normal understanding and practice of undergraduate assessment involved the identification and specification of outcomes from the achievement of the assessment. As the outcomes of the placement experience are largely in control of the employer and not the University, this could not be predicted with certainty (Hill 2002). The method of assessment developed, centres on a portfolio of evidence from the workplace, with associated professional skills identified by the students and then 'claims' or commentaries acting as statements which show how the particular experience, given by the evidence, can demonstrate ability in a particular professional competence.

In the first instance this method of assessment used existing professional competencies as identified in the Chartered Institute of Building Professional Development Programme (Hill 2001, CIOB 2005). From the perspective of a University considering the integration of placement assessment, the specificity of the professional competencies identified within the Professional Development Programme offered the opportunity of cross- referencing to the understanding of specific learning outcomes adopted in higher education assessment.

It is important to recognise that this involved a 'translation of terms' from academic language to professional language, and back again to ensure that the two would be compatible.

The students were strongly advised that they should identify a small number of professional competencies, relevant and appropriate to their own experience, rather than attempting to cover every one. This in turn allowed for variations in experience, with one student perhaps identifying Communication, Decision Making, and Managing Information, where another identifies Managing Health and Safety, Managing Quality of Work, and Managing Resources, for example (CIOB 2005). There is no need for overlap, although of course, it may occur.

This acceptance and acknowledgement of variation in the topic areas of learning outcomes, and hence assessment, allowed for the variation in experience which students were bound to be exposed to.

As the scheme developed to encompass the roles of Building Surveyors and Quantity Surveyors, reference to the Royal Institute of Chartered Surveyors APC documents was made. This allowed students either to choose from the CIOB or the RICS or, for the better student, a combination of both. Submissions using professional competencies from other bodies, such as the ICE have also been welcomed. The student must consider which list of competencies is most appropriate to their experience, and identify those which are most appropriate from that list. This in turn is a key part of the process of reflection which is at the heart of the process.

Further assessment of the placement experience takes the form of a seminar presentation in front of an audience of second year students. This seminar presentation fulfils a number of intended requirements: it develops the skills of oral presentation for the presenter; it is assessed against recognised criteria; it provides excellent briefing opportunities for second year students; it offers the opportunity for the dissemination of both experience and learning reflection.

One of the issues to be faced by the academic planning the assessment of work experience is the use of different languages. Essentially, within academic circles, such as Universities or other teaching institutions, we have language such as 'learning outcomes'. These have become both vital and explicit in the language of UK Universities. Learning Outcomes make explicit expectations of the learning experience (Drew and Bingham 2001). For vocational and professionally accredited courses, such as the Built Environment Programme, these learning outcomes are combined to an overall curriculum, which in turn is linked to the educational framework of professional bodies (e.g. CIOB 2005). It is important to note that this process has developed over the last decade or so, as learning outcomes become more explicit, and transparent – that is they may be seen by external bodies and the students, rather than simply the preserve of the academic staff involved in their delivery and application.

This in turn raises the notion of intended learning outcomes, and unintended learning outcomes, which is central to this paper. Whilst explicitly setting out with the aim of allowing the students the opportunity to gain specific identified learning outcomes, which have been accounted for and planned for within an overall curriculum, there must be the acceptance that students will learn other things: timekeeping in meeting assignment deadlines being one of the most apparent.

For the assessment of work experience, the important characteristic of note is that the experience itself – where the learning takes place physically, and the time dimension within which it takes place are both out of the control of the University. This is essentially different to the vast majority of undergraduate programmes, although distance learning may be considered as a separate case again. Hence, the degree of prediction of the learning outcomes is also limited.

Development of this practice of assessment has acknowledged and taken advantage of the tri-partite relationship between the University, the employer and the student (e.g. Boud 1999).

RESEARCH METHODOLOGY

The assessment of undergraduates through the placement process has been undertaken for some nine years. That is, nine cohorts of students have progressed through the process. This has ranged from initially 30 or so students each year to 140 plus in recent years as the module expanded.

The seminars have been witnessed and assessed by a number of academic staff, with the author being present at well over 90% of the total. The use of explicit criteria, although developed over time, has ensured that students have gained similar experiences in the seminars.

Assessment has been verified through the internal quality assurance systems together with the external examiner process, and professional revalidation, in common with other modules.

The methodology for this paper is essentially that of observation (Deacon *et al.* 1999), in that the seminars were already taking place for another purpose – as noted above, combined with unstructured or semi structured interview. That questions and explanations were asked by the academic staff was *already* an accepted part of the seminar presentation process. These interactions allowed confirmations of meaning and clarity of the understanding of the participants, the students, in the discourse (Deacon *et al.* 1999). The findings can then be attributed to a combination of observation and interview. The interview techniques should be understood as not an investigation of an *a priori* assumption of a phenomenon to be investigated, but rather a confirmation of a phenomenon brought to light by the students giving the seminar presentations. (Collis and Hussey 2009, Flick 1998).

All kinds of criticisms of this methodology in terms of cross contamination of the students' presentations can be raised. If a student making a presentation later witnessed an earlier presentation or presentation which raised the findings concerned, what was to stop them also reporting it? (e.g. Maykut and Morehouse 1994).

The answer of course is nothing, as noted above, one of the explicit outcomes aimed for in the development of the seminar presentation process was that of dissemination of learning throughout and across the cohort of students. This must be seen as a positive benefit for the students involved. If they are prompted to mention in their own seminar the notion of 'soft skills' described by another student in a previous presentation, this cannot be simply discounted. Importantly, the notion of 'soft skills' is *not* included in the explicit assessment criteria, so there would be no benefit in terms of grade.

In terms of a research process, the author took the view that the learning outcomes of the students, and the furtherance of that learning through dissemination was more important than the clinical isolation of students' to prevent 'contamination' of results through 'prompting'.

FINDINGS

From the seminars, the identification of professional competencies was in most cases explicit. 89% of the 2008/09 cohort of 146 students explicitly reported the gaining of professional competencies during the placement period as part of their seminar. An example of this is the experience of attending and participating in meetings, both formal and informal, developing element 1 of the professional Competence of Communication (CIOB 2005). The grading of assessment depended, amongst other criteria, on the ability of the student to present coherent and credible evidence to support their abilities in identified professional competencies. This is an expected and intended learning outcome, and specific assessment criteria are assigned to this identification. The students are aware of the assessment criteria.

Furthermore, and most importantly, many students explicitly identified the gaining of what may be termed 'soft skills' during their placement experience. In particular, attributes such as 'maturity', 'confidence' and even 'making social contacts' were explicitly identified by students. 46% of the 2008/09 cohort of 146 students made explicit reference to at least one of the terms: maturity, confidence, making social contacts. Many students, when summarising their experience, would emphasise that these attributes had been developed greater over the experience period than any of the specifically identified 'hard skills' or professional competencies. That is, whilst few

students would claim any level of 'mastery' even in isolated individual professional competencies, some recognised a significant development in these 'soft skills'.

The term 'maturity' was itself explained and expanded by the students: essentially attitudes exhibited on returning to the University after a period of placement were different to attitudes held before. Notably a more positive and directed attitude to their studies and submissions. Work would be started early, sources of information and research would be sought from a wider field than previously considered, and clarification from academic staff sought out. This was in some cases in marked contrast to behaviours exhibited before placement period. The meaning and understanding of the term 'maturity' was elicited through a question and answer process at the end of the presentation. Academic staff and students all participated in this dialogue. Similar processes took place for the other terms used for soft skills.

The term 'confidence' was often cited as that ability most closely linked with the seminar presentation itself. The confidence to stand up in front of peers, second year students and academic staff, and talk about their experiences for 20 minutes was given as an indication of the levels of confidence gained through the placement period. These students often reported that they had had to make presentations to clients, employees, subcontractors, statutory authorities, suppliers and such like. This interaction often involved negotiation, instruction, argument, discipline and other features. Therefore the confidence to present in the final year was greatly enhanced.

Talking to academic staff such as in one-to - one dissertation meetings and viva's was also indicative of improved confidence, and was recognised by staff and students alike.

Personal contacts' being raised as outcome by students is interesting for several reasons, not least that for some students, this was thought to have the greatest bearing on their career futures, both in the immediate and the medium term. This observation, or explanation may be a refection of remarks often made by academic staff. However the validity of the perception held by the students cannot be questioned in this research.

The gaining of personal contacts was in turn attributed to opportunity: coming across potentially useful contacts in the course of the work placement; and interpersonal skills: the facility to interact and communicate with those individuals. This last facility includes confidence demonstrating the interdependence of these skills. The raising of these issues by students in turn is explicit recognition of acquisition of appropriate languages and behaviours with which to interact with practitioners. This relates back to the notions of Legitimate Peripheral Participation (Lave and Wenger 1991).

DISCUSSION

It is possible to argue that the acquisition of professional competencies is dependent on the development of such skills as maturity and confidence. It is equally possible to argue that the development of maturity and confidence is in turn dependent on specific vocational technical abilities, such as professional competencies. For the purpose of this paper these divisions should not be made, indeed supporting Portwood's (2000) assertion that such distinction should be considered false. The distinction only exists insofar that certain students chose to identify them explicitly.

It is interesting to note again that the breadth of the Built Environment Programme under study encompasses a considerable range of experience. This includes the private professional practice to the Local Authority, the Management Contractor to the

specialist groundworks subcontractor, and the multi- disciplinary consultancy to the estimating department. The facility for the students to select professional competencies from a considerable range in order to fulfil their assessment requirements allows for such disparate experience. Further, the method of assessment focuses on the quality of the reflection rather than the quality (assumed) of the experience (Hill 2002).

However, that the revelation of the soft skills came from different students, in essentially different disciplines, and certainly with different experiences highlights the all encompassing nature of the development of soft skills. If any of the attributes developed by placement were to be considered truly 'transferable' it is these soft skills: maturity, confidence and social contacts. The explicit identification and recognition of these outcomes denotes better reflection, that is an understanding of the process of learning, personal development and self awareness, which is in turn demonstrated by better students. Maturity is often demonstrated through such reflections.

In contrast, the 'hard skills', the identified professional competencies, must be seen as unique to the experience and development of the student in the particular context. That is, the hard skills are the contextual skills and contextual knowledge as described by (amongst many others) Portwood (2000), Hinchliffe (2001) and Hill (2002)

CONCLUSION

Accepting the variation in experience gained from placement, perhaps particularly so for the broad range of roles to be encompassed within a Built Environment Programme, the paper highlights three essential revelations. The first is that many students recognise that the soft skills, such as maturity, confidence and personal contacts were considered of greater value than the specific professional competencies against which the formal assessment takes place. That the students should raise this issue themselves is important, and that this should come across within a student led presentation seminar is also a feature. The opportunity or even appropriateness of assessing this level of reflection remains in doubt – it may deter the students from what must be considered as a beneficial, but unintended learning outcome. Soft skills could not be included in the portfolio submission as there is no appropriate place for it, no grade could be attributed to it. Because it is not an identified learning outcome it cannot be included. Conversely, it cannot be made an identified learning outcome as it cannot be included in the portfolio.

The second revelation is that this acquisition of soft skills may be considered as truly inter- professional. There is no correlation between the levels of experience or professional roles undertaken and the soft skills gained. A student may gain as much from working on site as an engineer as working within a private practice consultancy as a project manager. The opportunities to develop these skills seem to be the same, and the development, and more importantly, recognition and explicit acknowledgement of their development is down to the student.

The third revelation is that these attributes may well be the most attractive to potential employers when students graduate. This last may be considered as 'blindingly obvious', in that proponents of placement education within vocational courses have often relied on hearsay, anecdotal evidence, or intuitive understandings based on long term experience. This includes the facility to develop within one discipline experience, but to seek employment in another. Importantly, the phenomenon was

brought to light by the students: when asked to reflect on their experience in order to gain marks for an assessment, many chose to 'add' to the formalised and specific professional competencies by identifying and acknowledging the soft skills aspect. This in turn revealed abilities of reflection, in the students concerned, which could perhaps be indicative not only of their academic ability, and hence their grade, but also their academic maturity.

Whilst the majority of Higher Education assessment and grading is framed around common languages and the terminology of professionally recognised curricula, there is still a place for the unintended and inexplicit learning outcome. This research suggests that this is very important, not least from the perspective of students who have identified it and recognised it. The student benefits from an experience and establishes a behavioural change (and hence learning) based on an experience.

That the experience itself should occur outside the University should not be considered a challenge to the University provision, nor be discounted as invalid.

Typically, during the four years a student is enrolled on a course, much can happen, much will be learnt, behaviours will change and modify, and the student will be a different person at the end of that period.

Whilst many practitioners, not only in Universities, but employers have long recognised the value of placement experience and learning, the nature of that experience and learning, and the personal development gained from it have perhaps escaped close examination.

It is intended to continue with the process of assessing placement experience through amongst other things, seminar presentations. This allows the opportunity, not only for the dissemination of learning but also raising issues considered as unintended learning outcomes. The incidence of these revelations being repeated, and perhaps other findings being revealed will be reported. As a research technique, any significant alteration to the seminar process, the assessment process, and the briefing process must take account of the main intended outcome: the grading of students. In addition, as other academic staff are involved, parity of treatment must be maintained. Any further research must rely on observation and inquisition of the phenomena as it is, rather than explicit intrusion into the process.

REFERENCES

Anon 2002 Work Related Learning Report Nottingham, Department for Education and Skills

Beard C and Wilson J 2002 The Power of Experiential Learning, Kogan Page, London

Billett S 1999 *Guided Learning at Work in* Boud D and Garrick J 1999 *Understanding Learning at Work* Routledge, London

Boud D and Garrick J 1999 Understanding Learning at Work Routledge, London

CIOB 2005 *The Professional Development Programme (PDP)* Chartered Institute of Building, Englemere, UK

Collis J and Hussey R 2009 Business Research a Practical Guide for Undergraduate and Postgraduate Students Palgrave Macmillan, London

Deacon D, Pickering M, Golding P, Murdock G 1999 Researching Communications Hodder Arnold, London

Drew S and Bingham R 2001 *Learning Outcomes Symposium* Sheffield Hallam University, Sheffield

- Flick U (1998) An Introduction to Qualitative Research Sage, London
- Hill CJ 2001 Report on the Experience of Work Based Learning for Construction Management Courses ARCOM Conference Proceedings 5th - 7th September 2001, Salford
- Hill C J 2002 *Placement Work Based Learning* Conference Proceedings: University for Continuing Education, Work Based Learning Network 26th -27th November 2002, Cardiff
- Hill C J 2003 Learning the Language of Organisations: Sandwich Placement Experience in Construction Proceedings of Construction Property Educational Research, Technology and Collaboration BEAR 2003 9th 11th April 2003, Salford
- Hinchliffe G 2002 *Situating Skills: A conceptual framework for Pedagogy and Performance* 3rd Annual Skills Conference Proceedings, Hertfordshire Integrated Learning Project 10th 11th July 2002, University of Hertfordshire
- Lave J and Wenger E 1991 Situated Learning: Legitimate Peripheral Participation Cambridge University Press, Cambridge
- Maykut P and Morehouse R 1994 Beginning Qualitative Research a Philosophic and Practical Guide The Falmer Press London
- Portwood D 2000 Workers, Students and Learners: Work Based Learning Perspectives and their Impact on Organisations. Conference Proceedings: The Impact of Work Based Learning 14th 15th December 2000, Fitzwilliam College, Cambridge